Important Notice

THIS DOCUMENT IS NOT FOR DISTRIBUTION TO ANY PERSON OTHER THAN TO INVESTORS WHO ARE EITHER (1) QIBS (AS DEFINED BELOW) UNDER RULE 144A UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR (2) PERSONS OTHER THAN U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT) WITH ADDRESSES OUTSIDE OF THE UNITED STATES.

IMPORTANT: You must read the following notice before continuing. The following notice applies to the attached offering circular dated April 20, 2020 (the "Offering Circular"), whether received by email, accessed from an internet page or otherwise received as a result of electronic communication and you are therefore advised to read this notice carefully before reading, accessing or making any other use of the Offering Circular. In reading, accessing or making any other use of the Offering Circular, you agree to be bound by the following terms and conditions and each of the restrictions set out in the Offering Circular, including any modifications made to them from time to time, each time you receive any information from us as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY THE SECURITIES DESCRIBED IN THE OFFERING CIRCULAR IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO. THE SECURITIES HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION AND THE SECURITIES MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT "REGULATION S")), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE SECURITIES ARE BEING OFFERED AND SOLD ONLY: (1) WITHIN THE UNITED STATES OR TO A U.S. PERSON IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT ("RULE 144A") ONLY TO PERSONS THAT ARE "QUALIFIED INSTITUTIONAL BUYERS" ("QIBS") (AS DEFINED IN RULE 144A), ACTING FOR THEIR OWN ACCOUNT OR FOR THE ACCOUNT OF ANOTHER QIB, AND (2) OUTSIDE THE UNITED STATES TO PERSONS OTHER THAN U.S. PERSONS ("U.S. PERSONS") (AS DEFINED IN REGULATION S) IN OFFSHORE TRANSACTIONS IN ACCORDANCE WITH RULE 903 OR RULE 904 OF REGULATION S. WITHIN THE UNITED KINGDOM, THE OFFERING CIRCULAR IS DIRECTED ONLY AT PERSONS WHO (A) HAVE PROFESSIONAL EXPERIENCE IN MATTERS RELATING TO INVESTMENTS FALLING WITHIN ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005 (THE "FPO"); (B) ARE PERSONS FALLING WITHIN ARTICLE 49(2)(a) TO (d) OF THE FPO; OR (C) ARE OTHER PERSONS TO WHOM THE OFFERING CIRCULAR MAY BE LAWFULLY COMMUNICATED (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "RELEVANT PERSONS"). OUTSIDE OF THE UNITED KINGDOM, THE OFFERING CIRCULAR IS BEING DIRECTED ONLY AT PERSONS WHO MAY LAWFULLY RECEIVE IT. FOR A MORE COMPLETE DESCRIPTION OF RESTRICTIONS ON OFFERS AND SALES, SEE "SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS" IN THE OFFERING CIRCULAR.

THE OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THE OFFERING CIRCULAR IN WHOLE OR IN PART IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE SECURITIES LAWS OF OTHER JURISDICTIONS. IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORIZED AND WILL NOT BE ABLE TO PURCHASE ANY OF THE SECURITIES DESCRIBED IN THE ATTACHED DOCUMENT. THIS DOCUMENT IS NOT INTENDED FOR DISTRIBUTION TO AND MUST NOT BE PASSED ON TO ANY RETAIL CLIENT.

Confirmation of your Representation: In order to be eligible to view the Offering Circular or make an investment decision with respect to the offered securities described therein, (1) each prospective investor in respect of the securities being offered pursuant to Rule 144A must be a QIB, (2) each prospective investor in respect of the securities being offered outside of the United States in an offshore transaction pursuant to Regulation S must be a person other than a U.S. Person and (3) each prospective investor in respect of the securities being offered in the United Kingdom must be a Relevant Person. By accepting the e-mail and accessing, reading or making any other use of the attached Offering Circular, you shall be deemed to have represented to BNP Paribas, Citigroup Global Markets Inc., Crédit Agricole Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, The Hongkong and Shanghai Banking Corporation Limited, J.P. Morgan Securities plc, Merrill Lynch International, MUFG Securities EMEA plc, Mizuho Securities USA LLC, Société Générale, Standard Chartered Bank and UBS AG Hong Kong Branch (the "Dealers") being the sender of the attached, that (A) in respect of the securities being offered pursuant to Rule 144A, you are (or the person you represent is) a QIB, and that the electronic mail (or e-mail) address to which, pursuant to your request, the Offering Circular has been delivered by electronic transmission is utilized by someone who is a QIB, or (B) in respect of the securities being offered outside of the United States in an offshore transaction pursuant to Regulation S, you are (or the person you represent is) a person other than a U.S. Person, and that the electronic mail (or e-mail) address to which, pursuant to your request, the Offering Circular has been delivered by electronic transmission is utilized by a person other than a U.S. Person, (C) in respect of the securities being offered in the United Kingdom, you are (or the person you represent is) a Relevant Person, and (D) you

You are reminded that the Offering Circular has been delivered to you on the basis that you are a person into whose possession the Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorized to, deliver or disclose the contents of this Offering Circular to any other person. Failure to comply with this directive may result in a violation of the Securities Act or the applicable laws of other jurisdictions.

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where such offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the Dealers or any affiliate of the Dealers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Dealers or such affiliate on behalf of Kookmin Bank (the "Issuer") in such jurisdiction.

The Offering Circular has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently, none of the Dealers, the Issuer or any person who controls any of them or is a director, officer, employee or agent of any of them nor any affiliate of any such person accepts any liability or responsibility whatsoever to the fullest extent permitted by law in respect of any difference between the Offering Circular distributed to you in electronic format and the hard copy version available to you on request from the Dealers.

You are responsible for protecting against viruses and other destructive items. Your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

The distribution of the Offering Circular in certain jurisdictions may be restricted by law. Persons into whose possession the Offering Circular comes are required by the Dealers and the Issuer to inform themselves about, and to observe, any such restrictions.

Offering Circular dated April 20, 2020



(incorporated with limited liability under the laws of the Republic of Korea) (acting through its principal office in the Republic of Korea and any overseas branch)

U.S.\$8,000,000,000 Global Medium Term Note Programme

This Offering Circular supersedes and replaces in its entirety the offering circular dated May 10, 2019 in relation to the U.S.\$8,000,000,000 Global Medium Note Programme (the "Programme," as amended, supplemented or restated from time to time) of Kookmin Bank (the "Issuer" or the "Bank"). The Programme was originally established on April 18, 1996. Any Notes (as defined below) issued under the Programme on or after the date of this Offering Circular are issued subject to the provisions described herein. This Offering Circular does not affect any Notes issued before the date of this Offering Circular.

Under the Programme, the Issuer may from time to time issue notes in bearer and/or registered form (respectively, "Bearer Notes and Registered Notes" and, together, the "Notes," which expression shall include Senior Notes and Subordinated Notes (as defined herein)) denominated in any currency agreed between the Issuer and the relevant Dealer (as defined below).

In relation to any Tranche (as defined under "Terms and Conditions of the Notes") of Notes, the Issuer may act through its principal office in the Republic of Korea ("Korea") or through any of its overseas branches, in each case as indicated in the applicable Pricing Supplement (as defined below).

The maximum aggregate nominal amount of all Notes from time to time outstanding under the Programme will not exceed U.S.\$8,000,000,000 (or its equivalent in other currencies calculated as described herein).

The Notes may be issued on a continuing basis to one or more of the Dealers specified under "Summary of the Programme" and any additional Dealer appointed under the Programme from time to time, which appointment may be for a specific issue or on an ongoing basis (each, a "Dealer" and, together, the "Dealers"). References in this Offering Circular to the relevant Dealer shall, in the case of an issue of Notes being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to purchase such Notes.

An investment in Notes issued under the Programme involves certain risks. For a discussion of these risks, see "Risk Factors."

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") in connection with the Programme and application will be made for the listing and quotation of any Notes that may be issued pursuant to the Programme and which are agreed, at or prior to the time of issue thereof, to be so listed and quoted on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, admission to the Official List of, and listing and quotation of any Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes. Notice of the aggregate nominal amount of Notes, interest (if any) payable in respect of Notes, the issue price of Notes and any other terms and conditions not contained herein which are applicable to each Tranche of Notes will be set out in a pricing supplement (the "Pricing Supplement") which, with respect to Notes to be listed and quoted on the Singapore Stock Exchange, will be submitted to the Singapore Stock Exchange before the date of listing and quotation of the Notes of such Tranche.

The Programme provides that Notes may be listed or admitted to trading on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer. The Issuer may also issue unlisted Notes.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "Securities Act"), and may not be offered or sold in the United States or to, or for the benefit of, U.S. persons, unless the Notes are registered under the Securities Act or an exemption from the registration requirements of the Securities Act is available. See "Form of the Notes" for a description of the manner in which Notes will be issued. The Notes are subject to certain restrictions on transfer. See "Subscription and Sale and Transfer and Selling Restrictions."

The Issuer may agree with any Dealer that Notes may be issued in a form not contemplated by the *Terms and Conditions of the Notes* herein, in which event (in the case of Notes intended to be listed and quoted on the Singapore Stock Exchange) a supplementary Offering Circular, if appropriate, will be made available which will describe the effect of the agreement reached in relation to such Notes.

Arranger

HSBC

Dealers

BNP PARIBAS
Crédit Agricole CIB
J.P. Morgan
Société Générale
Corporate & Investment Banking

BofA Securities Credit Suisse Mizuho Securities Standard Chartered Bank Citigroup HSBC MUFG UBS The Issuer, having made all reasonable enquiries, confirms that this Offering Circular contains or incorporates all information which is material in the context of the issuance and offering of Notes, that the information contained or incorporated in this Offering Circular is true and accurate in all material respects and is not misleading, that the opinions and intentions expressed in this Offering Circular are honestly held and that there are no other facts the omission of which would make this Offering Circular or any of such information or the expression of any such opinions or intentions misleading. The Issuer accepts responsibility accordingly.

The Singapore Stock Exchange assumes no responsibility for the contents of this Offering Circular, makes no representation as to its accuracy or completeness and expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this Offering Circular.

This Offering Circular is to be read in conjunction with all documents which are deemed to be incorporated herein by reference (see "Documents Incorporated by Reference" below). This Offering Circular shall be read and construed on the basis that such documents are incorporated and form part of this Offering Circular.

No representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Arranger or the Dealers as to the authenticity, origin, validity, accuracy or completeness of, or any errors in or omissions from, the information or statements contained or incorporated in this Offering Circular or any supplement hereto or any other information provided by the Issuer in connection with the Programme. Neither the Arranger nor the Dealers accept any liability in relation to the information contained or incorporated by reference in this Offering Circular or any other information provided by the Issuer in connection with the Programme.

No person is or has been authorized by the Issuer to give any information or to make any representation not contained in or not consistent with this Offering Circular or any other information supplied in connection with the Programme or the Notes and, if given or made, such information or representation must not be relied upon as having been authorized by the Issuer or any of the Dealers.

Neither this Offering Circular nor any other information supplied in connection with the Programme or any Notes (i) is intended to provide the basis of any credit, taxation or other evaluation or (ii) should be considered as a recommendation by the Issuer, the Arranger, or any of the Dealers that any recipient of this Offering Circular or any other information supplied in connection with the Programme or any Notes should purchase any Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of the Issuer. Neither this Offering Circular nor any other information supplied in connection with the Programme or the issue of any Notes constitutes an offer or invitation by or on behalf of the Issuer, the Arranger or any of the Dealers to any person to subscribe for or to purchase any Notes.

Neither the delivery of this Offering Circular nor the offering, sale or delivery of any Notes shall in any circumstances imply that the information contained herein concerning the Issuer is correct at any time subsequent to the date hereof or that any other information supplied in connection with the Programme is correct as of any time subsequent to the date indicated in the document containing the same. The Arranger and the Dealers expressly do not undertake to review the financial condition or affairs of the Issuer during the life of the Programme or to advise any investor in the Notes of any information coming to their attention. Investors should review, *inter alia*, the most recently published documents incorporated by reference into this Offering Circular when deciding whether or not to purchase any Notes.

This Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy any Notes in any jurisdiction to any person to whom it is unlawful to make the offer or solicitation in such jurisdiction. The distribution of this Offering Circular and the offer or sale of Notes may be restricted by law in certain jurisdictions. The Issuer, the Arranger, and the Dealers do not represent that this Offering Circular may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to an exemption

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available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by the Issuer, the Arranger, or the Dealers which would permit a public offering of any Notes or distribution of this document in any jurisdiction where action for that purpose is required. Accordingly, no Notes may be offered or sold, directly or indirectly, and neither this Offering Circular nor any advertisement or other offering material may be distributed or published in any jurisdiction, except under circumstances that will result in compliance with any applicable laws and regulations. Persons into whose possession this Offering Circular or any Notes come must inform themselves about, and observe, any such restrictions on the distribution of this Offering Circular and the offering and sale of Notes. In particular, there are restrictions on the distribution of this Offering Circular and the offer or sale of Notes in the United States, the European Economic Area and the United Kingdom, Japan, Korea, Singapore, Hong Kong and Canada. See "Subscription and Sale and Transfer and Selling Restrictions."

This Offering Circular has been prepared on the basis that any offer of Notes in any Member State of the European Economic Area or the United Kingdom (each, a "Relevant State") will be made pursuant to an exemption under the Prospectus Regulation (as defined below) from the requirement to publish a prospectus for offers of Notes. Accordingly, any person making or intending to make any offer in that Relevant State of Notes which are the subject of the offering contemplated in this Offering Circular as completed by final terms in relation to the offer of those Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation, in each case, in relation to such offer. Neither the Issuer nor the Dealers have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or the Dealers to publish or supplement a prospectus for such offer. The expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notification under Section 309B(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"): Unless otherwise stated in the Pricing Supplement in respect of any Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

In making an investment decision, investors must rely on their own examination of the Issuer and the terms of the Notes being offered, including the merits and risks involved. The Notes have not been approved or disapproved by the United States Securities and Exchange Commission or any other securities commission or other regulatory authority in the United States, nor have the foregoing authorities approved this Offering Circular or confirmed the accuracy or determined the adequacy of the information contained in this Offering Circular. Any representation to the contrary is unlawful.

None of the Arranger, the Dealers or the Issuer makes any representation to any investor in the Notes regarding the legality of its investment under any applicable laws. Any investor in the Notes should be able to bear the economic risk of an investment in the Notes for an indefinite period of time.

MiFID II Product Governance / Target Market

The Pricing Supplement in respect of any Notes may include a legend entitled "MiFID II Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the target market assessment; however, a distributor subject to Directive 2014/65/EU (as amended, "MiFID II") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "MiFID Product Governance Rules"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise

neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

Prohibition of Sales to EEA and UK Retail Investors

The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area (the "EEA") or in the United Kingdom (the "UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive (EU) 2016/97 (the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the UK may be unlawful under the PRIIPs Regulation.

U.S. Information

This Offering Circular may be submitted on a confidential basis in the United States to a limited number of QIBs or Institutional Accredited Investors (each as defined under "Form of the Notes") for informational use solely in connection with the consideration of the purchase of the Notes being offered hereby. Its use for any other purpose in the United States is not authorized. It may not be copied or reproduced in whole or in part nor may it be distributed or any of its contents disclosed to anyone other than the prospective investors to whom it is originally submitted.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to United States persons, except in certain transactions permitted by U.S. Treasury regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended, and the Treasury regulations promulgated thereunder.

Registered Notes may be offered or sold within the United States only to QIBs or to Institutional Accredited Investors, in either case, in transactions exempt from registration under the Securities Act. Each U.S. purchaser of Registered Notes is hereby notified that the offer and sale of any Registered Notes to it may be being made in reliance upon the exemption from the registration requirements of the Securities Act provided by Rule 144A under the Securities Act ("Rule 144A").

Purchasers of Definitive IAI Registered Notes will be required to execute and deliver an IAI Investment Letter (as defined under "Terms and Conditions of the Notes"). Each purchaser or holder of Definitive IAI Registered Notes, Notes represented by a Rule 144A Global Note or any Notes issued in registered form in exchange or substitution therefor (together, "Legended Notes") will be deemed, by its acceptance or purchase of any such Legended Notes, to have made certain representations and agreements intended to restrict the resale or other transfer of such Notes as set out in "Subscription and Sale and Transfer and Selling Restrictions." Unless otherwise stated, terms used in this paragraph have the meanings given to them in "Form of the Notes."

Notice to Persons in the United Kingdom

This communication is only being distributed to and is only directed at (i) persons who are outside the United Kingdom, or (ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"), or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (each such person being referred to as a "relevant person"). The Notes are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Notice to Persons in Canada

The Notes are being offered in Canada on a prospectus-exempt, private placement basis only, and may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions (NI 45-106) or subsection 73.3(1) of the Securities Act (Ontario), and that are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Prospective Canadian investors should read the section entitled "Subscription and Sale and Transfer and Selling Restrictions—Selling Restrictions—Canada" for additional information.

Service of Process and Enforcement of Civil Liabilities

The Issuer is a corporation organized under the laws of Korea. All of the officers and directors named herein reside outside the United States and all or a substantial portion of the assets of the Issuer and of such officers and directors are located outside the United States. As a result, it may not be possible for investors to effect service of process outside Korea upon the Issuer or such persons, or to enforce judgments against them obtained in courts outside Korea predicated upon civil liabilities of the Issuer or such directors and officers under laws other than Korean law, including any judgment predicated upon United States federal securities laws. The Issuer has been advised by Lee & Ko, its counsel, that there is doubt as to the enforceability in Korea in original actions or in actions for enforcement of judgments of United States courts of civil liabilities predicated solely upon the federal securities laws of the United States.

Presentation of Financial and Other Information

The Issuer maintains its financial books and records and prepares its financial statements in Won, in accordance with International Financial Reporting Standards as adopted by Korea ("Korean IFRS"), which differ in certain important respects from generally accepted accounting principles in other countries, including the generally accepted accounting principles in the United States ("U.S. GAAP").

Unless otherwise stated, the financial data contained in this Offering Circular as of and for the years ended December 31, 2017, 2018 and 2019 are derived from the Issuer's audited consolidated financial statements included herein which have been prepared in accordance with Korean IFRS.

Any discrepancies in any table between totals and sums of the amounts listed are due to rounding.

All references in this document to "Won" and "₩" refer to the currency of Korea, those to "U.S. dollars," "U.S.\$" and "\$" refer to the currency of the United States of America, those to "S\$" refer to the currency of Singapore, those to "Hong Kong dollar" and "HK\$" refer to the currency of the Hong Kong Special Administrative Region of the People's Republic of China, those to "Tenge" refer to the currency of the Republic of Kazakhstan, those to "Sterling" and "£" refer to the currency of the United Kingdom and those to "€" and "euro" refer to the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the functioning of the European Union, as amended.

For convenience only, certain Won amounts in this Offering Circular have been translated into U.S. dollars. The table below sets out, for the periods and dates indicated, information concerning the base rate under the market average exchange rate system, announced by the Seoul Money Brokerage Services, Ltd., between U.S. dollars and Won rounded to the nearest tenth of one Won (the "Market Average Exchange Rate"). Unless indicated otherwise, the translations of Won into U.S. dollars in this Offering Circular have been made at the rate of \(\forall 1,157.8\) to U.S.\\$1.00, which was the Market Average Exchange Rate as of December 31, 2019. No representation is made that the Won or U.S. dollar amounts referred to herein could have been or could be converted into U.S. dollars or Won, as the case may be, at any particular rate, or at all.

Year ended December 31,	Low	High	Average ⁽¹⁾	Period-end
		(Won pe	er U.S.\$1.00)	
2015	1,068.1	1,203.1	1,131.5	1,172.0
2016	1,093.2	1,240.9	1,160.5	1,208.5
2017	1,071.4	1,208.5	1,130.8	1,071.4
2018	1,057.6	1,142.5	1,100.3	1,118.1
2019	1,111.6	1,218.9	1,165.7	1,157.8
September	1,184.0	1,215.2	1,197.6	1,201.3
October	1,166.5	1,203.7	1,184.1	1,168.4
November	1,156.1	1,179.3	1,167.5	1,179.3
December	1,157.8	1,193.7	1,175.8	1,157.8
2020 (through April 17)	1,153.1	1,280.1	1,198.4	1,227.5
January	1,153.1	1,183.5	1,164.3	1,183.5
February	1,179.8	1,217.7	1,193.8	1,215.9
March	1,185.0	1,280.1	1,220.1	1,222.6
April (through April 17)	1,212.3	1,237.6	1,223.1	1,227.5

Source: Seoul Money Brokerage Services, Ltd.

Note:

⁽¹⁾ Represents the average of the daily Market Average Exchange Rate over the relevant period.

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In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilization Manager(s) (or persons acting on behalf of any Stabilization Manager(s)) in the applicable Pricing Supplement may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilization Manager(s) (or persons acting on behalf of a Stabilization Manager) will undertake stabilization action. Any stabilization action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Notes is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilization action or over-allotment must be conducted by the relevant Stabilization Manager(s) (or person(s) acting on behalf of Stabilization Manager(s)) in accordance with all applicable laws and rules.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents published or issued from time to time after the date hereof shall be deemed to be incorporated in, and to form part of, this Offering Circular:

- (a) the most recently published audited, (if available), consolidated and separate annual financial statements and, if published later, the most recently published, unaudited, consolidated and separate interim financial statements (if any) of the Issuer (see "General Information" for a description of the financial statements currently published by the Issuer); and
- (b) all supplements or amendments to this Offering Circular circulated by the Issuer from time to time, save that any statement contained herein or in a document which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this Offering Circular to the extent that a statement contained in any such subsequent document which is deemed to be incorporated by reference herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Offering Circular.

Separate financial statements are financial statements as presented by the parent (an investor with control of a subsidiary) or an investor with joint control of, or significant influence over, an investee, in which the investments are accounted for at cost or in accordance with Korean IFRS 1109, Financial Instruments.

The Issuer will provide, without charge, to each person to whom a copy of this Offering Circular has been delivered, upon the request of such person, a copy of any or all of the documents deemed to be incorporated herein by reference, unless such documents have been modified or superseded as specified above. Requests for such documents should be directed to the Issuer at its registered offices set out at the end of this Offering Circular. In addition, such documents will be available from the principal office in London of The Bank of New York Mellon, London Branch (the "Principal Paying Agent") for Notes listed and quoted on the Singapore Stock Exchange.

The Issuer will, in connection with the listing and quotation of the Notes on the Singapore Stock Exchange, so long as the rules of the Singapore Stock Exchange so require, in the event of any material change which is not reflected in this Offering Circular, prepare a supplement to this Offering Circular or publish a new Offering Circular for use in connection with any subsequent issue of the Notes to be listed and quoted on the Singapore Stock Exchange.

If the terms of the Programme are modified or amended in a manner which would make this Offering Circular, as so modified or amended, inaccurate or misleading, a new Offering Circular will be prepared.

AVAILABLE INFORMATION

To permit compliance with Rule 144A in connection with any resales or other transfers of Notes that are "restricted securities" within the meaning of the Securities Act, the Issuer has undertaken in a deed poll dated May 14, 2009 (the "Deed Poll") to furnish, upon the request of a holder of such Notes or any beneficial interest therein, to such holder or to a prospective purchaser designated by him, the information required to be delivered under Rule 144A(d)(4) under the Securities Act if, at the time of the request, the Issuer is neither a reporting company under Section 13 or Section 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder.

GENERAL DESCRIPTION OF THE PROGRAMME

Under the Programme, the Issuer may from time to time issue Notes denominated in any currency, subject as set out herein. A summary of the terms and conditions of the Programme and the Notes appears below. The applicable terms of any Notes will be agreed between the Issuer and the relevant Dealer prior to the issue of the Notes and will be set out in the Terms and Conditions of the Notes endorsed on, or incorporated by reference into, the Notes, as modified and supplemented by the applicable Pricing Supplement attached to, or endorsed on, such Notes, as more fully described under "Form of the Notes" below.

This Offering Circular and any supplement will only be valid for the offering of Notes during the period of 12 months from the date of this Offering Circular in an aggregate nominal amount which, when added to the aggregate nominal amount then outstanding of all Notes previously or simultaneously issued under the Programme, does not exceed U.S.\$8,000,000,000 or its equivalent in other currencies.

For the purpose of calculating the U.S. dollar equivalent of the aggregate nominal amount of Notes issued under the Programme from time to time:

- (a) the U.S. dollar equivalent of Notes denominated in another Specified Currency (as specified in the applicable Pricing Supplement in relation to the Notes, described under "Form of the Notes" below) shall be determined, at the discretion of the Issuer, either as of the date on which agreement is reached for the issue of Notes or on the preceding day on which commercial banks and foreign exchange markets are open for business in London, in each case on the basis of the spot rate for the sale of the U.S. dollar against the purchase of such Specified Currency in the London foreign exchange market quoted by any leading international bank selected by the Issuer on the relevant day of calculation;
- (b) the U.S. dollar equivalent of Dual Currency Notes, Index Linked Notes and Partly Paid Notes (each as specified in the applicable Pricing Supplement in relation to the Notes, described under "Form of the Notes" below) shall be calculated in the manner specified above by reference to the original nominal amount on issue of such Notes (in the case of Partly Paid Notes regardless of the subscription price paid); and
- (c) the U.S. dollar equivalent of Zero Coupon Notes (as specified in the applicable Pricing Supplement in relation to the Notes, described under "Form of the Notes" below) and other Notes issued at a discount or premium shall be calculated in the manner specified above by reference to the net proceeds received by the Issuer for the relevant issue.

SUMMARY OF THE PROGRAMME

The following summary does not purport to be complete and is taken from, and is qualified in its entirety by, the remainder of this Offering Circular and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. Words and expressions defined in "Form of the Notes" and "Terms and Conditions of the Notes" below shall have the same meanings in this summary.

Issuer Kookmin Bank, acting through its principal office in Korea or

through any of its overseas branches, in each case, as indicated

in the applicable Pricing Supplement.

Description Global Medium Term Note Programme

Arranger The Hongkong and Shanghai Banking Corporation Limited

Dealers BNP Paribas, Citigroup Global Markets Inc., Credit Agricole

Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, The Hongkong and Shanghai Banking Corporation Limited, J.P. Morgan Securities plc, Merrill Lynch International, MUFG Securities EMEA plc, Mizuho Securities USA LLC, Société Géneralé, Standard Chartered Bank and UBS AG Hong Kong Branch and any other Dealers appointed in

accordance with the Programme Agreement.

Certain Restrictions Each issue of Notes denominated in a currency in respect of

which particular laws, guidelines, regulations, restrictions or reporting requirements apply, will only be issued in circumstances which comply with such laws, guidelines, regulations, restrictions or reporting requirements from time to time (see "Subscription and Sale and Transfer and Selling"

Restrictions").

Notes having a maturity of less than one year

Notes having a maturity of less than one year will, if the proceeds of the issue are accepted in the United Kingdom, constitute deposits for the purposes of the prohibition on accepting deposits contained in Section 19 of the Financial Services and Markets Act 2000, unless they are issued to a limited class of professional investors and have a denomination of at least £100,000 or its equivalent. See "Subscription and Sale

and Transfer and Selling Restrictions."

Principal Paying Agent and

Calculation Agent The Bank of New York Mellon, London Branch

Registrar and Transfer Agent The Bank of New York Mellon

Paying Agent, Registrar and Transfer

Agent The Bank of New York Mellon SA/NV, Luxembourg Branch

CMU Lodging and Paying Agent The Bank of New York Mellon, Hong Kong Branch

Programme Size Up to U.S.\$8,000,000,000 (or its equivalent in other currencies

calculated as described under "General Description of the Programme") outstanding at any time. The Issuer may increase the amount of the Programme in accordance with the terms of

the Programme Agreement.

Notes may be distributed by way of private or public placement and in each case on a syndicated or non-syndicated basis. Subject to any applicable legal or regulatory restrictions, any currency as may be agreed between the Issuer and the relevant Dealer. Redenomination The applicable Pricing Supplement may provide that certain Notes may be redenominated in euro. Such maturities as may be agreed between the Issuer and the relevant Dealer and as indicated in the applicable Pricing Supplement, subject to such minimum or maximum maturities as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the Issuer or the relevant Specified Currency provided that, at the date of this Offering Circular: (i) Lower Tier II Subordinated Notes shall have a minimum maturity of five years; and (ii) Upper Tier II Subordinated Notes shall have a minimum maturity of 10 years and may not be perpetual. Issue Price Notes may be issued on a fully-paid or a partly-paid basis and at an issue price which is at par or at a discount to, or premium over, par. Notes will be issued in bearer or registered form as described in Form of Notes "Form of the Notes" below. Registered Notes will not be exchangeable for Bearer Notes and vice versa. Fixed interest will be payable on such date or dates as may be agreed between the Issuer and the relevant Dealer (as indicated in the applicable Pricing Supplement) and on redemption, and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer and the relevant Dealer. Floating Rate Notes Floating Rate Notes will bear interest at a rate determined either: (i) on the same basis as the floating rate under a notional interest-rate swap transaction in the relevant Specified Currency governed by an agreement incorporating the 2006 ISDA Definitions (as published by the International Swaps and Derivatives Association, Inc., and as amended and updated as at the Issue Date of the first Tranche of the Notes of the relevant Series); or (ii) on the basis of a reference rate appearing on the agreed screen page of a commercial quotation service; or (iii) on such other basis as may be agreed between the Issuer and the relevant Dealer. The margin (if any) relating to such floating rate will be agreed between the Issuer and the relevant Dealer for each series of Floating Rate Notes. Payments of interest in respect of Index Linked Interest Notes will be calculated by reference to such index and/or formula or to changes in the prices of securities or commodities or to such other factors as the Issuer and the relevant Dealer may agree (as indicated in the applicable Pricing Supplement) to the extent permitted by applicable law.

Other provisions in relation to
Floating Rate Notes and Index
Linked Interest Notes

Floating Rate Notes and Index Linked Interest Notes may also have a maximum interest rate, a minimum interest rate or both (as indicated in the applicable Pricing Supplement). Interest on Floating Rate Notes and Index Linked Interest Notes in respect of each Interest Period, as agreed prior to issue by the Issuer and the relevant Dealer, will be payable on such Interest Payment Dates and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer and the relevant Dealer.

Dual Currency Notes

Payments (whether in respect of principal or interest and whether at maturity or otherwise) in respect of Dual Currency Notes will be made in such currencies, and based on such rates of exchange, as the Issuer and the relevant Dealer may agree (as indicated in the applicable Pricing Supplement) to the extent permitted by applicable law.

Zero Coupon Notes

Zero Coupon Notes will be offered and sold at a discount to their nominal amount and will not bear interest other than in the case of late payment.

Redemption

The applicable Pricing Supplement will indicate either that the Notes cannot be redeemed prior to their stated maturity (other than in specified installments, if applicable, or for taxation reasons or following an Event of Default) or that such Notes will be redeemable at the option of the Issuer (only with, in the case of Subordinated Notes, the prior approval of the Financial Supervisory Service of Korea (the "FSS") or of such other relevant regulatory authorities in Korea) and/or (except in the case of Subordinated Notes) the Noteholders upon giving notice to the Noteholders or the Issuer, as the case may be, on a date or dates specified prior to such stated maturity and at a price or prices and on such other terms as may be agreed between the Issuer and the relevant Dealer. Subordinated Notes may not be redeemed less than five years after the relevant Issue Date, except for taxation reasons or following an Event of Default.

The applicable Pricing Supplement may provide that Notes may be redeemable in two or more installments of such amounts and on such dates as are indicated in the applicable Pricing Supplement.

Notes will be issued in such denominations as may be agreed between the Issuer and the relevant Dealer and as indicated in the applicable Pricing Supplement, save that the minimum denomination of each Note will be such as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the relevant Specified Currency. See "—Certain Restrictions—Notes having a maturity of less than one year" above.

Unless otherwise stated in the applicable Pricing Supplement, the minimum denomination of each Definitive IAI Registered Note will be U.S.\$500,000 or its approximate equivalent in other Specified Currencies.

Notes having a maturity of less than one year may be subject to restrictions on their denomination and distribution (see "—Certain Restrictions—Notes having a maturity of less than one year" above), and save that the minimum denomination of each Note admitted to trading on a regulated market within the European Economic Area or the United Kingdom or offered to the public in a Member State of the European Economic Area or the United Kingdom in circumstances which require the publication of a prospectus under the Prospectus Regulation will be €100,000 (or, if the Notes are denominated in a currency other than euro, the equivalent amount in such currency).

Taxation

All payments in respect of the Notes will be made without deduction for or on account of withholding taxes imposed by any tax jurisdiction, except as otherwise provided in Condition 8. In the event that any such deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 8, be required to pay additional amounts to cover the amounts so deducted. All payments in respect of the Notes will be made subject to any withholding or deduction required pursuant to FATCA, as provided in Condition 6.

Further Issues

Subject as provided in Condition 16 and the satisfaction of other relevant requirements under the Programme Agreement, the Agency Agreement (including the Conditions), the Deed Poll, the Deed of Covenant, each Pricing Supplement (as applicable in the case of each issue of listed Notes subscribed pursuant to a subscription agreement), each Subscription Agreement (as applicable in the case of each issue of listed Notes subscribed pursuant to a subscription agreement), each document, agreement or deed ancillary or supplemental to any of the documents specified in the documents above, and any other agreement or document from time to time designated as such by the Issuer and the Dealers, the Issuer may from time to time, without the consent of the Noteholders, Receiptholders or Couponholders, create and issue further securities having the same terms and conditions as any Series of Notes in all respects save for the amount and date of the first payment of interest thereon, which will be consolidated and form a single Series with the outstanding Notes of such Series.

Negative Pledge

The terms of the Senior Notes will contain a negative pledge provision as further described in Condition 4.

The terms of the Senior Notes will contain a cross-acceleration provision as further described in Condition 10.

Status of the Senior Notes

The Senior Notes will constitute direct, unconditional, and (subject to Condition 4) unsecured obligations of the Issuer which will rank *pari passu* among themselves and will rank at least *pari passu* with all other present and future unsecured (subject to Condition 4) and unsubordinated obligations of the Issuer, save for such as may be preferred by mandatory provisions of applicable law.

Status of the Subordinated Notes

The Subordinated Notes will constitute direct, general, unsecured and subordinated obligations of the Issuer which will at all times rank *pari passu* and rateably without any preference among themselves and in priority to claims of holders of all

classes of equity (including holders of preference shares (if any)) of the Issuer. The rights of holders of Subordinated Notes will be subordinated in right of payment in the manner provided in Condition 3(b).

Listing

Approval in-principle has been received from the Singapore Stock Exchange in connection with the Programme and application will be made for the listing and quotation of Notes that may be issued under the Programme and which are agreed, at or prior to the time of issue thereof, to be so listed and quoted on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, such Notes, if traded on the Singapore Stock Exchange, will be traded in a minimum board lot size of \$\$200,000 (or its equivalent in foreign currencies). The Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer in relation to each Series. Unlisted Notes may also be issued.

The applicable Pricing Supplement will state whether or not the relevant Notes will be admitted for listing and quotation on the Singapore Stock Exchange or admitted to listing, trading and/or quotation by any other stock exchange, listing authority and/or quotation system.

Governing Law

The Notes and any non-contractual obligations arising out of or in connection with the Notes will be governed by, and will be construed in accordance with, English law, except for Condition 3(b) ("Status of the Subordinated Notes") and Condition 3(c) ("Subordination") which will be governed by, and construed in accordance with, Korean law.

Notes Issued as Green Bonds, Social Bonds or Sustainability Bonds

The Issuer may agree at the relevant issue date of any Notes designated as Green Bonds, Social Bonds or Sustainability Bonds (as described in "Use of Proceeds") to allocate the net proceeds towards the financing and/or refinancing of Green Eligible Categories, Social Eligible Categories (each as defined in "Use of Proceeds") or a combination of the two categories (in the case of Sustainability Bonds) in accordance with certain prescribed eligibility criteria as described under the Kookmin Bank Sustainable Financing Framework. See "Sustainable Financing" Framework." However, it would not be an event of default under the Green Bonds, Social Bonds or Sustainability Bonds if (i) the Issuer were to fail to comply with such undertaking or were to fail to allocate the proceeds in the manner specified in the applicable Pricing Supplement and/or (ii) any Second Party Opinion (as defined in "Risk Factors—Risks Relating to the Notes—Notes issued as Green Bonds, Social Bonds or Sustainability Bonds may not be a suitable investment for all investors seeking exposure to green assets, social assets or sustainability assets") issued in connection with such Green Bonds, Social Bonds or Sustainability Bonds were to be withdrawn. Any failure to allocate the net proceeds of any Series of Green Bonds, Social Bonds or Sustainability Bonds in

connection with green projects, social projects or sustainability projects and/or any failure to meet, or to continue to meet, the investment requirements of certain environmentally or socially focused investors with respect to such Green Bonds, Social Bonds or Sustainability Bonds may affect the value and/or trading price of the Green Bonds, Social Bonds or Sustainability Bonds, and/or may have consequences for certain investors with portfolio mandates to invest in green assets, social assets or sustainability assets. Selling Restrictions There are restrictions on the offer, sale and transfer of the Notes in the United States, the European Economic Area and the United Kingdom, Japan, Korea, Singapore, Hong Kong, Canada and such other restrictions as may be required in connection with the offering and sale of a particular Tranche of Notes. See "Subscription and Sale and Transfer and Selling Restrictions."

RISK FACTORS

The Issuer believes that the following factors may affect its ability to fulfill its obligations under Notes issued under the Programme. All of these factors are contingencies which may or may not occur and the Issuer is not in a position to express a view on the likelihood of any such contingency occurring.

Factors which the Issuer believes may be material for the purpose of assessing the market risks associated with Notes issued under the Programme are also described below.

The Issuer believes that the factors described below represent the principal risks inherent in investing in Notes issued under the Programme, but the Issuer may be unable to pay interest, principal or other amounts on or in connection with any Notes for other reasons which may not be considered significant risks by the Issuer based on information currently available to it and which it may not currently be able to anticipate. The risks described below are not the only risks faced by the Issuer. Additional risks and uncertainties, including those not presently known to the Issuer or that it currently believes to be immaterial, could also have a material impact on the Issuer's financial results, businesses, financial condition or liquidity and could, directly or indirectly, adversely affect the ability of the Issuer to pay interest, principal or other amounts on or in connection with any Notes or to perform any of their respective obligations. For such additional information in respect of the Issuer, prospective investors should consider all such risks and factors and read the detailed information set out elsewhere in this Offering Circular and any applicable Final Terms to reach their own views prior to making any investment decisions.

Prospective purchasers of Notes should carefully review the information contained in this Offering Circular, including, in particular, the following matters.

Risks Relating to the Issuer's Retail Credit Portfolio

Future changes in market conditions as well as other factors may lead to increases in delinquency levels of the Issuer's retail loan portfolio.

In recent years, consumer debt has increased significantly in Korea. The Issuer's portfolio of retail loans on a separate basis, including mortgage and home equity loans, increased from \text{\text{\$\text{\$W}\$}}130,303 billion as of December 31, 2017 to \text{\text{\$\text{\$\text{\$\text{\$W}\$}}}141,894 billion as of December 31, 2018 and to \text{\text{\$\text{\$\text{\$\text{\$W}\$}}}148,559 billion as of December 31, 2019. As of December 31, 2019, on a separate basis, the Issuer's retail loans represented 50.7% of the Issuer's total lending. On a separate basis, within the Issuer's retail loan portfolio, the outstanding balance of other consumer loans, which unlike mortgage or home equity loans are often unsecured and therefore tend to carry a higher credit risk, increased from \text{\text{\$\text{\$\text{\$\text{\$W}\$}}}34,870 billion as of December 31, 2017 to \text{\text{\$\text{\$\text{\$\text{\$\text{\$W}\$}}}3,111 billion as of December 31, 2019; as a percentage of total outstanding retail loans on a separate basis, such balance increased from 26.8% as of December 31, 2017 to 29.0% as of December 31, 2019. The growth of the Issuer's retail lending business, which generally offers higher margins than other lending activities, has contributed significantly to its interest income and profitability in recent years.

The growth of the Issuer's retail loan portfolio, together with fluctuating economic conditions in Korea and globally in recent years, may lead to increases in delinquency levels and a deterioration in asset quality. On a separate basis, the amount of the Issuer's non-performing retail loans (defined as those loans that are past due by 90 days or more) increased from \text{\text{\$\frac{\text{\$\frac{\text{\$\text{

The Issuer's large exposure to consumer debt means that it is exposed to changes in economic conditions affecting Korean consumers. Accordingly, economic difficulties in Korea that hurt consumers could result in a deterioration in the credit quality of the Issuer's retail loan portfolio. For example, the severe impact of the ongoing global outbreak of the COVID-19 pandemic caused by a new strain of coronavirus on Korea's economy has disrupted the business, activities and operations of consumers, which in turn could

result in a significant decrease in the number of financial transactions or the inability of the Issuer's customers to meet existing payment or other obligations to the Issuer. See "—Other Risks Relating to the Issuer's Business—The ongoing global pandemic of COVID-19 and any possible recurrence of other types of widespread infectious disease may adversely affect the Issuer's business, financial condition or results of operations." In addition, a rise in unemployment, an increase in interest rates or a decline in real estate prices in Korea could adversely affect the ability of consumers to make payments and increase the likelihood of potential defaults. See "—Risks Relating to Korea—Unfavorable financial and economic developments in Korea may have an adverse effect on the Issuer." Despite the Issuer's efforts to minimize the Issuer's risk as a result of such exposure, there is no assurance that it will be able to prevent significant credit quality deterioration in its retail loan portfolio.

In addition, the Issuer is exposed to changes in regulations and policies on retail lending by the Korean government (the "Government"), which may adopt measures to restrict retail lending or encourage financial institutions to provide financial support to certain types of retail borrowers. From the second half of 2016 to 2018, the Government introduced various measures to tighten regulations on mortgage lending and housing subscription in response to the rapid growth in consumer debt and concerns over speculative investments in real estate in certain areas. A decrease in housing prices as a result of the implementation of such measures, together with the high level of consumer debt and rising interest rate levels, could result in declines in consumer spending and reduced economic growth, which may lead to increases in delinquency levels of the Issuer's retail loan portfolio.

In light of adverse conditions in the Korean economy affecting consumers, in March 2009, the Financial Services Commission (the "FSC") requested Korean banks, including the Issuer, to establish a "pre-workout program," including a credit counselling and recovery service, for retail borrowers with outstanding short-term debt defaults. Under the pre-workout program, which has been in operation since April 2009, maturity extensions and/or interest reductions are provided for retail borrowers with total loans of \text{\text{\$\psi}1.5} billion or less (consisting of no more than \text{\$\psi}500 million of unsecured loans and W1 billion of secured loans) who are in arrears on their payments for more than 30 days but less than 90 days or for retail borrowers with an annual income of \u22440 million or less who have been in arrears on their payments for 30 days or more on an aggregate basis for the 12 months prior to their application, among others. In addition, in March 2015, in response to increasing levels of consumer debt and amid concerns over the debt-servicing capacity of retail borrowers if interest rates were to rise, the Government launched, and requested Korean banks to participate in, a mortgage loan refinancing program aimed at reducing the payment burden on and improving the asset quality of outstanding mortgage loans. Under such refinancing program, over 340,000 qualified retail borrowers converted their outstanding non-amortizing floating-rate mortgage loans from Korean commercial banks (including the Issuer) into amortizing fixed-rate mortgage loans with lower interest rates, amounting to an aggregate principal amount of \(\mathbb{W}\)34 trillion for all commercial banks in 2015. In September 2019, the Korean government announced another similar mortgage loan refinancing program, the details of which will be finalized during the first half of 2020. The Issuer's participation in such refinancing program may lead to a decrease in its interest income on its outstanding mortgage loans, as well as in its overall net interest margin. Moreover, the Issuer's participation in such initiatives led by the Government to provide financial support to retail borrowers may lead the Issuer to offer credit terms for such borrowers that it would not generally offer, which may have an adverse effect on the Issuer's results of operations and financial condition.

Risks Relating to the Issuer's Small- and Medium-Sized Enterprise (SME) Loan Portfolio

The Issuer has significant exposure to SMEs, and any financial difficulties experienced by these customers may result in a deterioration of the Issuer's asset quality and have an adverse impact on the Issuer.

"FSS"), the delinquency ratio for Won currency loans by Korean commercial banks to SMEs was 0.4% as of December 31, 2019. The delinquency ratio for Won currency loans to SMEs is calculated as the ratio of (1) the outstanding balance of such loans in respect of which either principal or interest payments are overdue by one month or more to (2) the aggregate outstanding balance of such loans. The Issuer's delinquency ratio for such loans was 0.2% as of December 31, 2017, 0.3% as of December 31, 2018 and 0.2% as of December 31, 2019. However, the Issuer's delinquency ratio for such Won currency loans may increase in the future.

The Government has historically introduced policies and initiatives intended to encourage Korean banks to provide financial support to SME borrowers. For example, the Government requested Korean banks, including the Issuer, to establish a "fast track" program to provide liquidity assistance to SMEs on an expedited basis. Under the "fast track" program established by the Issuer, the Issuer provides liquidity assistance to qualified SME borrowers applying for such assistance, in the form of new loans or maturity extensions or interest rate adjustments with respect to existing loans, after expedited credit review and approval by the Issuer. The overall prospects for the Korean economy in 2020 and beyond remain uncertain, and the Government may extend or renew existing or past policies and initiatives or introduce new policies or initiatives to encourage Korean banks to provide financial support to SMEs. In particular, the ongoing global outbreak of the COVID-19 pandemic affecting many countries worldwide, including Korea, has prompted the Government in recent months to implement various emergency aid initiatives involving Korean banks, including the Issuer, to provide liquidity assistance to SME borrowers. Such initiatives include the provision of new loans to borrowers with low credit ratings, extension of maturity dates for existing loans and suspension of interest payment obligations for an extended period of time. The Issuer's participation in such Government-led initiatives may lead the Issuer to extend credit to SME borrowers that the Issuer would not otherwise extend, or offer terms for such credit that the Issuer would not otherwise offer, in the absence of such initiatives. Furthermore, there is no guarantee that the financial condition and liquidity position of the Issuer's SME borrowers benefiting from such initiatives will improve sufficiently for them to service their debt on a timely basis, or at all. Accordingly, increases in the Issuer's exposure to SME borrowers resulting from such Government-led initiatives may have a material adverse effect on the Issuer's financial condition and results of operations.

A substantial part of the Issuer's SME lending comprises loans to "small office/home office" customers ("SOHOs"). SOHOs, which the Issuer currently defines to include sole proprietorships and individual business interests, are usually dependent on a limited number of suppliers or customers. SOHOs tend to be affected to a greater extent than larger corporate borrowers by fluctuations in the Korean economy. In addition, SOHOs often maintain less sophisticated financial records than other corporate borrowers. Although the Issuer continues to make efforts to improve its internally developed credit rating systems to rate potential borrowers, particularly with respect to SOHOs, and intends to manage its exposure to these borrowers closely in order to prevent any deterioration in the asset quality of the Issuer's loans to this segment, the Issuer may not be able to do so as intended.

In addition, many SMEs have close business relationships with the largest Korean commercial conglomerates, known as "*chaebols*," primarily as suppliers. Any difficulties encountered by those *chaebols* would likely hurt the liquidity and financial condition of related SMEs, including those to which the Issuer has exposure, also resulting in an impairment of their ability to repay loans.

In recent years, the Issuer has taken measures which sought to stem rising delinquencies in its loans to SMEs, including through strengthening the review of loan applications and closer monitoring of the post-loan performance of SME borrowers in industry sectors that are relatively more sensitive to downturns in the economy and have shown higher delinquency ratios, such as shipping, construction, lodging, retail and wholesale, restaurants and real estate. Despite such efforts, however, there is no assurance that delinquency levels for the Issuer's loans to SMEs will not rise in the future. In particular, financial difficulties experienced by SMEs as a result of, among other things, adverse economic conditions in Korea and globally, could have an adverse impact on the ability of SMEs to make payments on the Issuer's loans. For example, the ongoing global outbreak of the COVID-19 pandemic has had a significant adverse impact on the Korean and global economy, which in turn could subject SMEs to disruptions in supply chains, a decline in sales and/or deterioration in financial conditions. In addition, aggressive marketing and competition among banks to lend to this segment may lead to a deterioration in the asset quality of the Issuer's loans to this segment in the future. Any such deterioration would result

in increased charge-offs and higher provisioning and reduced interest and fee income from this segment, which would have an adverse impact on the Issuer's financial condition and results of operations.

The Issuer has exposure to Korean construction, shipbuilding and shipping companies, and financial difficulties of these companies may have an adverse impact on the Issuer.

As of December 31, 2019, on a separate basis, the Issuer had loans outstanding to construction, shipbuilding and shipping companies (many of which are SMEs) in the amount of \(\formalleq 2,671\) billion, \(\formalleq 523\) billion and \(\formalleq 228\) billion, or 0.9%, 0.2% and 0.1% of its total loans, respectively. The Issuer also has other exposures to Korean construction, shipbuilding and shipping companies, including in the form of guarantees extended on behalf of such companies (which included, on a separate basis, confirmed guarantees of \(\formalleq 471\) billion for construction companies, \(\formalleq 983\) billion for shipbuilding companies and less than \(\formalleq 1\) billion for shipping companies as of December 31, 2019) and debt and equity securities of such companies held by the Issuer. In the case of construction companies, such exposures include guarantees provided to the Issuer by general contractors with respect to financing extended by the Issuer for residential and commercial real estate development projects. In the case of shipbuilding companies, such exposures include refund guarantees extended by the Issuer on behalf of shipbuilding companies to cover their obligation to return a portion of the ship order contract amount to customers in the event of performance delays or defaults under shipbuilding contracts.

Although the construction industry in Korea has shown signs of recovery since 2015, excessive investment in residential property development projects, the recent strengthening of mortgage lending regulations by the Government, stagnation of real property prices and reduced demand for residential property in areas outside of Seoul are expected to continue to negatively impact the construction industry. The shipbuilding industry in Korea has experienced a severe downturn in recent years reflecting a significant decrease in ship orders, primarily due to oversupply. Although ship orders have started to increase again, the shipbuilding industry has yet to recover fully. In the case of shipping companies in Korea, reduced shipping rates and high chartering costs, together with the slowdown in global trade, have contributed to the deterioration of their financial condition, requiring some of them to file for bankruptcy or pursue voluntary restructuring of their debt.

In response to the deteriorating financial condition and liquidity position of borrowers in the construction, shipbuilding and shipping industries, which were disproportionately impacted by adverse economic developments in Korea and globally, the Government implemented a program in 2009 to promote expedited restructuring of such borrowers by their Korean creditor financial institutions, under the supervision of major commercial banks. In accordance with such program, 24 construction companies and five shipbuilding companies became subject to workout in 2009, following review by their creditor financial institutions (including the Issuer) and the Government. Each year since 2009, the FSC and the FSS have announced the results of subsequent credit risk evaluations conducted by creditor financial institutions (including the Issuer) of large corporations in Korea with outstanding credit exposures of \wordsymbol{\psi}50 billion or more and SMEs in Korea with outstanding credit exposures of \wordsymbol{\psi}50 billion or less, pursuant to which a number of companies were selected by such financial institutions for restructuring in the form of workout, liquidation or court receivership. However, there is no assurance that these measures will be successful in stabilizing the Korean construction, shipbuilding and shipping industries.

The allowances that the Issuer has established against its credit exposures to Korean construction, shipbuilding and shipping companies may not be sufficient to cover all future losses arising from these and other exposures. If the credit quality of the Issuer's exposures to such companies declines further, the Issuer may incur substantial additional provisions (including in connection with restructurings of such companies) and charge-offs, which could adversely impact its results of operations and financial condition. See "—Risks Relating to the Issuer's Large Corporate Loan Portfolio—The Issuer has exposure to companies that are currently or may in the future be put in restructuring, and the Issuer may suffer losses as a result of additional loan loss provisions required and/or the adoption of restructuring plans with which it does not agree." Furthermore, although a portion of the Issuer's credit exposures to construction, shipbuilding and shipping companies are secured by collateral, such collateral may not be sufficient to cover uncollectible amounts in respect of such credit exposures. See "—Other Risks Relating to the Issuer's Business—A decline in the value of the collateral securing the Issuer's loans and the Issuer's inability to realize full collateral value may adversely affect its credit portfolio."

Risks Relating to the Issuer's Strategy

Although increasing its fee income is an important part of the Issuer's strategy, the Issuer may not be able to do so.

The Issuer has historically relied on interest income as its primary revenue source. While the Issuer has developed new sources of fee income as part of its business strategy, the Issuer's ability to increase its fee income and thereby reduce its dependence on interest income will be affected by the extent to which the Issuer's customers generally accept the concept of fee-based services. Historically, customers in Korea have generally been reluctant to pay fees in return for value-added financial services, and their continued reluctance to do so will adversely affect the implementation of the Issuer's strategy to increase its fee income. Furthermore, the fees that the Issuer charges to customers are subject to regulation by Korean financial regulatory authorities, which may seek to implement regulations or measures that may also have an adverse impact on the Issuer's ability to achieve this aspect of the Issuer's strategy.

The Issuer may suffer customer attrition or the Issuer's net interest margin may decrease as a result of its competition strategy.

The Issuer has been pursuing, and intends to continue to pursue, a strategy of maintaining or enhancing its margins where possible and avoid, to the extent possible, entering into price competition. In order to execute this strategy, the Issuer will need to maintain relatively low interest rates on its deposit products while charging relatively higher rates on loans. If other banks and financial institutions adopt a strategy of expanding market share through interest rate competition, the Issuer may suffer customer attrition due to rate sensitivity. In addition, the Issuer may in the future decide to compete to a greater extent based on interest rates, which could lead to a decrease in its net interest margins. Any future decline in the Issuer's customer base or its net interest margins as a result of its future competition strategy could have an adverse effect on the Issuer's results of operations and financial condition.

Risks Relating to the Issuer's Competition

Competition in the Korean banking industry is intense, and the Issuer may lose market share and experience declining margins as a result.

Competition in the Korean banking industry has been and is likely to remain intense. Some of the banks that the Issuer competes with have greater financial resources or more specialized capabilities than the Issuer. In the retail and SME lending business, which has been the Issuer's traditional core business, competition has increased significantly and is expected to increase further. Most Korean banks have been focusing on retail customers and SMEs in recent years, although they have begun to generally increase their exposure to large corporate borrowers. In addition, the profitability of the Issuer's retail banking operations may decline as a result of growing market saturation in the retail lending segment, increased interest rate competition and higher marketing expenses. Intense and increasing competition has made and continues to make it more difficult for the Issuer to secure retail and SME customers with the credit quality and on credit terms necessary to achieve the Issuer's business objectives in a commercially acceptable manner.

In addition, the introduction of Internet-only banks in Korea is expected to increase competition in the Korean banking industry. Internet-only banks operate without branches and conduct most of their operations through electronic means, which enables them to minimize costs and offer customers higher interest rates on deposits or lower lending rates. In April 2017, K Bank, the first Internet-only bank in Korea, commenced operations. Kakao Bank, another Internet-only bank, in which the Issuer holds a 9.9% equity interest, commenced operations in July 2017. In December 2019, Toss Bank was granted a preliminary license by the FSC to operate as an Internet-only bank and is expected to begin operations in July 2021 upon receiving final approval from the FSC.

Moreover, the Issuer believes that regulatory reforms and the general modernization of business practices in Korea will lead to increased competition among financial institutions in Korea. In the second half of 2015, the Government implemented measures to facilitate bank account portability of retail customers by requiring commercial banks to establish systems that allow retail customers to easily switch their bank accounts at one commercial bank to another and automatically transfer the automatic payment settings

of their former accounts to the new ones. Such measures have further intensified competition among financial institutions in Korea. Moreover, in March 2016, the FSC introduced an individual savings account ("ISA") scheme in Korea, which enables individuals to efficiently manage a wide range of retail investment vehicles, including cash deposits, funds and securities investment products, from a single integrated account with one financial institution and offers tax benefits on investment returns. Since the Government-backed scheme allows only one ISA per person, financial institutions have been competing to retain existing customers and attract new customers since the launch of the ISA scheme. Over 30 financial institutions, including banks, securities companies and insurance companies, have registered with the FSC to sell their ISA products and competition among these financial institutions is expected to remain intense.

Furthermore, a number of significant mergers and acquisitions in the financial industry have taken place in Korea in recent years, including Hana Financial Group's acquisition of a controlling interest in Korea Exchange Bank in 2012 and the subsequent merger of Hana Bank into Korea Exchange Bank in 2015. In addition, as part of the Government's plans to privatize Woori Finance Holdings Co., Ltd. (the former financial holding company of Woori Bank), certain subsidiaries of Woori Finance Holdings were sold to other financial institutions and Woori Finance Holdings itself was merged into Woori Bank in 2014, which established a new financial holding company, Woori Financial Group Inc., in January 2019.

The Issuer expects that consolidation in the Korean financial industry will continue. The financial institutions resulting from such consolidation may, by virtue of their increased size and business scope, provide significantly greater competition for the Issuer. The Issuer also believes that foreign financial institutions, many of which have greater experience and resources than the Issuer, may seek to compete with the Issuer in providing financial products and services either by themselves or in partnership with existing Korean financial institutions. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on the Issuer's future profitability. Accordingly, the Issuer's results of operations and financial condition may suffer as a result of increasing competition in the Korean financial industry.

Risks Relating to the Issuer's Large Corporate Loan Portfolio

The Issuer has exposure to *chaebols*, and, as a result, financial difficulties of chaebols may have an adverse impact on the Issuer.

Of the Issuer's 20 largest corporate exposures (including loans, debt and equity securities and guarantees and acceptances) as of December 31, 2019 on a separate basis, 12 were to companies that were members of the 30 largest highly-indebted business groups among *chaebols* in Korea designated as such by the FSS based on their outstanding exposures. As of that date, on a separate basis, the total amount of the Issuer's exposures to such largest highly-indebted business groups among *chaebols* was \(\fomalloa\)22,665 billion, or 6.2% of the Issuer's total exposures. If the credit quality of the Issuer's exposures to *chaebols* declines as a result of financial difficulties they experience or for other reasons, the Issuer could require substantial additional loan loss provisions, which would hurt its results of operations and financial condition. See "Assets and Liabilities—Loan Portfolio—Exposure to Chaebols."

The Issuer cannot provide assurance that the allowances it has established against these exposures will be sufficient to cover all future losses arising from these exposures. In addition, with respect to those companies that are in or in the future enter into workout or liquidation proceedings, the Issuer may not be able to make any recoveries against such companies. The Issuer may, therefore, experience future losses with respect to those loans.

The Issuer has exposure to companies that are currently or may in the future be put in restructuring, and the Issuer may suffer losses as a result of additional loan loss provisions required and/or the adoption of restructuring plans with which it does not agree.

As of December 31, 2019, on a separate basis, the Issuer's loans and guarantees to companies that were in workout, restructuring or rehabilitation amounted to \www.401 billion or 0.1% of the Issuer's total loans and guarantees, most of which were classified as impaired. As of the same date, on a separate basis, the Issuer's allowances for credit losses on these loans and guarantees amounted to \www.180 billion, or 44.9%

of these loans and guarantees. These allowances may not be sufficient to cover all future losses arising from the Issuer's exposure to these companies. Furthermore, the Issuer has other exposure to such companies, in the form of debt and equity securities of such companies held by the Issuer (including equity securities the Issuer acquired as a result of debt-to-equity conversions). In addition, in the case of borrowers that are or become subject to workout or restructuring, the Issuer may be forced to restructure its credits pursuant to restructuring plans approved by other creditor financial institutions of the borrower, or to dispose of the Issuer's credits to other creditors on unfavorable terms.

In particular, as of December 31, 2019, on a separate basis, the Issuer had \www.84 billion of outstanding loans and \text{\text{\$\text{\$W215}\$}} billion of outstanding guarantees (mainly in the form of refund guarantees relating to shipbuilding contracts), to Daewoo Shipbuilding & Marine Engineering Co., Ltd. ("DSME"), which has been pursuing a voluntary restructuring program. In April 2017, the creditors of DSME agreed on a plan to provide additional financial support to DSME in connection with its voluntary restructuring program, under which the Korea Development Bank and the Export-Import Bank of Korea would provide W2.9 trillion of new loans to DSME, on the condition that DSME's other creditors and bondholders agree to a \(\forall 2.9\) trillion debt-to-equity swap. The financial support plan required the Korean commercial bank creditors of DSME (including the Issuer) to swap 80% of their outstanding unsecured loans into equity of DSME and extend the maturity of the remaining loans for a period of three years. The financial support plan also requires DSME's creditors (including the Issuer) to provide additional refund guarantees in connection with future shipbuilding contracts of DSME. The implementation of the financial support plan for DSME has required and may continue to require the Issuer to increase its loan loss provisions and recognize write-offs and impairment losses with respect to its exposures to DSME and may therefore have a material adverse impact on the Issuer's results of operations and financial condition. Furthermore, there is no guarantee that the plan will be successful in ensuring the financial viability of DSME.

A large portion of the Issuer's credit exposure is concentrated in a relatively small number of large corporate borrowers, which increases the risk of the Issuer's corporate credit portfolio.

Other Risks Relating to the Issuer's Business

The ongoing global pandemic of COVID-19 and any possible recurrence of other types of widespread infectious disease may adversely affect the Issuer's business, financial condition or results of operations.

COVID-19, an infectious disease caused by severe acute respiratory syndrome coronavirus 2 that was first reported to have been transmitted to humans in late 2019 and has since spread globally over the course of 2020 to date, has materially and adversely affected the global economy and financial markets in recent months as well as disrupted the Issuer's business operations. The World Health Organization declared the COVID-19 as a pandemic in March 2020.

Risks associated with a prolonged outbreak of COVID-19 or other types of widespread infectious diseases include:

- an increase in defaults on loan payments from the Issuer's customers who may not be able to meet
 payment obligations, which may lead to an increase in delinquency ratios and a deterioration in
 asset quality;
- depreciation of the Won against major foreign currencies, which in turn may increase the Issuer's cost in servicing its foreign currency denominated debt and result in foreign exchange losses;

- disruption in the normal operations of the Issuer's business resulting from contraction of infectious disease by the Issuer's employees, which may necessitate the Issuer's employees to be quarantined and/or the Issuer's offices to be temporarily shut down;
- disruption resulting from the necessity for social distancing, including, for example, temporary
 arrangements for employees to work remotely, which may lead to a reduction in labor productivity;
 and
- impairments in the fair value of the Issuer's investments in companies that may be adversely affected by the pandemic.

While the exact nature and magnitude of the impact of the COVID-19 pandemic on the Issuer's business, financial condition and results of operations are continuing to be assessed by the Issuer's management, the Issuer believes that the COVID-19 pandemic has had a negative impact on its results of operations for the three months ended March 31, 2020.

It is not possible to predict the duration or the full magnitude of the overall harm that may result from COVID-19 in the long term. In the event that COVID-19 or other types of widespread infectious diseases cannot be effectively and timely contained, the Issuer's business, financial condition and results of operations will likely suffer.

Unfavorable changes in the global financial markets could adversely affect the Issuer's results of operations and financial condition.

The overall prospects for the Korean and global economy remain uncertain. In recent years and in 2020, the global financial markets have experienced significant volatility as a result of, among other things:

- the occurrence of severe health epidemics, such as the ongoing COVID-19 pandemic;
- a deterioration in economic and trade relations between the United States and its major trading partners, including China;
- increased uncertainties resulting from the United Kingdom's exit from the European Union ("Brexit");
- financial and social difficulties affecting many countries worldwide, in particular in Latin America and Europe;
- escalations in trade protectionism globally and geopolitical tensions in East Asia and the Middle East:
- the slowdown of economic growth in China and other major emerging market economies;
- interest rate fluctuations as well as changes in policy rates by the U.S. Federal Reserve and other central banks; and
- political and social instability in various countries in the Middle East, including Syria, Iraq and Yemen

In light of the high level of interdependence of the global economy, unfavorable changes in the global financial markets, including as a result of any of the foregoing developments, could have a material adverse effect on the Korean economy and financial markets. In addition, in certain circumstances of emergency affecting domestic and global economic conditions, the Government may impose certain restrictions or obligations on banks, including the Issuer, pursuant to the Foreign Exchange Transactions Act of Korea in an effort to stabilize the Korean economy. Such restrictions or obligations may also have a material adverse effect on the Issuer's business, financial condition and results of operations.

The Issuer is also exposed to adverse changes and volatility in the global and Korean financial markets as a result of the Issuer's liabilities and assets denominated in foreign currencies and the Issuer's holdings of trading and investment securities, including structured products. The value of the Won relative to major foreign currencies in general and the U.S. dollar in particular has fluctuated widely in recent years. A depreciation of the Won will increase the Issuer's cost in Won of servicing the Issuer's foreign currency-

denominated debt, while continued exchange rate volatility may also result in foreign exchange losses for the Issuer. Furthermore, as a result of changes in global and Korean economic conditions, there has been volatility in securities prices, including the stock prices of Korean and foreign companies in which the Issuer holds an interest. Such volatility has resulted in and may lead to further trading and valuation losses on the Issuer's trading and investment securities portfolio as well as impairment losses on its investments accounted for under the equity method.

The Issuer's business may be materially and adversely affected by legal claims and regulatory actions against the Issuer.

The Issuer is subject to the risk of legal claims and regulatory actions in the ordinary course of its business, which may expose the Issuer to substantial monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against the Issuer's management and employees and regulatory restrictions on its operations, as well as significant reputational harm. See "Business—Legal Proceedings."

The Issuer is unable to predict the outcome of the legal claims and regulatory actions in which it is involved, and the scope of the claims or actions or the total amount in dispute in such matters may increase. Furthermore, adverse final determinations, decisions or resolutions in such matters could encourage other parties to bring related claims and actions against the Issuer. Accordingly, the outcome of current and future legal claims and regulatory actions, particularly those for which it is difficult to assess the maximum potential exposure or the ultimate adverse impact with any degree of certainty, may materially and adversely impact the Issuer's business, reputation, results of operations and financial condition.

The Issuer's risk management system may not be effective in mitigating risk and loss.

The Issuer seeks to monitor and manage its risk exposure through a broad risk management platform, encompassing a multi-layered risk management governance structure, reporting and monitoring systems, early warning systems, credit risk management systems for the Issuer's banking operations and other risk management infrastructure, using a variety of risk management strategies and techniques. See "Risk Management." However, such risk management strategies and techniques employed by the Issuer and the judgments that accompany their application cannot anticipate the economic and financial outcome in all market environments, and many of the Issuer's risk management strategies and techniques have a basis in historical market behavior that may limit the effectiveness of such strategies and techniques in times of significant market stress or other unforeseen circumstances. Furthermore, the Issuer's risk management strategies may not be effective in a difficult or less liquid market environment, as other market participants may be attempting to use the same or similar strategies as the Issuer to deal with such market conditions. In such circumstances, it may be difficult for the Issuer to reduce its risk positions due to the activity of such other market participants.

Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate ("LIBOR"), or any other interest rate benchmark could have adverse consequences for market participants, including the Issuer.

In July 2017, the U.K. Financial Conduct Authority (the "FCA"), which has regulatory authority with respect to LIBOR, announced that it does not intend to continue to encourage, or use its power to compel, panel banks to provide rate submissions for the determination of LIBOR beyond the end of 2021. It is possible that panel banks will continue to provide rate submissions, and that the ICE Benchmark Administration, the administrator of LIBOR, will continue to determine and announce LIBOR, on the current basis after 2021, if they are willing and able to do so. However, there is no guarantee that LIBOR will be determined and announced after 2021 on the current basis or at all. See "—*Risks Relating to the Notes—The Notes may have limited liquidity.*"

Given the extensive use of LIBOR across financial markets, the transition away from LIBOR presents various risks and challenges to financial markets and institutions, including the Issuer. As a commercial bank, the Issuer uses various financial products that reference LIBOR, including, among others, commercial loans, deposits, debts and debentures, that mature after 2021. The Issuer also enters into derivatives contracts in order to address the needs of its corporate clients to hedge their risk exposure as

well as the need to hedge its own risk exposure that results from such client contracts. In February 2020, the Issuer assembled a task force team in order to assess, identify, monitor and manage risks that may arise from the potential discontinuation of LIBOR.

If not sufficiently planned for, the discontinuation of LIBOR or any other interest rate benchmark could result in increased financial, operational, legal, reputational and/or compliance risks. For example, a significant challenge will be managing the impact of the LIBOR transition on the contractual mechanics of LIBOR-based financial instruments and contracts that mature after 2021. Certain of these instruments and contracts may not provide for alternative reference rates, and even if such instruments and contracts provide for alternative reference rates, such alternative reference rates are likely to differ from the prior benchmark rates and may require the Issuer to pay interest at higher rates on the related obligations, which could adversely impact the Issuer's interest expense, results of operations and cash flows. While there are a number of international working groups focused on transition plans and the provision of fallback contract language that seek to minimize market disruption, replacement of LIBOR or any other benchmark with a new benchmark rate could adversely impact the value of and return on existing instruments and contracts. Moreover, replacement of LIBOR or other benchmark rates could result in market dislocations and have other adverse consequences for market participants, including the potential for increased costs, and litigation risks stemming from potential disputes with customers and counterparties regarding the interpretation and enforceability of fallback contract language in the LIBOR-based financial instruments and contracts.

The Issuer is generally subject to Korean corporate governance and disclosure standards, which may differ from those in other countries.

Companies in Korea, including the Issuer, are subject to corporate governance standards which may differ in some respects from standards applicable in other countries, including the United States. There may also be less publicly available information about Korean companies, such as the Issuer, than is regularly made available by public or non-public companies in other countries. Such differences in corporate governance standards and less public information could result in corporate governance practices or disclosures that are perceived as less than satisfactory by investors in certain countries.

A decline in the value of the collateral securing the Issuer's loans and the Issuer's inability to realize full collateral value may adversely affect its credit portfolio.

A substantial portion of the Issuer's loans is secured by real estate, the values of which have fluctuated significantly in recent years. Although it is the Issuer's general policy to lend up to 39% to 85% of the appraised value of collateral (except in areas of high speculation designated by the government where the Issuer generally limits its lending to between 10% to 60% of the appraised value of collateral) and to periodically re-appraise its collateral, a downturn in the real estate market in Korea may result in declines in the value of the collateral securing the Issuer's mortgage and home equity loans. If collateral values decline in the future, they may not be sufficient to cover uncollectible amounts in respect of the Issuer's secured loans. Any future declines in the value of the real estate or other collateral securing the Issuer's loans, or its inability to obtain additional collateral in the event of such declines, could result in a deterioration in the Issuer's asset quality and may require the Issuer to take additional loan loss provisions.

In Korea, foreclosure on collateral generally requires a written petition to a court. An application, when made, may be subject to delays and administrative requirements that may result in a decrease in the value realized with respect to such collateral. The Issuer cannot guarantee that it will be able to realize the full value on its collateral as a result of, among other factors, delays in foreclosure proceedings and defects in the perfection of its security interest in collateral. The Issuer's failure to recover the expected value of collateral could expose it to losses.

The secondary market for corporate bonds in Korea is not fully developed, and, as a result, the Issuer may not be able to realize the full book value of debt securities the Issuer holds at the time of any sale of such securities.

As of December 31, 2019, the Issuer held debt securities issued by Korean companies and financial institutions (other than those issued by the Bank of Korea (the "BOK"), Korea Housing Finance

Corporation, the Korea Development Bank, Industrial Bank of Korea, the Export-Import Bank of Korea, the Korea Deposit Insurance Corporation (the "KDIC") and Korea Land & Housing Corporation, which are government-owned or -controlled enterprises or financial institutions) with a total carrying amount of \(\forall 13,306\) billion in the Issuer's trading and investment securities portfolio. The market value of these securities could decline significantly due to various factors, including future increases in interest rates or a deterioration in the financial and economic condition of any particular issuer or of Korea in general. Any of these factors individually or a combination of these factors would require the Issuer to write down the fair value of these debt securities, resulting in impairment losses. Because the secondary market for corporate bonds in Korea is not fully developed, the market value of many of these securities as reflected on the Issuer's statements of financial position is determined by references to suggested prices posted by Korean rating agencies or the Korea Financial Investment Association. These valuations, however, may differ significantly from the actual value that the Issuer could realize in the event it elects to sell these securities. As a result, the Issuer may not be able to realize the full book value at the time of any such sale of these securities and thus may incur losses.

The Issuer may be required to make transfers from its general banking operations to cover shortfalls in its guaranteed trust accounts, which could have an adverse effect on its results of operations.

The Issuer manages a number of money trust accounts. Under Korean law, trust account assets of a bank are required to be segregated from the assets of that bank's general banking operations. Those assets are not available to satisfy the claims of a bank's depositors or other creditors of its general banking operations. For some of the trust accounts the Issuer manages, the Issuer has guaranteed either the principal amount of the investor's investment or the principal and a fixed rate of interest.

If, at any time, the income from the Issuer's guaranteed trust accounts is not sufficient to pay any guaranteed amount, the Issuer will have to cover the shortfall first from the special reserves maintained in these trust accounts, then from the Issuer's fees from such trust accounts and finally from funds transferred from the Issuer's general banking operations. As of December 31, 2019, the Issuer had \textbf{\text{W}}114 billion of special reserves in respect of trust accounts for which the Issuer provided guarantees of principal. There was no transfer from general banking operations to cover deficiencies in guaranteed trust accounts in 2017, 2018 and 2019. However, the Issuer may be required to make transfers from its general banking operations to cover shortfalls, if any, in its guaranteed trust accounts in the future. Such transfers may adversely impact the Issuer's results of operations.

The Issuer's operations have been, and will continue to be, subject to increasing and continually evolving cyber security and other technological risks.

With the proliferation of new technologies and the increasing use of the Internet and mobile devices to conduct financial transactions, the Issuer's operations as a large financial institution have been, and will continue to be, subject to an increasing risk of cyber incidents relating to these activities, the nature of which is continually evolving. The Issuer's computer systems, software and networks are subject to cyber incidents, such as disruptions, delays or other difficulties from its information technology system, computer viruses or other malicious codes, loss or destruction of data (including confidential client information), unauthorized access, account takeover attempts and cyber attacks. A significant portion of the Issuer's daily operations relies on its information technology systems, including customer service, billing, the secure processing, storage and transmission of confidential and other information as well as the timely monitoring of a large number of complex transactions. Although the Issuer has made substantial and continuous investments to build systems and defenses to address cyber security and other technological risks, there is no guarantee that such measures or any other measures can provide adequate security. In addition, because methods used to cause cyber attacks change frequently or, in some cases, are not recognized until launched, the Issuer may be unable to implement effective preventive measures or proactively address these methods. Furthermore, these cyber threats may arise from human error, accidental technological failure and third parties with whom the Issuer does business. Although the Issuer maintains insurance coverage that may cover certain aspects of cyber risks, such insurance coverage may be insufficient to cover all losses. If the Issuer were to be subject to a cyber incident, it could result in the disclosure of confidential client information, damage to its reputation with its customers and in the market, customer dissatisfaction, additional costs to the Issuer, regulatory penalties, exposure to

litigation and other financial losses to both the Issuer and its customers, which could have an adverse effect on the Issuer's business and results of operations.

Risks Relating to the Issuer's Liquidity and Capital Management

A considerable increase in interest rates could decrease the value of the Issuer's debt securities portfolio and raise its funding costs while reducing loan demand and the repayment ability of its borrowers, which, as a result, could adversely affect the Issuer.

Interest rates in Korea have been subject to significant fluctuations in recent years. After the BOK reduced its policy rate to 1.50% in 2015 and again to 1.25% in June 2016 amid deflationary concerns and interest rate cuts by central banks around the world, it increased its policy rate to 1.50% in November 2017 and 1.75% in November 2018 in light of improved growth prospects in Korea and rising interest rate levels globally. However, the BOK again lowered its policy rate to 1.50% in July 2019 and to 1.25% in October 2019 in order to address the sluggishness of the global and domestic economy. Subsequently, in March 2020, the BOK further lowered its policy rate to 0.75% in response to deteriorating economic conditions resulting from the ongoing global outbreak of the COVID-19 pandemic. All else being equal, an increase in interest rates in the future could lead to a decline in the value of the Issuer's portfolio of debt securities, which generally pay interest based on a fixed rate. A sustained increase in interest rates will also raise the Issuer's funding costs, while reducing loan demand, especially among retail borrowers. Rising interest rates may therefore require the Issuer to re-balance its asset portfolio and its liabilities in order to minimize the risk of potential mismatches and maintain its profitability.

In addition, rising interest rate levels may adversely affect the Korean economy and the financial condition of the Issuer's corporate and retail borrowers, which in turn may lead to a deterioration in the Issuer's credit portfolio. In particular, since most of the Issuer's retail and corporate loans bear interest at rates that adjust periodically based on prevailing market rates, a sustained increase in interest rate levels will increase the interest costs of the Issuer's retail and corporate borrowers and could adversely affect their ability to make payments on their outstanding loans.

The Issuer's funding is highly dependent on short-term deposits, which dependence may adversely affect the Issuer's operations.

The Issuer meets a significant amount of its funding requirements through short-term funding sources, which consist primarily of customer deposits. As of December 31, 2019, approximately 95.9% of the Issuer's deposits had maturities of one year or less or were payable on demand. In the past, a substantial proportion of the Issuer's customer deposits have been rolled over upon maturity. The Issuer cannot guarantee, however, that depositors will continue to roll over their deposits in the future. In the event that a substantial number of the Issuer's short-term deposit customers withdraw their funds or fail to roll over their deposits as higher-yielding investment opportunities emerge, the Issuer's liquidity position could be adversely affected. The Issuer may also be required to seek more expensive sources of short-term and long-term funding to finance its operations.

The Issuer may be required to raise additional capital if its capital adequacy ratio deteriorates or the applicable capital requirements change in the future, but the Issuer may not be able to do so on favorable terms or at all.

Under the capital adequacy requirements of the FSC, as of December 31, 2019, the Issuer was required to maintain a total minimum common equity Tier I capital adequacy ratio of 8.0%, Tier I capital adequacy ratio of 9.5% and combined Tier I and Tier II capital adequacy ratio of 11.5%, on a consolidated basis (including applicable additional capital buffers and requirements as described below). As of December 31, 2019, the Issuer's common equity Tier I capital, Tier I capital and combined Tier I and Tier II capital adequacy ratios were 14.37%, 14.68% and 15.85%, respectively, all of which exceeded the minimum levels required by the FSC. However, the Issuer's capital base and capital adequacy ratios may deteriorate in the future if its results of operations or financial condition deteriorates for any reason, including as a result of a deterioration in the asset quality of the Issuer's retail loans and loans to SMEs, or if the Issuer is not able to deploy its funding into suitably low-risk assets.

The current capital adequacy requirements of the FSC are derived from a new set of bank capital measures, referred to as Basel III, which the Basel Committee on Banking Supervision initially introduced in 2009 and began phasing in starting from 2013. Commencing in July 2013, the FSC promulgated a series of amended regulations implementing Basel III, pursuant to which Korean banks and bank holding companies were required to maintain a minimum ratio of common equity Tier I capital (which principally includes equity capital, capital surplus and retained earnings) to risk-weighted assets of 3.5% and Tier I capital to risk-weighted assets of 4.5% from December 1, 2013, which minimum ratios were increased to 4.0% and 5.5%, respectively, from January 1, 2014 and increased further to 4.5% and 6.0%, respectively, from January 1, 2015. Such requirements are in addition to the pre-existing requirement for a minimum ratio of Tier I and Tier II capital (less any capital deductions) to riskweighted assets of 8.0%, which remains unchanged. The amended regulations also require an additional capital conservation buffer of 2.5% in 2019 and 2020, as well as a potential counter-cyclical capital buffer of up to 2.5%, which is determined on a quarterly basis by the FSC. Furthermore, the Issuer was designated as one of five domestic systemically important banks for 2019 by the FSC and was subject to an additional capital requirement of 1.0% in 2019. In June 2019, the Issuer was again designated as a domestic systemically important bank for 2020, which would again subject the Issuer to an additional capital requirement of 1.0% in 2020. The implementation of Basel III in Korea may have a significant effect on the capital requirements of Korean financial institutions, including the Issuer. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."

The Issuer may be required to obtain additional capital in the future in order to remain in compliance with more stringent capital adequacy and other regulatory requirements. However, the Issuer may not be able to obtain additional capital on favorable terms, or at all. The Issuer's ability to obtain additional capital at any time may be constrained to the extent that banks or other financial institutions in Korea or from other countries are seeking to raise capital at the same time. To the extent that the Issuer fails to comply with applicable capital adequacy ratio or other regulatory requirements in the future, Korean regulatory authorities may impose penalties on the Issuer ranging from a warning to suspension or revocation of the Issuer's banking license.

Reductions in the Issuer's credit ratings could, among other things, increase the cost of borrowing funds and may adversely impact the Issuer's ability to raise new funds or refinance maturing debt on commercially acceptable terms.

Credit ratings are an indicator of the Issuer's financial and liquidity profile. Among other factors, the Issuer's credit ratings are based on its financial strength, the credit quality of and concentrations in the Issuer's loan portfolio, the level and volatility of its earnings, its capital adequacy, the quality of its management, the liquidity of its balance sheet, the availability of a significant base of core and retail deposits, and its ability to access a broad range of funding sources. Any reduction in the Issuer's credit ratings could adversely affect its liquidity and competitive position, increase its borrowing costs, and limit its access to the capital markets and funding sources on commercially acceptable terms. Such events could adversely affect the Issuer's financial condition and results of operations. A reduction in the Issuer's ratings could also adversely affect the ratings of the Notes.

Risks of the Issuer Relating to Government Regulation and Policy

The Issuer's income tax expenses may increase as a result of changes to Korean corporate income tax laws.

Pursuant to an amendment to the Corporate Income Tax Law of Korea which became effective in January 2018, the corporate income tax rate applicable to the portion of the tax base of companies that exceeds \(\pi\)300 billion has been raised from 24.2% to 27.5%, inclusive of local income surtax in each case. In addition, pursuant to an amendment to the Special Tax Treatment Control Law of Korea (the "STTCL"), which became effective in January 2018, large corporations with net equity in excess of \(\pi\)50 billion, including the Issuer, are subject to a 20% additional levy on the unused amount if a certain portion (i.e., 65% or 15%, depending on the taxation method) of their taxable income is not used for investments, wage increases or other certain expenditures as prescribed by the STTCL. Such changes in Korean income tax laws may result in an increase in the Issuer's income tax expenses, which, depending on the magnitude of such increase, may have a material adverse effect on the Issuer's results of operations.

Strengthening of consumer protection laws applicable to financial institutions could adversely affect the Issuer's operations.

As a financial service provider, the Issuer is subject to a variety of regulations in Korea that are designed to protect financial consumers. In recent years, in light of heightened public concern regarding privacy issues, the Government has placed greater emphasis on protection of personal information by financial institutions and has implemented a number of measures to enhance consumer protection, including considerably restricting a financial institution's ability to transfer or provide personal information to its affiliates or holding company. Under the Personal Information Protection Act, financial institutions, as personal information managers, may not collect, store, maintain, utilize or provide resident registration numbers of their customers, unless other laws or regulations specifically require or permit the management of resident registration numbers. In addition, under the Use and Protection of Credit Information Act, a financial institution has a higher duty to protect all information that it collects from its customers and is required to treat such information as credit information. A financial institution's ability to transfer or provide the information to its affiliates or holding company is considerably restricted. Increased damages may be imposed on a financial institution for leakage of such information. Furthermore, under the Electronic Financial Transaction Act, a financial institution is primarily responsible for compensating its customers harmed by a cyber security breach affecting the financial institution even if the breach is not directly attributable to the financial institution.

Under the newly enacted Financial Consumer Protection Act, banks, as financial instrument distributors, will be subject to heightened investor protection measures, including stricter distribution guidelines, improved financial dispute resolution procedures, increased liability for customer losses and newly imposed penalty surcharges starting in March 2021.

These and other measures that may be implemented by the Government to strengthen consumer protection laws applicable to financial institutions may limit the Issuer's operational flexibility and cause the Issuer to incur significant additional compliance costs, as well as subject the Issuer to increased potential liability to its customers, which could adversely affect the Issuer's business and performance.

The Government may promote lending and financial support by the Korean financial industry to certain types of borrowers as a matter of policy, which financial institutions, including the Issuer, may decide to follow.

Through its policies and recommendations, the Government has promoted and, as a matter of policy, may continue to attempt to promote lending by the Korean financial industry to particular types of borrowers. For example, the Government has in the past provided and may continue to provide policy loans, which encourage lending to particular types of borrowers. The Government has generally done this by identifying sectors of the economy it wishes to promote and making low interest funding available to financial institutions that may voluntarily choose to lend to these sectors. The Government has in this manner provided policy loans intended to promote mortgage lending to low-income individuals and lending to SMEs. All loans or credits the Issuer chooses to make pursuant to these policy loans would be subject to review in accordance with its credit approval procedures. However, the availability of policy loans may influence the Issuer to lend to certain sectors or in a manner in which it otherwise would not have done in the absence of such loans from the Government.

In the past, the Government has also announced policies under which financial institutions in Korea are encouraged to provide financial support to particular sectors. For example, in light of the deteriorating financial condition and liquidity position of SMEs in Korea and adverse conditions in the Korean economy affecting such enterprises, the Government introduced measures intended to encourage Korean banks to provide financial support to SMEs and retail borrowers. See "—Risks Relating to the Issuer's Retail Credit Portfolio—Future changes in market conditions as well as other factors may lead to increases in delinquency levels of the Issuer's retail loan portfolio" and "—Risks Relating to the Issuer's Small- and Medium-Sized Enterprise (SME) Loan Portfolio—The Issuer has significant exposure to SMEs, and any financial difficulties experienced by these customers may result in a deterioration of the Issuer's asset quality and have an adverse impact on the Issuer." The Government may in the future request financial institutions in Korea, including the Issuer, to make investments in or provide other forms of financial support to particular sectors of the Korean economy as a matter of policy, which financial institutions, including the Issuer, may decide to accept. The Issuer may incur costs or losses as a result of providing such financial support.

The FSC may impose burdensome measures on the Issuer if the FSC deems the Issuer to be financially unsound.

If the FSC deems the Issuer's financial condition to be unsound, or if the Issuer fails to meet applicable regulatory standards, such as minimum capital adequacy and liquidity ratios, the FSC may order or recommend, among other things:

- capital increases or reductions;
- stock cancellations or consolidations;
- transfers of businesses;
- sale of assets:
- closures of subsidiaries or branch offices;
- mergers with other financial institutions; and
- suspensions of a part of the Issuer's business operations.

If any of these measures is imposed on the Issuer by the FSC, it could damage the Issuer's business, results of operations and financial condition.

Risks Relating to Korea

Escalations in tensions with North Korea could have an adverse effect on the Issuer and the market value of the Notes.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs, which are more powerful than plutonium bombs, and warheads that can be mounted on ballistic missiles. Over the years, North Korea has also conducted a series of ballistic missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.
- In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than one hundred artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea.

Although bilateral summit meetings were held between Korea and North Korea in April, May and September 2018 and between North Korea and the United States in June 2018, February 2019 and June

2019, there can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future. Any increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea and North Korea or between the United States and North Korea break down or military hostilities occur, could have a material adverse effect on the Korean economy and on the Issuer's business, financial condition and results of operations and the market price and ratings of the Notes.

Unfavorable financial and economic developments in Korea may have an adverse effect on the Issuer.

The Issuer is incorporated in Korea, and substantially all of its operations are located in Korea. As a result, the Issuer is subject to political, economic, legal and regulatory risks specific to Korea, and the Issuer's performance and successful fulfilment of its operational strategies are dependent to a large extent on the overall Korean economy. The economic indicators in Korea in recent years have shown mixed signs, and in early 2020, the overall Korean economy has shown signs of deterioration due to the debilitating effects of the ongoing global outbreak of the COVID-19 pandemic on the Korean economy as well as on the economies of Korea's major trading partners. See "—Other Risks Relating to the Issuer's Business—The ongoing global pandemic of COVID-19 and any possible recurrence of other types of widespread infectious disease may adversely affect the Issuer's business, financial condition or results of operations." As a result, future growth of the Korean economy is subject to many factors beyond the Issuer's control, including developments in the global economy.

In recent years and in 2020, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the increasing weakness of the global economy mainly due to the COVID-19 pandemic have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. See "—Other Risks Relating to the Issuer's Business—Unfavorable changes in the global financial markets could adversely affect the Issuer's results of operations and financial condition." The value of the Won relative to major foreign currencies has also fluctuated significantly and, as a result of deteriorating global and Korean economic conditions, there recently has been significant volatility in the stock prices of Korean companies. Further declines in the Korea Composite Stock Price Index (the "KOSPI"), and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea, and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect the Issuer's business, financial condition and results of operations.

Developments that could have an adverse impact on Korea's economy include:

- declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;
- the occurrence of severe health pandemics, such as the ongoing global outbreak of the COVID-19 pandemic, or other severe health epidemics in Korea or other parts of the world, such as the Middle East Respiratory Syndrome outbreak in Korea in 2015;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy, in particular the ongoing trade disputes with Japan;
- adverse conditions or developments in the economies of countries and regions that are important export markets for Korea, such as the United States, Europe, Japan and China, or in emerging market economies in Asia or elsewhere, including as a result of deteriorating economic and trade relations between the United States and China and increased uncertainties resulting from Brexit;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, Euro or Japanese Yen exchange rates or revaluation of the Chinese Renminbi), interest rates, inflation rates or stock markets;
- increased sovereign default risks in select countries and the resulting adverse effects on the global financial markets;

- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and SME borrowers in Korea;
- a deterioration in the financial condition or performance of SMEs and other companies in Korea due to the Government's policies to increase minimum wages and limit working hours of employees;
- investigations of large Korean business groups and their senior management for possible misconduct;
- social and labor unrest;
- substantial decreases in the market prices of Korean real estate;
- a decrease in tax revenues or a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs that, together, would lead to an increased Government budget deficit;
- financial problems or lack of progress in the restructuring of *chaebols*, other large troubled companies, their suppliers or the financial sector;
- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues at certain *chaebols*;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;
- geo-political uncertainty and the risk of further attacks by terrorist groups around the world;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners;
- political uncertainty or increasing strife among or within political parties in Korea;
- hostilities or political or social tensions involving oil-producing countries in the Middle East (including a potential escalation of hostilities between the United States and Iran) and Northern Africa and any material disruption in the supply of oil or sudden increase in the price of oil;
- increased reliance on exports to service foreign currency debts, which could cause friction with Korea's trading partners;
- political or social tensions involving Russia and any resulting adverse effects on the supply of oil or the global financial markets;
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States; and
- changes in financial regulations in Korea.

Labor unrest in Korea may adversely affect the Issuer's operations.

Economic difficulties in Korea or increases in corporate reorganizations and bankruptcies could result in layoffs and higher unemployment. Such developments could lead to social unrest and substantially increase government expenditures for unemployment compensation and other costs for social programs. According to statistics from the Korea National Statistical Office, the unemployment rate increased from 3.7% in 2017 to 3.8% in 2018 and remained at 3.8% in 2019. Further increases in unemployment and any resulting labor unrest in the future could adversely affect the Issuer's operations, as well as the operations of many of the Issuer's customers and their ability to repay their loans, and could adversely affect the financial condition of Korean companies in general, depressing the price of their securities. These developments would likely have an adverse effect on the Issuer's financial condition and results of operations.

Risks Relating to the Notes

The Notes are unsecured obligations.

Because the Notes are unsecured obligations, their repayment may be compromised if:

- the Issuer enters into bankruptcy, liquidation, reorganization or other winding-up proceedings;
- there is a default in payment under the Issuer's secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of the Issuer's indebtedness.

If any of these events occurs, the Issuer's assets may not be sufficient to pay amounts due on any of the Notes.

The Notes are subject to transfer restrictions.

The Notes will not be registered under the Securities Act or any state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except to QIBs in reliance on the exemption provided by Rule 144A, to certain persons in offshore transactions in reliance on Regulation S, or pursuant to another exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws. For a further discussion of the transfer restrictions applicable to the Notes, see "Subscription and Sale and Transfer and Selling Restrictions."

The Notes may have limited liquidity.

Any Notes issued under the Programme will constitute a new issue of securities for which there is no existing market. Approval in-principle has been received from the Singapore Stock Exchange in connection with the Programme and application will be made for the listing and quotation of any Notes that may be issued under the Programme and which are agreed, at or prior to the time of issue thereof, to be listed and quoted on the Singapore Stock Exchange. The offer and sale of the Notes is not conditional on obtaining a listing and quotation of the Notes on the Singapore Stock Exchange or any other exchange.

No assurance can be given as to the liquidity of, or the development and continuation of an active trading market for, the Notes. If an active trading market for the Notes does not develop or is not maintained, the market price and liquidity of the Notes may be adversely affected. If such a market were to develop, the Notes could trade at prices that may be higher or lower than the price at which the Notes are issued depending on many factors, including:

- prevailing interest rates;
- the Issuer's results of operations, financial condition and credit ratings;
- political and economic developments in and affecting Korea;
- the market conditions for similar securities; and
- the financial condition and stability of the Korean financial sector.

The regulation and reform of "benchmark" rates of interest and indices may adversely affect the value of Notes linked to or referencing such "benchmarks."

Interest rates and indices which are deemed to be or used as "benchmarks" are the subject of recent international regulatory guidance and proposals for reform, particularly in the United Kingdom. Some of these reforms are already effective whilst others are still to be implemented. These reforms may cause such benchmarks to perform differently than in the past or to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on any Notes linked to or referencing such a benchmark. Regulation (EU) 2016/1011 (the "Benchmarks Regulation") was published in the Official Journal of the EU on June 29, 2016 and applies from January 1, 2018 (with the exception of provisions specified in Article 59 (mainly on critical benchmarks)

that apply from June 30, 2016 and July 3, 2016). The Benchmarks Regulation applies to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark within the EU. It will, among other things, (i) require benchmark administrators to be authorized or registered (or, if non-EU-based, to be subject to an equivalent regime or otherwise recognized or endorsed) and (ii) prevent certain uses by EU supervised entities of benchmarks of administrators that are not authorized or registered (or, if non-EU based, not deemed equivalent or recognized or endorsed).

The Benchmarks Regulation could have a material impact on any Notes linked to or referencing a benchmark, in particular, if the methodology or other terms of the benchmark are changed in order to comply with the requirements of the Benchmarks Regulation. Such changes could, among other things, have the effect of reducing, increasing or otherwise affecting the volatility of the published rate or level of the benchmark.

More broadly, any of the international reforms, particularly in the United Kingdom or the general increased regulatory scrutiny of benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements. For example, the sustainability of LIBOR has been questioned as a result of the absence of relevant active underlying markets and possible disincentives (including as a result of regulatory reforms) for market participants to continue contributing to such benchmarks. See "-Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate ("LIBOR"), or any other interest rate benchmark could have adverse consequences for market participants, including the Issuer." The FCA Announcement indicated that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021. The potential elimination of the LIBOR benchmark or any other benchmark, or changes in the manner of administration of any benchmark, could require an adjustment to the terms and conditions, or result in other consequences, in respect of any Notes linked to such benchmark (including, but not limited to, floating rate Notes whose interest rates are linked to LIBOR). Such factors may have the following effects on certain benchmarks: (i) discourage market participants from continuing to administer or contribute to the benchmark; (ii) trigger changes in the rules or methodologies used in the benchmark; or (iii) lead to the disappearance of the benchmark. Any of the above changes or any other consequential changes as a result of international reforms, particularly in the United Kingdom or other initiatives or investigations, could have a material adverse effect on the value of and return on any Notes linked to or referencing a benchmark.

Investors should consult their own independent advisers and make their own assessment about the potential risks imposed by the Benchmarks Regulation or any other international reforms, particularly in the United Kingdom, in making any investment decision with respect to any Notes linked to or referencing a benchmark.

The Notes may be represented by Global Notes and holders of a beneficial interest in a Global Note must rely on the procedures of the relevant Clearing System(s) (as defined below).

Notes issued under the Programme may be represented by one or more Global Notes. Such Global Notes will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg and/or a sub-custodian for the HKMA as operator of the CMU and/or DTC (each of Euroclear, Clearstream, Luxembourg, the CMU and DTC, a "Clearing System"). Except in the circumstances described in the relevant Global Note, investors will not be entitled to receive Definitive Notes. The relevant Clearing System(s) will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by one or more Global Notes, investors will be able to trade their beneficial interests only through the Clearing Systems.

While the Notes are represented by one or more Global Notes, the Issuer will discharge its payment obligations under the Notes by making payments to the relevant Clearing System for distribution to their account holders.

A holder of a beneficial interest in a Global Note must rely on the procedures of the relevant Clearing System(s) to receive payments under the relevant Notes. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Notes issued as Green Bonds, Social Bonds or Sustainability Bonds may not be a suitable investment for all investors seeking exposure to green assets, social assets or sustainability assets.

The Issuer may issue Notes under the Programme which are specified to be "Green Bonds," "Social Bonds" or "Sustainability Bonds" in the applicable Pricing Supplement (any such Notes, "Green Bonds", "Social Bonds" or "Sustainability Bonds", respectively), in accordance with the Kookmin Bank Sustainable Financing Framework. See "Sustainable Financing Framework." In connection with an issue of Green Bonds, Social Bonds or Sustainability Bonds, the Issuer may request a sustainability rating agency or sustainability consulting firm to issue an independent opinion (a "Second Party Opinion") confirming that any Green Bonds, Social Bonds or Sustainability Bonds are in compliance with the Green Bond Principles 2018 ("GBP 2018"), ICMA (the "ICMA Green Bond Principles"), the Social Bond Principles 2018 ("SBP 2018"), ICMA (the "ICMA Social Bond Principles") or the Sustainability Bond Guidelines 2018 ("SBG 2018"), ICMA (the "ICMA Sustainability Bond Guidelines"). The ICMA Green Bond Principles, the ICMA Social Bond Principles and the ICMA Sustainability Bond Guidelines are a set of voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the green bond, social bond and sustainability bond markets.

There is currently no market consensus on what precise attributes are required for a particular project to be defined as "green," "social" or "sustainability," and therefore no assurance can be provided to potential investors that the Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) will continue to meet the relevant eligibility criteria. Although applicable green projects, social projects or sustainability projects are expected to be selected in accordance with the categories recognized by the ICMA Green Bond Principles, the ICMA Social Bond Principles or the ICMA Sustainability Bond Guidelines and are expected to be developed in accordance with applicable legislation and standards, there can be no guarantee that adverse environmental and/or social impacts will not occur during the design, construction, commissioning and/or operation of any such green projects, social projects or sustainability projects. Where any negative impacts are insufficiently mitigated, green projects, social projects or sustainability projects may become controversial, and/or may be criticized by activist groups or other stakeholders.

Potential investors should be aware that any Second Party Opinion will not be incorporated into, and will not form part of, this Offering Circular or the applicable Pricing Supplement. Any such Second Party Opinion may not reflect the potential impact of all risks related to the structure of the relevant Series of Green Bonds, Social Bonds or Sustainability Bonds, their marketability, trading price or liquidity or any other factors that may affect the price or value of the Green Bonds, Social Bonds or Sustainability Bonds. Any such Second Party Opinion is not a recommendation to buy, sell or hold securities and is only current as of its date of issue.

Furthermore, although the Issuer may agree at the relevant issue date of any Green Bonds, Social Bonds or Sustainability Bonds to allocate the net proceeds towards the financing and/or refinancing of Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) in accordance with certain prescribed eligibility criteria as described under the Kookmin Bank Sustainable Financing Framework, it would not be an event of default under the Green Bonds, Social Bonds or Sustainability Bonds if (i) the Issuer were to fail to comply with such undertaking or were to fail to allocate the proceeds in the manner specified in the applicable Pricing Supplement and/or (ii) any Second Party Opinion issued in connection with such Green Bonds were to be withdrawn. Any failure to allocate the net proceeds of any Series of Green Bonds, Social Bonds or Sustainability Bonds in connection with green projects, social projects or sustainability projects and/or any failure to meet, or to continue to meet, the investment requirements of certain environmentally or socially focused investors with respect to such Green Bonds, Social Bonds or Sustainability Bonds may affect the value and/or trading price of the Green Bonds, Social Bonds or Sustainability Bonds, and/or may have consequences for certain investors with portfolio mandates to invest in green assets, social assets or sustainability assets.

Neither the Issuer nor the Dealers make any representation as to the suitability for any purpose of any Second Party Opinion or whether any Green Bonds, Social Bonds or Sustainability Bonds fulfil the relevant environmental or social criteria. Prospective investors should have regard to the relevant Green

Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) and the use of proceeds described in the applicable Pricing Supplement. Each potential purchaser of any Series of Green Bonds, Social Bonds or Sustainability Bonds should determine for itself the relevance of the information contained in this Offering Circular and in the applicable Pricing Supplement regarding the use of proceeds and its purchase of any Green Bonds, Social Bonds or Sustainability Bonds should be based upon such investigation as it deems necessary.

Subordinated Notes have only limited rights of acceleration.

Subordinated Notes (as defined in Condition 3(b) of the Terms and Conditions of the Notes) are subordinated obligations of the Issuer. Payments on Subordinated Notes are subordinated in right of payment upon the occurrence of a Subordination Event (as defined in Condition 3(c) of the Terms and Conditions of the Notes) to the prior payment in full of all deposits and other liabilities of the Issuer, except those liabilities which rank equally with or junior to Subordinated Notes. As a consequence of these subordination provisions, if any of such events should occur, the holders of Subordinated Notes may recover proportionately less than the holders of the Issuer's deposit liabilities or the creditors with respect to its other unsubordinated liabilities.

Only those events described herein regarding the Issuer's bankruptcy or liquidation will permit a holder of a Subordinated Note to accelerate payment of such Subordinated Notes. In such event, the only action the holder may take in Korea against the Issuer is to make a claim in the Issuer's liquidation or other applicable proceeding. Furthermore, if the Issuer's indebtedness were to be accelerated, its assets may be insufficient to repay in full borrowings under its debt instruments, including Subordinated Notes.

In addition, subject to complying with applicable regulatory requirements in respect of the Issuer's leverage and capital ratios and the restrictions set forth in the Issuer's articles of incorporation, there is no restriction on the amount or type of other securities or indebtedness that the Issuer may issue or incur, as the case may be, that rank senior to, or *pari passu* with, Subordinated Notes. The issue of any such other securities or the incurrence of any such other indebtedness may reduce the amount, if any, recoverable by holders of Subordinated Notes on a liquidation or winding-up of the Issuer. The issue of any such other securities or the incurrence of any such other indebtedness may also have an adverse impact on the market price of Subordinated Notes and the ability of holders to sell Subordinated Notes.

Subordinated Notes may be fully written off upon the occurrence of a trigger event, in which case holders of such Notes will lose all of their investment.

Subordinated Notes are subject to the loss absorption provisions in Condition 3(d) of the Terms and Conditions of the Notes. Pursuant to such provisions, the Issuer will irrevocably effect a full write-off of the outstanding principal amount and accrued but unpaid interest on Subordinated Notes (without the need for the consent of the holders) upon the occurrence of a trigger event tied to the performance and viability of the Issuer. A trigger event would occur upon the designation of the Issuer as an "insolvent financial institution" pursuant to the Act on Structural Improvement of the Financial Industry.

Under Article 2 of the Act on Structural Improvement of the Financial Industry, an "insolvent financial institution" is defined as a financial institution that is:

- determined by Korea's Financial Services Commission (the "FSC") or the Deposit Insurance Committee (the "DIC") established within the Korea Deposit Insurance Corporation (the "KDIC"), based on an actual survey of such financial institution's business operations, as (i) having liabilities that exceed its assets (each as valued and calculated in accordance with standards established by the FSC), or (ii) facing apparent difficulty in its normal operations because its liabilities exceed its assets (each as valued and calculated in accordance with standards established by the FSC) as a result of the occurrence of a major financial scandal or the accrual of non-performing loans;
- subject to a suspension of payments of claims (including deposits) or repayments of money borrowed from other financial institutions; or
- determined by the FSC or the DIC to be unable to make payments of claims (including deposits) or repayments of money borrowed, without external support or additional borrowings (other than borrowings accruing from ordinary course financial transactions).

In the event that Subordinated Notes are written off, such written-off amounts are irrevocably lost and will not be restored under any circumstances, including where the trigger event ceases to continue, and holders of Subordinated Notes will cease to have any claims for any principal amount and accrued but unpaid interest on Subordinated Notes. See "Terms and Conditions of the Notes—Status of the Notes—Loss Absorption upon a Trigger Event in respect of Subordinated Notes."

Potential investors should consider the risk that, due to the existence of such loss absorption features, a holder of Subordinated Notes may lose all of its investment in such Subordinated Notes in the event that a trigger event occurs.

The applicable Korean laws and regulations relating to the trigger event and loss absorption features of capital instruments like Subordinated Notes are relatively new and have yet to be tested. There is considerable uncertainty as to the circumstances under which the relevant Korean regulatory authorities will decide to effect a trigger event with respect to a particular financial institution. The occurrence of a trigger event with respect to the Issuer is therefore inherently unpredictable and is subject to factors that are outside the control of the Issuer, which will make it difficult for investors to anticipate when, if at all, a write-off of Subordinated Notes will take place. Accordingly, the trading behavior with respect to Subordinated Notes may not follow trading behavior associated with other types of securities of the Issuer or other issuers. Any indication that the Issuer is trending towards a possible trigger event could have a material adverse effect on the market price of Subordinated Notes. A potential investor should not invest in Subordinated Notes unless it has knowledge and expertise to evaluate how Subordinated Notes will perform under changing market conditions and the resulting effect on the likelihood of a write-off and on the market value of Subordinated Notes.

Under Article 38 of the Depositor Protection Act, the KDIC (upon a resolution by the DIC) may provide financial assistance to an insured financial company (such as the Issuer) or a financial holding company which controls such insured financial company that becomes an "insolvent or similar financial company" (including an "insolvency-threatened financial company") in the following circumstances: (i) there is a request to the KDIC for financial support in merging, receiving business transfer from, or receiving assignment of agreement from an insolvent or similar financial institution or from a financial holding company holding such institution or such financial assistance is deemed necessary for an orderly merger or certain other proceedings of an insolvent or similar financial institution, (ii) the improvement of the financial structure of such company is deemed necessary for the protection of depositors and the preservation of order in credit transactions or (iii) there is a request from the FSC pursuant to Article 12(1) of the Act on Structural Improvement of the Financial Industry in consideration of the fact that the insolvent or similar financial institution can no longer continue its business due to deteriorated financial structure. An "insolvency-threatened financial company" is defined under Article 2 of the Depositor Protection Act as a financial company determined by the DIC as having a high possibility of becoming an insolvent financial company due to its weak financial standing. The financial assistance to be provided can take the form of a loan or deposit of funds, a purchase of assets, a guarantee or assumption of obligations and an equity injection or contribution.

The Government has in the past also taken measures to support the capital position of Korean banks in times of stress to the Korean financial system and economy. For example, in response to the global financial crisis commencing in 2008, the Government established a \text{\text{\text{\text{W}}}20 trillion bank recapitalization fund in 2009, based on a \text{\text{\text{\text{W}}10 trillion contribution from the Bank of Korea, a \text{\text{\text{\text{W}}2 trillion contribution from the Korea Development Bank and \text{\text{\text{\text{\text{W}}8 trillion of contributions from institutional and retail investors. The bank recapitalization fund provided capital support to the Korean banking sector by purchasing an aggregate of approximately \text{\text{\text{\text{\text{W}}4 trillion of hybrid capital securities and subordinated notes issued by eight Korean financial institutions, including the Issuer.

In light of the size and scale of the Issuer and its relative importance to the Korean banking system, it is possible that, prior to the occurrence of a trigger event that leads to a write-off of Subordinated Notes, the Issuer will be classified as an insolvency-threatened financial company and receive some form of financial assistance from the KDIC, or that the Government will decide to provide other forms of financial assistance or capital support to the Issuer. However, since the provision of any such financial assistance or capital support would be at the discretion of the KDIC or the Government, as applicable, there is no guarantee that the Issuer will receive any financial assistance or capital support prior to the

occurrence of a trigger event or that any such financial assistance or capital support received by the Issuer will be sufficient to prevent the occurrence of a trigger event leading to a write-off of Subordinated Notes.

Holders of the Notes will have no creditor objection rights in connection with any future merger, spin-off or other similar transaction of the Issuer.

Under the Korean Commercial Code, a Korean company that has resolved to merge with another entity or engage in a spin-off or other similar transaction is required to provide notice of the impending transaction to its creditors and, if any creditor raises an objection to the relevant transaction during the applicable creditor objection period, either repay the relevant debt owed to such creditor or provide adequate collateral to secure such debt. However, pursuant to Condition 3(c) of the Terms and Conditions of the Notes, holders of Subordinated Notes will be deemed to have waived, and agreed not to exercise, any such creditor objection rights that may arise in connection with such a transaction of the Issuer. Accordingly, holders of the Notes will have no creditor objection rights in connection with any such future transaction of the Issuer.

The Notes may be redeemed by the Issuer in certain circumstances.

The Notes may be redeemed at the option of the Issuer, in whole but not in part, on any of the optional redemption dates specified in this Offering Circular at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption. Furthermore, the Notes may be redeemed at the option of the Issuer, in whole but not in part, at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption, upon the occurrence of certain changes in applicable tax laws and regulations which (i) require the Issuer to pay additional amounts on payments of principal and interest in respect of the Notes due to withholding or deduction required by law, or (ii) in the case of Tier I Subordinated Notes (as defined under Condition 3(b)(ii) of the Terms and Conditions of the Notes), cause the Issuer to no longer be entitled to claim a deduction in respect of interest paid on the Tier I Subordinated Notes for purposes of Korean corporation tax. In addition, the Tier I Subordinated Notes may be redeemed by the Issuer, in whole but not in part, at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption, upon the occurrence of a regulatory event that would cause the Tier I Subordinated Notes to no longer qualify as additional Tier I capital of the Issuer. Such redemptions at the option of the Issuer are subject to necessary prior approval by the FSS or such other relevant regulatory authorities in Korea. See "Terms and Conditions of the Notes-Redemption and Purchase."

Accordingly, holders of the Notes should not rely on being able to hold the Notes until their maturity date. The date on which the Issuer elects to redeem the Notes may not align with the preference of holders of the Notes, and such election by the Issuer may be disadvantageous to holders of the Notes in light of market conditions or the individual circumstances of such holders. In addition, if the Notes are redeemed prior to their maturity date (if any), there is no guarantee that the holders of the Notes will be able to reinvest the amounts received upon redemption at a rate that will provide the same return as the investment in the Notes.

Tier I Subordinated Notes have no fixed maturity date, and holders of such Notes have no right to call for redemption of such Notes.

The Tier I Subordinated Notes are undated perpetual securities and accordingly have no fixed final maturity date. Subject to the subordination provisions of Condition 3(c) of the Terms and Conditions of the Notes, the principal amount of the Tier I Subordinated Notes will become due and payable by the Issuer on the date on which voluntary or involuntary winding-up proceedings are instituted in respect of the Issuer in accordance with, as the case may be, (i) a resolution passed at a shareholders' meeting of the Issuer, (ii) any provision of the Issuer's articles of incorporation or (iii) any applicable law or any decision of any judicial or administrative authority. In addition, the holders of Tier I Subordinated Notes have no right to call for the redemption of the Tier I Subordinated Notes. Although the Issuer may redeem the Tier I Subordinated Notes at its option on any of the optional redemption dates specified in the applicable Pricing Supplement or at any time for certain tax or regulatory reasons, there are limitations on redemption of the Tier I Subordinated Notes, including a requirement to obtain the necessary prior approval of the FSS or such other relevant regulatory authorities in Korea. See "Terms"

and Conditions of the Notes—Redemption and Purchase." Accordingly, there is no guarantee as to whether or when the Tier I Subordinated Notes will be redeemed.

Interest payments on the Tier I Subordinated Notes are discretionary and are not cumulative.

The rate of interest applicable to the Tier I Subordinated Notes may be subject to reset periodically, based on the prevailing base rate plus the spread as specified in the applicable Pricing Supplement. Furthermore, interest on Tier I Subordinated Notes may not be paid in full, or at all. The Issuer may elect, in its sole discretion, to not pay any interest, or to pay only partial interest, on Tier I Subordinated Notes on any interest payment date for any reason. In addition, Tier I Subordinated Notes will not bear any interest, and any interest payable on Tier I Subordinated Notes on any interest payment date will not be paid, during an interest cancellation period, which will be triggered upon the issuance of a management improvement recommendation, a management improvement requirement or a management improvement order, or the imposition of emergency measures, by the FSC against the Issuer.

Article 36 of the Regulation on Supervision of Banking Business provides that the FSC shall issue a management improvement order to a bank where:

- the bank constitutes an "insolvent financial institution" under the Act on Structural Improvement of the Financial Industry;
- its combined Tier I and Tier II capital adequacy ratio is less than 2.0% or its Tier I capital adequacy ratio is less than 1.5% or its common equity Tier I capital ratio is less than 1.2%; or
- the bank has difficulty continuing its normal operations, even though it has previously become subject to a management improvement requirement under Article 35(1), and has been urged (but has failed) to implement a management improvement plan under Article 39(6), of the Regulation on Supervision of Banking Business.

Prior to issuing a management improvement order to a bank, the FSC would be expected to (i) issue a management improvement recommendation to such bank (for example, if its combined Tier I and Tier II capital adequacy ratio is less than 8.0% or its Tier I capital adequacy ratio is less than 6.0% or its common equity Tier I capital ratio is less than 4.5%) under Article 34 of the Regulation on Supervision of Banking Business and (ii) subject such bank to a management improvement requirement (for example, if its combined Tier I and Tier II capital adequacy ratio is less than 6.0% or its Tier I capital adequacy ratio is less than 3.5%) under Article 35 of the Regulation on Supervision of Banking Business.

Article 38(1) of the Regulation on Supervision of Banking Business provides that the FSC or its chairman shall impose emergency measures on a bank where:

- a drastic deterioration in the liquidity of the bank causes it to experience, among others, shortages of reserves and assets for repayment of deposits or an inability to repay its external debts;
- it becomes impracticable or impossible for the bank to conduct normal business operations due to the occurrence of events such as, among others, a strike, work stoppage, labor dispute or a run on its deposits; or
- there is a manifest risk of bankruptcy or insolvency of the bank or the bank is unable to repay its deposits.

Such emergency measures may include: (i) restrictions on acceptance of deposits and provision of loans by the bank; (ii) a suspension on repayment of all or any part of the bank's deposits; (iii) a prohibition on repayment of debts by the bank; and (iv) mandatory dispositions of the bank's assets under Article 38(2) of the Regulation on Supervision of Banking Business.

Furthermore, interest on any Series (as defined under "Terms and Conditions of the Notes") of Tier I Subordinated Notes will be paid only out of such amounts legally available to the Issuer from time to time under applicable Korean law for payment of dividends on equity of the Issuer (or, if higher, such amounts for payment of interest on such Tier I Subordinated Notes). Under the Korean Commercial

Code, the Issuer may pay an annual dividend only out of the excess of its net assets, on a non-consolidated basis, over the sum of (i) its stated capital (i.e., paid-in capital), (ii) the total amount of its capital surplus reserve and legal reserve accumulated up to the end of the relevant dividend period, (iii) the earned surplus reserve to be set aside for the annual dividend and (iv) any increase in net assets caused by the valuation of assets and liabilities performed in accordance with Korean accounting principles, against which no unrealized loss is set off. Depending on the ability of the Issuer to meet certain capital ratios, such amounts legally available to the Issuer under the Korean Commercial Code are subject to further restrictions pursuant to Articles 26, 26-1 and 26-2 of the Regulation on Supervision of Banking Business, which sets forth upper limits on the amounts a bank may use from its legally available amounts under the Korean Commercial Code to pay discretionary dividends, including discretionary interest payments on capital securities such as the Tier I Subordinated Notes. Specifically, the Issuer would be able to use only a certain percentage (ranging from 0% to 60%, depending on the degree of the shortfall in the applicable capital adequacy ratios) of its annual consolidated net income as stated in its latest audited financial report after deducting the regulatory reserve for credit loss if its common equity Tier I capital ratio, Tier I capital adequacy ratio or combined Tier I and Tier II capital adequacy ratio were to fall below 8.0%, 9.5% or 11.5%, respectively. The foregoing thresholds have been calculated based on (i) an additional capital conservation buffer of 2.5%, (ii) a potential countercyclical capital buffer set at 0% (which may be subject to change within the range of 0% to 2.5% based on the FSC's determination on a quarterly basis) and (iii) an additional capital requirement of 1.0% for being designated as one of six domestic systemically important banks for 2020. See "Risk Factors—Risks Relating to the Issuer's Liquidity and Capital Management—The Issuer may be required to raise additional capital if its capital adequacy ratio deteriorates or the applicable capital requirements change in the future, but the Issuer may not be able to do so on favorable terms or at all" and "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."

To the extent the aggregate amount of interest and other distributions payable on any Series of Tier I Subordinated Notes and other Tier I obligations exceed such amounts legally available to the Issuer, the aggregate amount of interest payable on such Tier I Subordinated Notes would be reduced by an amount equal to the pro rata portion of such excess. Moreover, because the Issuer is entitled to not pay interest on any interest payment date in its sole discretion, it may choose to do so even if amounts are legally available for payment of dividends or interest. See "Terms and Conditions of the Notes—Interest—Special Provisions Relating to Interest on Tier I Subordinated Notes."

Interest payments on the Tier I Subordinated Notes are not cumulative. Accordingly, if interest is not paid or is reduced on any interest payment date as a result of any of the foregoing, such unpaid interest will be irrevocably lost, and holders of Tier I Subordinated Notes will not be entitled to receive such unpaid interest on any subsequent interest payment date or any other date, whether or not funds are, or subsequently become, available. Any non-payment of interest by the Issuer will not constitute an event of default under the Tier I Subordinated Notes. Due to these interest cancellation features, the trading behavior with respect to the Tier I Subordinated Notes may not follow trading behavior associated with other types of securities of the Issuer or other issuers. A potential investor should not invest in Tier I Subordinated Notes unless it has knowledge and expertise to evaluate how the Tier I Subordinated Notes will perform under changing market conditions and the resulting effect on the likelihood of an interest cancellation and on the market value of the Tier I Subordinated Notes.

Non-payment of interest may adversely affect the trading price of the Tier I Subordinated Notes.

If interest is not paid on the Tier I Subordinated Notes on any interest payment date, the Tier I Subordinated Notes may trade at a price which is lower than the issue price or the prevailing market price prior to such interest payment date. The sale of the Tier I Subordinated Notes during any period of non-payment of interest thereon may result in the holder receiving lower returns on the investment than a holder who continues to hold the Tier I Subordinated Notes until the interest payments resume (if at all). In addition, because of the interest cancellation provisions applicable to the Tier I Subordinated Notes, the market price of the Tier I Subordinated Notes may be more volatile than that of other securities that are not subject to such provisions.

Investors should consider the U.S. federal income tax treatment of an investment in Subordinated Notes.

No statutory, judicial or administrative authority directly addresses the U.S. federal income tax characterization of the Subordinated Notes or instruments with a similar write-off feature. As a result, significant aspects of the U.S. federal income tax consequences of an investment in such Notes are uncertain. Notwithstanding their legal form as debt, the Issuer may treat certain Subordinated Notes as equity for U.S. federal income tax purposes. If the IRS were to treat the Subordinated Notes as debt for U.S. federal income tax purposes, this characterization would be potentially adverse to U.S. holders. See "Taxation—U.S. Taxation—Subordinated Notes." Prospective investors are urged to consult their tax advisers concerning the U.S. federal income tax consequences of an investment in the Subordinated Notes.

FORM OF THE NOTES

The Notes of each Series will be in either bearer form, with or without interest coupons attached, or registered form, without interest coupons attached. Bearer Notes will be issued outside the United States in reliance on Regulation S under the Securities Act ("Regulation S") and Registered Notes will be issued both outside the United States in reliance on the exemption from registration provided by Regulation S and within the United States in reliance on Rule 144A or Regulation D under the Securities Act.

Bearer Notes

Each Tranche of Bearer Notes will be initially issued in the form of either a temporary bearer global note (a "Temporary Bearer Global Note") or a permanent bearer global note (a "Permanent Bearer Global Note" and, together with a Temporary Bearer Global Note, each a "Bearer Global Note") as indicated in the applicable Pricing Supplement, which, in either case, will be delivered on or prior to the original issue date of the Tranche to a common depositary (the "Common Depositary") for Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking S.A. ("Clearstream, Luxembourg") and/or a sub-custodian for the Hong Kong Monetary Authority (the "HKMA") as operator of the Central Moneymarkets Unit Service (the "CMU"). Whilst any Bearer Note is represented by a Temporary Bearer Global Note, payments of principal, interest (if any) and any other amount payable in respect of the Notes due prior to the Exchange Date (as defined below) will be made against presentation of the Temporary Bearer Global Note only to the extent that certification (in a form to be provided) to the effect that the beneficial owners of interests in such Bearer Note are not U.S. persons or persons who have purchased for resale to any U.S. person, as required by U.S. Treasury regulations, has been received by Euroclear and/or Clearstream, Luxembourg and/or The Bank of New York Mellon, Hong Kong Branch (the "CMU Lodging and Paving Agent") and Euroclear and/or Clearstream, Luxembourg and/or the CMU, as applicable, has given a like certification (based on the certifications it has received) to the Principal Paying Agent.

On and after the date (the "Exchange Date") which is 40 days after a Temporary Bearer Global Note is issued, interests in such Temporary Bearer Global Note will be exchangeable (free of charge) upon a request as described therein either for (i) interests in a Permanent Bearer Global Note of the same Series or (ii) for definitive Bearer Notes of the same Series with, where applicable, receipts, interest coupons and talons attached (as indicated in the applicable Pricing Supplement and subject, in the case of definitive Bearer Notes, to such notice period as is specified in the applicable Pricing Supplement), in each case against certification of beneficial ownership as described above unless such certification has already been given, provided that purchasers in the United States and certain U.S. persons will not be able to receive definitive Bearer Notes. The holder of a Temporary Bearer Global Note will not be entitled to collect any payment of interest, principal or other amount due on or after the Exchange Date unless, upon due certification, exchange of the Temporary Bearer Global Note for an interest in a Permanent Bearer Global Note or for definitive Bearer Notes is improperly withheld or refused. The CMU may require that any such exchange for a Permanent Bearer Global Note is made in whole and not in part and in such event, no such exchange will be effected until all relevant account holders (as set out in a CMU Instrument Position Report (as defined in the rules of the CMU) or any other relevant notification supplied to the CMU Lodging and Paying Agent by the CMU) have so certified.

Payments of principal, interest (if any) or any other amounts on a Permanent Bearer Global Note will be made through Euroclear and/or Clearstream, Luxembourg and/or the CMU Service against presentation or surrender (as the case may be) of the Permanent Bearer Global Note without any requirement for certification.

In respect of a Bearer Global Note held through the CMU, any payments of principal, interest (if any) or any other amounts shall be made to the person(s) for whose account(s) interests in the relevant Bearer Global Note are credited (as set out in a CMU Instrument Position Report or any other relevant notification supplied to the CMU Lodging and Paying Agent by the CMU) and save in the case of final payment, no presentation of the relevant Bearer Global Note shall be required for such purpose.

The applicable Pricing Supplement will specify that a Permanent Bearer Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Bearer Notes with, where

applicable, receipts, interest coupons and talons attached upon either (i) not less than 60 days' written notice (a) in the case of Notes held by a Common Depositary for Euroclear and/or Clearstream, Luxembourg, from Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Permanent Bearer Global Note) to the Principal Paying Agent as described therein and/or (b) in the case of Notes held through the CMU, from the relevant account holders therein to the CMU Lodging and Paying Agent as described therein; or (ii) only upon the occurrence of an Exchange Event. For these purposes, Exchange Event means that (I) an Event of Default (as defined in Condition 10) has occurred and is continuing, (II) the Issuer has been notified that either Euroclear or Clearstream, Luxembourg, and in the case of Notes cleared through the CMU, the CMU, have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention to cease business permanently or have in fact done so and no successor clearing system is available, or (III) the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Permanent Bearer Global Note in definitive form (provided that, in certain circumstances where the Notes are held through Euroclear and/or Clearstream, Luxembourg, such adverse tax consequences are as a result of a change in, or amendment to, the laws or regulations (taxation or otherwise) in, or of, Korea). The Issuer will promptly give notice to Noteholders in accordance with Condition 14 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, (A) in the case of Notes held by a Common Depositary for Euroclear and/or Clearstream, Luxembourg, Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Permanent Bearer Global Note) and/or (B) in the case of Notes held through the CMU, the relevant account holders therein, may give notice to the Principal Paying Agent or, as the case may be, the CMU Lodging and Paying Agent, requesting exchange and, in the event of the occurrence of an Exchange Event as described in (III) above, the Issuer may also give notice to the Principal Paying Agent or, as the case may be, the CMU Lodging and Paying Agent requesting exchange. Any such exchange shall occur not later than 45 days after the date of receipt of the first relevant notice by the Principal Paying Agent or, as the case may be, the CMU Lodging and Paying Agent.

The following legend will appear on all Bearer Notes which have an original maturity of more than 365 days and on all receipts and interest coupons relating to such Notes:

"ANY UNITED STATES PERSON WHO HOLDS THIS OBLIGATION WILL BE SUBJECT TO LIMITATIONS UNDER THE UNITED STATES INCOME TAX LAWS, INCLUDING THE LIMITATIONS PROVIDED IN SECTIONS 165(j) AND 1287(a) OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED."

The sections referred to provide that United States holders, with certain exceptions, will not be entitled to deduct any loss on Bearer Notes, receipts or interest coupons and will not be entitled to capital gains treatment of any gain on any sale, disposition, redemption or payment of principal in respect of such Notes, receipts or interest coupons.

Notes which are represented by a Bearer Global Note will only be transferable in accordance with the rules and procedures for the time being of Euroclear or Clearstream, Luxembourg or the CMU Service, as the case may be.

Registered Notes

The Registered Notes of each Tranche offered and sold in reliance on Regulation S, which will be sold to non-U.S. persons outside the United States will initially be represented by a global note in registered form (a "Regulation S Global Note") which will be deposited with a custodian for, and registered in the name of a nominee of, the Depository Trust Company ("DTC") and/or a Common Depositary for Euroclear and Clearstream, Luxembourg and/or a sub-custodian for the HKMA as operator of the CMU. Prior to expiry of the Distribution Compliance Period (as defined in Regulation S) applicable to each Tranche of Notes, beneficial interests in a Regulation S Global Note may not be offered or sold to, or for the account or benefit of, a U.S. person save as otherwise provided in Condition 2 and may not be held otherwise than through Euroclear or Clearstream, Luxembourg or the CMU and such Regulation S Global Note will bear a legend regarding such restrictions on transfer.

The Registered Notes of each Tranche may only be offered and sold in the United States or to U.S. persons in private transactions (i) to "qualified institutional buyers" within the meaning of Rule 144A under the Securities Act ("QIBs") or (ii) to "accredited investors" as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act that are institutions ("Institutional Accredited Investors") who agree to purchase the Notes for their own account and not with a view to the distribution thereof. The Registered Notes of each Tranche sold to QIBs will be represented by a global note in registered form (a "Rule 144A Global Note" and, together with a Regulation S Global Note, the "Registered Global Notes") which will be deposited with a custodian for, and registered in the name of a nominee of, DTC.

Persons holding beneficial interests in Registered Global Notes will be entitled or required, as the case may be, under the circumstances described below, to receive physical delivery of Definitive Notes in fully registered form.

The Registered Notes of each Tranche sold to Institutional Accredited Investors will be in definitive form, registered in the name of the holder thereof ("Definitive IAI Registered Notes"). Unless otherwise set forth in the applicable Pricing Supplement, Definitive IAI Registered Notes will be issued only in minimum denominations of U.S.\$500,000 and integral multiples of U.S.\$1,000 in excess thereof (or the approximate equivalents in the applicable Specified Currency). Definitive IAI Registered Notes will be subject to the restrictions on transfer set forth therein and will bear the restrictive legend described under "Subscription and Sale and Transfer and Selling Restrictions." Institutional Accredited Investors that hold Definitive IAI Registered Notes may elect to hold such Notes through DTC, Euroclear, Clearstream, Luxembourg or the CMU, but transferees acquiring the Notes in transactions exempt from the Securities Act registration pursuant to Regulation S or Rule 144 under the Securities Act (if available) may do so upon satisfaction of the requirements applicable to such transfer as described under "Subscription and Sale and Transfer and Selling Restrictions." The Rule 144A Global Note and the Definitive IAI Registered Notes will be subject to certain restrictions on transfer set forth therein and will bear a legend regarding such restrictions.

Payments of principal, interest and any other amount in respect of the Registered Global Notes will, in the absence of provision to the contrary, be made to the person shown on the Register (as defined in Condition 6(e)) as the registered holder of the Registered Global Notes. None of the Issuer, any Paying Agent or the Registrar will have any responsibility or liability for any aspect of the records relating to or payments or deliveries made on account of beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Payments of principal, interest or any other amount in respect of the Registered Notes in definitive form will, in the absence of provision to the contrary, be made to the persons shown on the Register on the relevant Record Date (as defined in Condition 6(e)) immediately preceding the due date for payment in the manner provided in that Condition.

Interests in a Registered Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Registered Notes without receipts, interest coupons or talons attached only upon the occurrence of an Exchange Event. For these purposes, "Exchange Event" means that (i) an Event of Default has occurred and is continuing, (ii) DTC has notified the Issuer that it is unwilling or unable to continue to act as depository for the Notes and no successor or alternative clearing system is available or DTC has ceased to constitute a clearing agency registered under the Exchange Act, (iii) the Issuer has been notified that in the case of Notes registered in the name of a nominee for a Common Depositary for Euroclear and Clearstream, Luxembourg, both Euroclear and Clearstream, Luxembourg, and in the case of Notes held through the CMU, the CMU, have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention to cease business permanently or have in fact done so and, in any such case, no successor clearing system is available, or (iv) the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Registered Global Note in definitive form.

The Issuer will promptly give notice to Noteholders in accordance with Condition 14 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, (i) in the case of Notes registered in the name of a nominee for DTC or a nominee for a Common Depositary for Euroclear and/or Clearstream, Luxembourg, DTC, Euroclear and/or Clearstream, Luxembourg (acting on the instructions

of any holder of an interest in such Registered Global Note) and/or (ii) in the case of Notes held through the CMU, the relevant account holders therein, may give notice to the Registrar, or as the case may be, the CMU Lodging and Paying Agent, requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iv) in the previous paragraph above, the Issuer may also give notice to the Registrar, or as the case may be, the CMU Lodging Agent requesting exchange. Any such exchange shall occur not later than 10 days after the date of receipt of the first relevant notice by the Registrar or, as the case may be, the CMU Lodging Agent.

Transfer of Interests

Interests in a Registered Global Note may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such interest in another Registered Global Note or in the form of a Definitive IAI Registered Note and Definitive IAI Registered Notes may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such Notes in the form of an interest in a Registered Global Note. No beneficial owner of an interest in a Registered Global Note will be able to transfer such interest, except in accordance with the applicable procedures of DTC, Euroclear and Clearstream, Luxembourg and the CMU, in each case to the extent applicable. Registered Notes are also subject to the restrictions on transfer set forth therein and will bear a legend regarding such restrictions. See "Subscription and Sale and Transfer and Selling Restrictions."

General

Pursuant to the Agency Agreement (as defined under "*Terms and Conditions of the Notes*"), the Principal Paying Agent, or as the case may be, the CMU Lodging and Paying Agent shall arrange that, where a further Tranche of Notes is issued which is intended to form a single Series with an existing Tranche of Notes, the Notes of such further Tranche shall be assigned a common code and ISIN and, where applicable, a CMU instrument number, a CUSIP number and a CINS number which are different from the common code, ISIN, CMU instrument number, CUSIP number and CINS number assigned to Notes of any other Tranche of the same Series until at least the expiry of the distribution compliance period applicable to the Notes of such Tranche.

For so long as any of the Notes is represented by a Bearer Global Note held on behalf of Euroclear and/ or Clearstream, Luxembourg and/or the CMU each person (other than Euroclear or Clearstream, Luxembourg or the CMU) who is for the time being shown in the records of Euroclear or of Clearstream, Luxembourg or the CMU as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream, Luxembourg or the CMU as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer and its agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer and its agents as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note and the expressions Noteholder and holder of Notes and related expressions shall be construed accordingly. Notwithstanding the above, if a Note (whether in global or definitive form) is held through the CMU, any payment that is made in respect of such Note shall be made at the direction of the bearer or the registered holder to the person(s) for whose account(s) interests in such Note are credited as being held through the CMU in accordance with the Central Moneymarkets Unit Rules ("CMU Rules") at the relevant time as notified to the CMU Lodging and Paying Agent by the CMU in a relevant CMU Instrument Position Report or any other relevant notification by the CMU (which notification, in either case, shall be conclusive evidence of the records of the CMU as to the identity of any accountholder and the principal amount of any Note credited to its account, save in the case of manifest error) and such payments shall discharge the obligation of the Issuer in respect of that payment under such Note.

So long as DTC or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented

by such Registered Global Note for all purposes under the Agency Agreement and such Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

Any reference herein to Euroclear and/or Clearstream, Luxembourg and/or the CMU and/or DTC shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in the applicable Pricing Supplement or otherwise approved by the Issuer, the Principal Paying Agent and the Registrar.

A Note may be accelerated by the holder thereof in certain circumstances described in Condition 10. In such circumstances, where any Note is still represented by a Global Note and the Global Note (or any part thereof) has become due and repayable in accordance with the Terms and Conditions of such Notes and payment in full of the amount due has not been made in accordance with the provisions of the Global Note, then holders of interest in such Global Note credited to their accounts with Euroclear and/ or Clearstream, Luxembourg and/or the CMU and/or DTC, as the case may be, will become entitled to proceed directly against the Issuer on the basis of statements of account provided by Euroclear, Clearstream, Luxembourg and/or the CMU and/or DTC on and subject to the terms of the deed of covenant dated September 28, 2018 and executed by the Issuer (the "Deed of Covenant"). In addition, holders of interests in such Global Note credited to their accounts with DTC may require DTC to deliver Definitive Notes in registered form in exchange for their interest in such Global Note in accordance with DTC's standard operating procedures.

For so long as any Notes are listed and quoted on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that a Global Note is exchanged for Definitive Notes, the Issuer will appoint and maintain a Paying Agent in Singapore, where the Notes may be presented or surrendered for payment or redemption. In addition, in the event that a Global Note is exchanged for Definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange, and such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the Paying Agent in Singapore.

Summary of Provisions Relating to Definitive Registered Notes

Registered Notes of a Series that are initially offered and sold in the United States pursuant to Section 4(a)(2) of the Securities Act in private placement transactions exempt from registration under the Securities Act to Institutional Accredited Investors who execute and deliver to the Registrar an IAI Investment Letter substantially in the form attached to the Agency Agreement will be issued only as Definitive Registered Notes, registered in the name of the purchaser thereof or its nominee. Unless otherwise set forth in the applicable Pricing Supplement, such Definitive Registered Notes will be issued only in minimum denominations of U.S.\$500,000 and integral multiples of U.S.\$1,000 in excess thereof (or the approximate equivalents in the applicable Specified Currency). Such Definitive Registered Notes issued to Institutional Accredited Investors will be subject to the restrictions on transfer set forth therein and in the Agency Agreement and will bear the applicable legend regarding such restrictions set forth under "Subscription and Sale and Transfer and Selling Restrictions." Institutional Accredited Investors that hold Definitive Registered Notes may not elect to hold such Notes through DTC, but transferees acquiring such Notes in transactions exempt from registration under the Securities Act pursuant to Rule 144A, Regulation S or Rule 144 under the Securities Act (if available) may take delivery thereof in the form of an interest in a Rule 144A Global Note or a Regulation S Global Note, as the case may be, representing Notes of the same Series.

FORM OF APPLICABLE PRICING SUPPLEMENT

Set out below is the form of Pricing Supplement which will be completed for each Tranche of Notes issued under the Programme.

[Date]

KOOKMIN BANK

(acting through its [principal office in Korea/[●] Branch])
Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]
under the U.S.\$8,000,000,000
Global Medium Term Note Programme

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. The terms and conditions of the Notes (the "Conditions") shall consist of the terms and conditions set out under the heading "*Terms and Conditions of the Notes*" in the Offering Circular dated April 20, 2020 (the "Offering Circular"), as amended or supplemented, as the case may be, in this Pricing Supplement. Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Offering Circular. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular.

The Notes have not been registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered, delivered, or sold directly or indirectly in the Republic of Korea ("Korea") or to any resident of Korea (as defined in the Foreign Exchange Transaction Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale directly or indirectly in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations.

[The following alternative language applies if the first tranche of an issue which is being increased was issued under an Offering Circular with an earlier date.

Terms used herein shall be deemed to be defined as such for the purposes of the terms and conditions of the Notes (the "Conditions") set forth in the Offering Circular dated [original date]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular dated April 20, 2020, save in respect of the Conditions which are extracted from the Offering Circular dated [original date] and are attached hereto.]

[MiFID II product governance / Professional investors and ECPs only target market—Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Notes has led to the conclusion that: (i) the target market for the Notes is eligible counterparties and professional clients only, each as defined in [Directive 2014/65/EU (as amended, "MiFID II")][MiFID II]; and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. [Consider any negative target market.] Any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels.]

[The following legend should be included where item 16 below is marked as "Applicable".]

[PRIIPs REGULATION—PROHIBITION OF SALES TO EEA AND UK RETAIL INVESTORS—The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA") or in the United Kingdom (the "UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of [MiFID II] [Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive (EU) 2016/97 [(the "Insurance Distribution Directive")], where that customer would not qualify as a professional client as defined in

point (10) of Article 4(1) of MiFID II[.]/[; or] [(iii) not a qualified investor as defined in Regulation (EU) 2017/1129 ([, the "Prospectus Regulation")].] Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA or in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA or in the UK may be unlawful under the PRIIPs Regulation.]

[If the Notes have a maturity of less than one year from the date of their issue, the minimum denomination may need to be £100,000 or its equivalent in any other currency.]

[Notification under Section 309B(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")—The Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are [prescribed capital markets products [OR] capital markets products other than prescribed capital markets products]* (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and [Excluded Investment Products [OR] Specified Investment Products]* (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).]**

[Include whichever of the following apply or specify as "Not Applicable" (N/A). Note that the numbering should remain as set out below, even if "Not Applicable" is indicated for individual paragraphs or sub-paragraphs. Italics denote directions for completing the Pricing Supplement.]

1	Issuer:		Kookmin Bank (acting through its [principal office in Korea/ [●] Branch])
2	(i)	Series Number:	[•]
	(ii)	Tranche Number:	[•]
	(iii)	Date on which the Notes will be consolidated and form a single Series:	The Notes will be consolidated and form a single Series with [<i>identify earlier Tranches</i>] on [the Issue Date/exchange of the Temporary Global Note for interests in the Permanent Global Note, as referred to in paragraph [•] below, which is expected to occur on or about [date]] [Not Applicable]
3	Specified Currency or Currencies:		[•]
4	Aggregate Principal Amount:		
	(i)	Series:	[•]
	(ii)	Tranche:	[•]
5	(i)	[Issue Price:]	[•]% of the Aggregate Nominal Amount [plus accrued interest from [insert date] (if applicable)]
	(ii)	[Net Proceeds:]	[•]
	(Rec	juired only for listed issues)	

^{*} To delete accordingly.

^{** [}For any Notes to be offered to Singapore investors, the Issuer to consider whether it needs to re-classify the Notes pursuant to Section 309B of the SFA prior to the launch of the offer.]

- 6 (i) Specified Denominations: (in the case of Registered Notes, this means the minimum integral amount in which transfers can be made)
- [] [] (N.B. Notes must have a minimum denomination of €100,000 (or equivalent) in order to benefit from Transparency Directive exemptions in respect of wholesale securities and in order to benefit from the wholesale exemption set out in Article 3.2(d) of the Prospectus Regulation in that Member State.)

(Note—where Bearer Notes with multiple denominations above U.S.\$200,000 or equivalent are being used, the following sample wording should be followed:

"U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof up to and including U.S.\$299,000. No Notes in definitive form will be issued with a denomination above U.S.\$299,000.")

(N.B. If an issue of Notes is (i) NOT admitted to trading on a European Economic Area exchange or a United Kingdom exchange; and (ii) only offered in the European Economic Area or the United Kingdom in circumstances where a prospectus is not required to be published under the Prospectus Regulation the €100,000 minimum denomination is not required.)

- (ii) Calculation Amount:
- [] (If there is only one Specified Denomination, insert that Specified Denomination. If there is more than one Specified Denomination, insert the highest common factor. N.B. there must be a common factor in the case of two or more Specified Denominations)

7 (i) Issue Date:

[•]

[Specify/Issue Date/Not Applicable]

- (ii) Interest Commencement Date:
- [] (N.B. An Interest Commencement Date will not be relevant for certain Notes, for example, Zero Coupon Notes)

8 Maturity Date:

[Fixed rate—specify date/Floating rate—Interest Payment Date falling in or nearest to [specify month]] (N.B.: (i) Lower Tier II Subordinated Notes shall have a minimum maturity of five years; and (ii) Upper Tier II Subordinated Notes shall have a minimum maturity of 10 years and may not be perpetual)

9 Interest Basis:

[[•]% Fixed Rate]

[[Specify Reference Rate] +/- [•]% Floating Rate]

[Zero Coupon]

[Index Linked Interest] [Dual Currency Interest]

[specify other]

(further particulars specified below)

10 Redemption/Payment Basis:

[Redemption at par]

[Dual Currency Redemption]

[Partly Paid]
[Instalment]
[specify other]

11 Change of Interest or Redemption/Payment Basis:

[Specify details of any provision for change of Notes into another Interest Basis or Redemption/Payment Basis]

12 Put/Call Options:

[Investor Put]
[Issuer Call]

[(further particulars specified below)]

13 Status of the Notes:

[Senior/Subordinated] [If Subordinated, specify either Upper Tier II Subordinated or Lower Tier II Subordinated]

14 Listing and admission to trading:

[Singapore Exchange Securities Trading Limited/specify

other/None]

15 Method of distribution:

[Syndicated/Non-syndicated]

16 Prohibition of Sales to EEA and UK Retail Investors: [Applicable/Not Applicable]

[If the Notes clearly do not constitute "packaged" products, "Not Applicable" should be specified. If the Notes may constitute "packaged" products and no KID will be prepared, "Applicable" should be specified]

17 Use of Proceeds:

[•] [If different from the use of proceeds specified in the Offering Circular]

Provisions Relating to Interest (if any) Payable

18 Fixed Rate Note Provisions:

[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)

(i) Rate(s) of Interest:

[•]% per annum payable in arrear on each Interest Payment Date

(ii) Interest Payment Date(s):

[•] in each year up to and including the Maturity Date (Amend appropriately in the case of irregular coupons)

(iii) Fixed Coupon Amount(s): (Applicable to Notes in definitive form)

[•] per Calculation Amount**

(iv) Broken Amount(s): (Applicable to Notes in definitive form)

•] per Calculation Amount payable on the Interest Payment Date falling [in/on] [●].* Note that for certain Hong Kong dollar denominated Fixed Rate Notes, the Interest Payment Dates are subject to modification and the following words should be added: "provided that if any Interest Payment Date falls on a day which is not a Business Day, the Interest Payment Date will be the next succeeding Business Day unless it would thereby fall in the next calendar month in which event the Interest Payment Date shall be brought forward to the immediately preceding Business Day. For these purposes, "Business Day" means a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and currency deposits) in Hong Kong and [•]."** For Hong Kong dollar denominated Fixed Rate Notes where the Interest Payment Dates are subject to modification the following wording is appropriate: "Each Fixed Coupon Amount shall be calculated by applying the Rate of Interest to each Specified Denomination,

multiplying such sum by the actual number of days in the Accrual Period (as defined in Condition 5(a)) divided by 365 and rounding the resultant figure to the nearest HK\$0.01, HK\$0.005 being rounded upwards."

(v) Day Count Fraction:

[Actual/Actual (ICMA)/specify other]

(vi) Determination Date[s]:

[•] in each year [Insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon (N.B.: This will need to be amended in the case of regular interest payment dates which are not of equal duration) (N.B.: Only relevant where Day Count Fraction is Actual/Actual (ICMA))]

(vii) Other terms relating to the method of calculating interest for Fixed Rate Notes:

[None/Give details]

19 Floating Rate Note Provisions:

[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph.)

(i) Specified Period(s)/Specified Interest Payment Dates:

(ii) Business Day Convention:

[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/[specify other]]

(iii) Additional Business Centre(s):

(iv) Manner in which the Rate of Interest and Interest Amount are to be determined: [Screen Rate Determination/ISDA Determination/specify other]

(v) Party responsible for calculating the Rate of Interest and Interest Amount (if not the Agent):

(vi) Screen Rate Determination:

—Reference Rate and Relevant Financial Centre:

Reference Rate: [•] month [LIBOR/EURIBOR/HIBOR/specify other Reference Rate].

—Interest Determination Date(s):

[•] (Second London Business Day prior to the start of each Interest Period if LIBOR (other than Sterling, Hong Kong dollar or euro LIBOR), first day of each Interest Period if Sterling or Hong Kong dollar LIBOR or HIBOR and the second day on which the TARGET2 System is open prior to the start of each Interest Period if EURIBOR or euro LIBOR)

—Relevant Screen Page:

[•] (In the case of EURIBOR, if not Reuters Page EURIBOR 01 ensure it is a page which shows a composite rate or amend the fallback provisions appropriately)

	(vii)	ISDA Determination:	
	—Floating Rate Option:		[•]
	—Designated Maturity:		[•]
	—Reset Date:		[•] (In the case of a LIBOR, EURIBOR or HIBOR based option, the first day of the Interest Period)
	(viii)	Margin(s):	[+/-] [●]% per annum
	(ix)	Minimum Rate of Interest:	[•]% per annum
	(x)	Maximum Rate of Interest:	[•]% per annum
	(xi)	Day Count Fraction:	[Actual/Actual (ISDA)] [Actual/Actual] [Actual/365 (Fixed)] [Actual/365 (Sterling)] [Actual/360] [30/360] [360/360] [Bond Basis] [30E/360] [Eurobond Basis] (See Condition 5 for alternatives)
	(xii)	Fall back provisions, rounding provisions and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[•]
20	Zero Coupon Note Provisions:		[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Accrual Yield:	[•]% per annum
	(ii)	Reference Price:	[•]
	(iii)	Any other formula/basis of determining amount payable:	[•]
	(iv)	Day Count Fraction in relation to Early Redemption Amounts and late payment:	[30/360] [Actual/360] [Actual/365]
21	Index Linked Note Provisions:		[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Index/Formula:	[give or annex details]
	(ii)	Calculation Agent:	[•]
	(iii)	Party responsible for calculating the Rate of Interest (if not the Calculation Agent) and Interest Amount (if not the Principal Paying Agent):	[•]

	(iv)	Provisions for determining Coupon where calculation by reference to Index and/or Formula is impossible or impracticable:	[•]
	(v)	Specified Period(s)/Specified Interest Payment Dates:	[•]
	(vi)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/specify other]
	(vii)	Additional Business Centre(s):	[•]
	(viii)	Minimum Rate of Interest:	[•]% per annum
	(ix)	Maximum Rate of Interest:	[●]% per annum
	(x)	Day Count Fraction:	[•]
22	Dual Currency Note Provisions:		[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Rate of Exchange/method of calculating Rate of Exchange:	[give details]
	(ii)	Party, if any, responsible for calculating the principal and/or interest payable due (if not the Principal Paying Agent):	[•]
	(iii)	Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable:	[•]
	(iv)	Person at whose option Specified Currency(ies) is/are payable	[•]
		Provisions	Relating to Redemption
23	Issuer Call:		[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i)	Optional Redemption Date(s):	[•]
	(ii)	Optional Redemption Amount and method, if any, of calculation of such amount(s):	[•] [per Calculation Amount/specify other/see Appendix]
	(iii)	If redeemable in part:	
	(a)	Minimum Redemption Amounts	[•]

(b) Maximum Redemption Amount:

[•]

(iv) Notice period (if other than as set out in the Conditions):

[•] (N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer is advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer and the Agent)

24 Investor Put

[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)

- (i) Optional Redemption Date(s):
- []
- (ii) Optional Redemption Amount and method, if any, of calculation of such amount(s):
- | [per Calculation Amount/specify other/see Appendix]
- (iii) Notice period (if other than as set out in the Conditions):
- [] (N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer is advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer and the Agent)
- 25 Redemption Amount of each Note:
- [[] per Calculation Amount/specify other/see Appendix]
- 26 Early Redemption Amount of each Note payable on redemption for taxation reasons or on event of default and/or the method of calculating the same (if required or if different from that set out in Condition 7(e)):
- [] per Calculation Amount/specify other/see Appendix]

General Provisions Applicable to the Notes

27 Form of Notes:

[Bearer Notes:

[Temporary Bearer Global Note exchangeable for a Permanent Bearer Global Note which is exchangeable for Definitive Notes [on 60 days' notice given at any time/only upon an Exchange Event]]

[Temporary Bearer Global Note exchangeable for Definitive Notes on and after the Exchange Date]

[Permanent Bearer Global Note exchangeable for Definitive Notes [on 60 days' notice given at any time/only upon an Exchange Event]]]

(Ensure that this is consistent with the wording in the "Form of the Notes" section in the Offering Circular and the Notes themselves. N.B. The exchange upon notice/at any time options should not be expressed to be applicable

if the Specified Denomination of the Notes in paragraph 6 includes language substantially to the following effect:

"U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof up to and including U.S.\$299,000."

Furthermore, such Specified Denomination construction is not permitted in relation to any issue of Notes which is to be represented on issue by a Temporary Global Note exchangeable for Definitive Notes.)

[Registered Notes:

Regulation S Global Note (U.S.\$[●] nominal amount) / Rule 144A Global Note (U.S.\$[●] nominal amount) / Definitive IAI Registered Notes (specify nominal amounts)]

28 Additional Financial Centre(s) or other special provisions relating to Payment Dates:

[Not Applicable/give details] (Note that this item relates to the place of payment and not Interest Period end dates to which items 17(iii) and 19(vii) relate)

29 Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):

[Yes/No. If yes, give details]

30 Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:

[Not Applicable/give details] (N.B.: A new form of Global Note may be required for Partly Paid issues)

31 Details relating to Instalment Notes:

[Not Applicable/The provisions [in Condition [•]] [annexed to this Pricing Supplement] apply]

(i) Instalment Amount(s):

[Not Applicable/give details]

(ii) Instalment Date(s):

[Not Applicable/give details]

32 Redenomination applicable:

Redenomination [not] applicable [(If Redenomination is applicable, specify the applicable Day Count Fraction and any provisions necessary to deal with floating rate interest calculation (including alternative reference rates))] [(if Redenomination is applicable, specify the terms of the redenomination in an Annex to the Pricing Supplement)]

33 Other terms or special conditions:

[Not Applicable/give details]

Distribution

34 (i) If syndicated, names of Managers:

[Not Applicable/give names]

(ii) Stabilizing Manager(s) (if any):

[Not Applicable/give name(s)]

35 If non-syndicated, name of relevant Dealer:

[Not Applicable/give name]

FORM OF APPLICABLE PRICING SUPPLEMENT

36 U.S. selling restrictions: [Reg. S Compliance Category [1/2]/Rule 144A/ TEFRA D/

TEFRA C/TEFRA not applicable]

37 Additional selling restrictions: [Not Applicable/give details]

Operational Information

Any clearing system(s) other than DTC, Euroclear and Clearstream, Luxembourg and the relevant identification number(s):

[Not Applicable/give name(s) and number(s)]

39 Delivery: Delivery [against/free of] payment

40 Additional Paying Agent(s) (if any): [Not Applicable/give name]

(i) ISIN: [●]

(ii) Common Code: [●]

(iii) CMU Instrument Number: [•]

(iv) CUSIP: [●]

(v) LEI: 549300XXMOJSIW8P4769

(insert here any other relevant codes such as a CMU instrument number and CINS codes)

41 Provisions Relating to Green Bonds, Social Bonds or Sustainability Bonds

(i) Green Bonds: [Yes/No]

(ii) Social Bonds: [Yes/No]

(iii) Sustainability Bonds: [Yes/No]

(iv) [Reviewer(s):] [Name of sustainability rating agency(ies) and name of

third party assurance agent] and [give details of

compliance opinion (s) and availability]]

Listing Application

This Pricing Supplement comprises the details required to list the issue of Notes described herein pursuant to the U.S.\$8,000,000,000 Global Medium Term Note Programme of Kookmin Bank. The Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval in-principle from, admission to the Official List of, and the listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes.

Responsibility

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:

By:

Duly authorized

If the applicable Pricing Supplement specifies any modification to the Terms and Conditions of the Notes as described herein, it is envisaged that, to the extent that such modification relates only to Conditions 1, 2, 5, 6, 7 (except Condition 7(b)), 11, 12, 13, 14 (insofar as Notes are not listed or admitted to trading on any stock exchange) and 16, they will not necessitate the preparation of a supplement to this Offering Circular. If the Terms and Conditions of the Notes of any Series are to be modified in any other respect, a supplement to this Offering Circular will be prepared, if appropriate.

TERMS AND CONDITIONS OF THE NOTES

The following are the Terms and Conditions of the Notes to be issued by the Issuer which will be incorporated by reference into each Global Note (as defined below) and each definitive Note, in the latter case only if permitted by the relevant stock exchange (if any) and agreed by the Issuer and the relevant Dealer at the time of issue but if not so permitted and agreed, such definitive Note will have endorsed thereon or attached thereto such Terms and Conditions. The applicable Pricing Supplement in relation to any Tranche of Notes may specify other terms and conditions which shall to the extent so specified or to the extent inconsistent with the following Terms and Conditions, replace or modify the following Terms and Conditions for the purpose of such Notes. The applicable Pricing Supplement (or the relevant provisions thereof) will be endorsed upon, or attached to, each Global Note and definitive Note. Reference should be made to "Form of the Notes" above for a description of the content of Pricing Supplements which will include the definitions of certain terms used in the following Terms and Conditions or specify which of such terms are to apply in relation to the relevant Notes.

This Note is one of a Series (as defined below) of Notes issued by Kookmin Bank (the Issuer). The applicable Pricing Supplement (as defined below) will indicate whether the Issuer is acting through its principal office in Korea or any of its overseas branches pursuant to the Agency Agreement (as defined below).

References herein to the "Notes" shall be references to the Notes of this Series and shall mean:

- (i) in relation to any Notes represented by a global Note (a "Global Note"), units of each Specified Denomination in the Specified Currency;
- (ii) any definitive Notes in bearer form ("Bearer Notes") issued in exchange for a Global Note in bearer form;
- (iii) any Global Note; and
- (iv) any definitive Notes in registered form ("Registered Notes") (whether or not issued in exchange for a Global Note in registered form).

The Notes, the Receipts (as defined below) and the Coupons (as defined below) have the benefit of an Amended and Restated Agency Agreement (such Agreement as modified and/or supplemented and/or restated from time to time, the "Agency Agreement") dated September 28, 2018 and made between, the Issuer, The Bank of New York Mellon, London Branch, as principal paying agent (the "Principal Paying Agent", which expression shall include any successor principal paying agent), and as calculation agent (the "Calculation Agent", which expression shall include any successor calculation agent), The Bank of New York Mellon, Hong Kong Branch as CMU lodging and paying agent (the "CMU Lodging and Paying Agent", which expression shall include any successor CMU lodging and paying agent) and The Bank of New York Mellon SA/NV, Luxembourg Branch and any additional paying agents appointed in accordance with the Agency Agreement, as paying agent (the "Paying Agent" and, together with the Principal Paying Agent and the CMU Lodging and Paying Agent, the "Paying Agents", which expression shall, unless the context otherwise requires, include any successor paying agents), as registrar (the "Registrar", which expression shall include any successor registrar), and as transfer agent (the "Transfer Agent", which expression shall include any successor or any additional transfer agents appointed in accordance with the Agency Agreement) and The Bank of New York Mellon, as transfer agent (the "Transfer Agent" and, together with The Bank of New York Mellon SA/NV, Luxembourg Branch, the "Transfer Agents", which expressions shall include any successor to any of The Bank of New York Mellon, and The Bank of New York Mellon SA/NV, Luxembourg Branch in their capacities as such and any substitute or any additional transfer agents appointed in accordance with the Agency Agreement), and as registrar (the "Registrar" and, together with The Bank of New York Mellon SA/NV, Luxembourg, the "Registrars", which expression shall include any successor or any additional registrars appointed in accordance with the Agency Agreement), such agents together being referred to as the "Agents". For the purposes of these Terms and Conditions, all references to the Principal Paying Agent shall, with respect to a Series of Notes to be held in the CMU (as defined below), be deemed to be a reference to the CMU Lodging and Paying Agent and all such references shall be construed accordingly.

Interest bearing definitive Bearer Notes have interest coupons ("Coupons") and, if indicated in the applicable Pricing Supplement, talons for further Coupons ("Talons") attached on issue. Any reference

herein to Coupons or coupons shall, unless the context otherwise requires, be deemed to include a reference to Talons or talons. Definitive Bearer Notes repayable in instalments have receipts ("Receipts") for the payment of the instalments of principal (other than the final instalment) attached on issue. Registered Notes and Global Notes do not have Receipts, Coupons or Talons attached on issue.

The Pricing Supplement for this Note (or the relevant provisions thereof) is attached to or endorsed on this Note and supplements these Terms and Conditions and may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Terms and Conditions, replace or modify these Terms and Conditions for the purposes of this Note. References to the "applicable Pricing Supplement" are to the Pricing Supplement (or the relevant provisions thereof) attached to or endorsed on this Note.

Any reference to "Noteholders" or "holders" in relation to any Notes shall mean (in the case of Bearer Notes) the holders of the Notes and (in the case of Registered Notes) the persons in whose name the Notes are registered and shall, in relation to any Notes represented by a Global Note, be construed as provided below. Any reference herein to "Receiptholders" shall mean the holders of the Receipts and any reference herein to "Couponholders" shall mean the holders of any Coupons, and shall, unless the context otherwise requires, include the holders of any Talons.

As used herein, "Tranche" means Notes which are identical in all respects (including as to listing) and "Series" means a Tranche of Notes together with any further Tranche or Tranches of Notes which are (i) expressed to be consolidated and form a single series and (ii) identical in all respects (including as to listing) except for their respective Issue Dates, Interest Commencement Dates and/or Issue Prices.

The Noteholders, the Receiptholders and the Couponholders are entitled to the benefit of the Amended and Restated Deed of Covenant (such Deed of Covenant as modified and/or supplemented from time to time, the "Deed of Covenant") dated September 28, 2018, and made by the Issuer. The original of the Deed of Covenant is held by the common depositary on behalf of Euroclear (as defined below) and Clearstream, Luxembourg (as defined below).

Copies of the Agency Agreement, a deed poll (such Deed Poll as modified and/or supplemented from time to time, the "Deed Poll") dated May 14, 2009 and made by the Issuer, the applicable Pricing Supplement and the Deed of Covenant are available for inspection following written consent and satisfactory proof of holding, free of charge, during normal business hours at the specified office of the Principal Paying Agent, the Registrar and the Transfer Agents save that, if this Note is an unlisted Note of any Series, the applicable Pricing Supplement will only be available for inspection by a Noteholder holding one or more unlisted Notes of that Series and such Noteholder must produce evidence satisfactory to the relevant Agent as to its holding of such Notes and as to identity. The Noteholders, the Receiptholders and the Couponholders are deemed to have notice of, and are entitled to the benefit of, all the provisions of the Agency Agreement, the Deed Poll, the Deed of Covenant and the applicable Pricing Supplement which are applicable to them. The statements in these Terms and Conditions include summaries of, and are subject to, the detailed provisions of the Agency Agreement.

Words and expressions defined in the Agency Agreement or used in the applicable Pricing Supplement shall have the same meanings where used in these Terms and Conditions unless the context otherwise requires or unless otherwise stated and provided that, in the event of inconsistency between the Agency Agreement and the applicable Pricing Supplement, the applicable Pricing Supplement will prevail.

In the Conditions, euro means the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty on the Functioning of the European Union, as amended.

1 Form, Denomination and Title

The Notes may be in bearer form and/or in registered form as specified in the applicable Pricing Supplement and, in the case of definitive Notes, will be serially numbered, in the currency (the "Specified Currency") and the denominations (the "Specified Denomination(s)") specified in the applicable Pricing Supplement. Notes of one Specified Denomination may not be exchanged for Notes of another Specified Denomination and Bearer Notes may not be exchanged for Registered Notes and vice versa.

This Note may be a Fixed Rate Note, a Floating Rate Note, a Zero Coupon Note, an Index Linked Interest Note, a Dual Currency Note or a combination of any of the foregoing, depending upon the Interest Basis shown in the applicable Pricing Supplement, and to the extent permitted by applicable law.

This Note may be an Instalment Note, a Dual Currency Redemption Note, a Partly Paid Note or a combination of any of the foregoing, depending upon the Redemption/ Payment Basis shown in the applicable Pricing Supplement.

This Note may also be a Senior Note (as defined in Condition 3(a)) or a Subordinated Note (as defined in Condition 3(b)), as indicated in the applicable Pricing Supplement.

Bearer Notes in definitive form are issued with Coupons and (if applicable) Receipts and Talons attached, unless they are Zero Coupon Notes in which case references to Coupons and Couponholders in these Terms and Conditions are not applicable.

Subject as set out below, title to the Bearer Notes, Receipts and Coupons will pass by delivery. Title to Registered Notes will pass upon registration of transfers in accordance with the provisions of the Agency Agreement. The Issuer and any Agent will (except as otherwise required by law) deem and treat the bearer of any Bearer Note, Receipt or Coupon and the registered holder of any Registered Note as the absolute owner thereof (whether or not overdue and notwithstanding any notice of ownership or writing thereon or notice of any previous loss or theft thereof) for all purposes but, in the case of any Global Note, without prejudice to the provisions set out in the next succeeding paragraph.

For so long as any of the Notes is represented by a Global Note held on behalf of Euroclear Bank SA/NV ("Euroclear") and/or Clearstream Banking S.A. ("Clearstream, Luxembourg"), and/or a subcustodian for the Central Moneymarkets Unit Service operated by the Hong Kong Monetary Authority (the "CMU"), each person (other than Euroclear, Clearstream, Luxembourg or the CMU) who is for the time being shown in the records of Euroclear, Clearstream, Luxembourg or the CMU as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear, Clearstream, Luxembourg or the CMU as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer and the Agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer and any Agent as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note (and the expressions "Noteholder" and "holder" of Notes and related expressions shall be construed accordingly). Notwithstanding the above, if a Note (whether in global or definitive form) is held through the CMU, any payment that is made in respect of such Note shall be made at the direction of the bearer or the registered holder to the person(s) for whose account(s) interests in such Note are credited as being held through the CMU in accordance with the CMU Rules at the relevant time as notified to the CMU Lodging and Paying Agent by the CMU in a relevant CMU Instrument Position Report or any other relevant notification by the CMU (which notification, in either case, shall be conclusive evidence of the records of the CMU as to the identity of any accountholder and the principal amount of any Note credited to its account, save in the case of manifest error) ("CMU Accountholders") and such payments shall discharge the obligation of the Issuer in respect of that payment under such Note. For so long as the Depository Trust Company ("DTC") or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Registered Global Note for all purposes under the Agency Agreement and the Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

Notes which are represented by a Global Note will be transferable only in accordance with the rules and procedures for the time being of Euroclear, Clearstream, Luxembourg, the CMU and DTC, as the case may be. References to Euroclear, Clearstream, Luxembourg, the CMU and/or DTC shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system approved by the Issuer and the Principal Paying Agent and specified in the applicable Pricing Supplement.

2 Transfers of Registered Notes

(a) Transfers of interests in Registered Global Notes

Transfers of beneficial interests in Registered Global Notes will be effected by DTC, the CMU, Euroclear or Clearstream, Luxembourg, as the case may be, and, in turn, by other participants and, if appropriate, indirect participants in such clearing systems acting on behalf of beneficial transferors and transferees of such interests. A beneficial interest in a Registered Global Note will, subject to compliance with all applicable legal and regulatory restrictions, be transferable for Notes in definitive form or for a beneficial interest in another Registered Global Note only in the authorized denominations set out in the applicable Pricing Supplement and only in accordance with the rules and operating procedures for the time being of DTC, the CMU, Euroclear or Clearstream, Luxembourg, as the case may be, and in accordance with the terms and conditions specified in the Agency Agreement. Transfers of a Registered Global Note registered in the name of a nominee for DTC shall be limited to transfers of such Registered Global Note, in whole but not in part, to another nominee of DTC or to a successor of DTC or such successor's nominee.

(b) Transfers of Registered Notes in definitive form

Subject as provided in paragraphs (e), (f) and (g) below, upon the terms and subject to the conditions set forth in the Agency Agreement, a Registered Note in definitive form may be transferred in whole or in part (in the authorized denominations set out in the applicable Pricing Supplement). In order to effect any such transfer (i) the holder or holders must (A) surrender the Registered Note for registration of the transfer of the Registered Note (or the relevant part of the Registered Note) at the specified office of the Registrar or any Transfer Agent, with the form of transfer thereon duly executed by the holder or holders thereof or his or their attorney or attorneys duly authorized in writing and (B) complete and deposit such other certifications as may be required by the Registrar or, as the case may be, the relevant Transfer Agent and (ii) the Registrar or, as the case may be, the relevant Transfer Agent must, after due and careful enquiry, be satisfied with the documents of title and the identity of the person making the request. Any such transfer will be subject to such reasonable regulations as the Issuer and the Registrar may from time to time prescribe (the initial such regulations being set out in Schedule 9 to the Agency Agreement). Subject as provided above, the Registrar or, as the case may be, the relevant Transfer Agent will, within three business days (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar or, as the case may be, the relevant Transfer Agent is located) of the request (or such longer period as may be required to comply with any applicable fiscal or other laws or regulations), and subject to authentication by the Registrar, deliver, or procure the authentication and delivery of, at its specified office to the transferee or (at the risk of the transferee) send by uninsured mail, to such address as the transferee may request, a new Registered Note in definitive form of a like aggregate nominal amount to the Registered Note (or the relevant part of the Registered Note) transferred. In the case of the transfer of part only of a Registered Note in definitive form, a new Registered Note in definitive form in respect of the balance of the Registered Note not transferred will be so authenticated and delivered or (at the risk of the transferor) sent to the transferor.

(c) Registration of transfer upon partial redemption

In the event of a partial redemption of Notes under Condition 7, the Issuer shall not be required to register the transfer of any Registered Note, or part of a Registered Note, called for partial redemption.

(d) Costs of registration

Noteholders will not be required to bear the costs and expenses of effecting any registration of transfer as provided above, except for any costs or expenses of delivery other than by regular uninsured mail and except that the Issuer may require the payment of a sum sufficient to cover any stamp duty, tax or other governmental charge that may be imposed in relation to the registration.

(e) Transfers of interests in Regulation S Global Notes

Prior to expiry of the applicable Distribution Compliance Period, transfers by the holder of, or of a beneficial interest in, a Regulation S Global Note to a transferee in the United States or who is a U.S. person will only be made:

(i) upon receipt by the Registrar of a written certification substantially in the form set out in the Agency Agreement, amended as appropriate (a "Transfer Certificate"), copies of which are available from

the specified office of the Registrar or any Transfer Agent, from the transferor of the Note or beneficial interest therein to the effect that such transfer is being made:

- (A) to a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A; or
- (B) to a person who is an Institutional Accredited Investor, together with, in the case of (B), a duly executed investment letter from the relevant transferee substantially in the form set out in the Agency Agreement (an "IAI Investment Letter"); or
- (ii) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States, and, in each case, in accordance with any applicable securities laws of any state of the United States or any other jurisdiction.

In the case of (A) above, such transferee may take delivery through a Legended Note in global or definitive form and, in the case of (B) above, such transferee may take delivery only through a Legended Note in definitive form. After expiry of the applicable Distribution Compliance Period (a) beneficial interests in Regulation S Global Notes registered in the name of a nominee for DTC may be held through DTC directly, by a participant in DTC, or indirectly through a participant in DTC and (b) such certification requirements will no longer apply to such transfers.

(f) Transfers of interests in Legended Notes

Transfers of Legended Notes or beneficial interests therein may be made:

- (i) to a transferee who takes delivery of such interest through a Regulation S Global Note, upon receipt by the Registrar of a duly completed Transfer Certificate from the transferor to the effect that such transfer is being made in accordance with Regulation S and that in the case of a Regulation S Global Note registered in the name of a nominee for DTC, if such transfer is being made prior to expiry of the applicable Distribution Compliance Period, the interests in the Notes being transferred will be held immediately thereafter through Euroclear and/or Clearstream, Luxembourg; or
- (ii) to a transferee who takes delivery of such interest through a Legended Note:
 - (A) where the transferee is a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, without certification; or
 - (B) where the transferee is an Institutional Accredited Investor, subject to delivery to the Registrar of a Transfer Certificate from the transferor to the effect that such transfer is being made to an Institutional Accredited Investor, together with a duly executed investment letter from the relevant transferee substantially in the form set out in the Agency Agreement (an "IAI Investment Letter"); or
- (iii) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States;

and in each case, in accordance with any applicable securities laws of any state of the United States or any other jurisdiction.

Notes transferred by Institutional Accredited Investors to QIBs pursuant to Rule 144A or outside the United States pursuant to Regulation S will be eligible to be held by such QIBs or non-U.S. investors through DTC, the CMU, Euroclear or Clearstream, Luxembourg, as appropriate, and the Registrar will arrange for any Notes which are the subject of such a transfer to be represented by the appropriate Registered Global Note, where applicable.

Upon the transfer, exchange or replacement of Legended Notes, or upon specific request for removal of the Legend, the Registrar shall deliver only Legended Notes or refuse to remove the Legend, as the case may be, unless there is delivered to the Issuer such satisfactory evidence as may reasonably be required by

the Issuer, which may include an opinion of U.S. counsel, that neither the Legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

(g) Exchanges and transfers of Registered Notes generally

Holders of Registered Notes in definitive form, other than Institutional Accredited Investors, may exchange such Notes for interests in a Registered Global Note of the same type at any time.

(h) Closed Periods

No Noteholder may require the transfer of a Registered Note to be registered during the period of 15 days ending on the due date for any payment of principal or interest or payment on that Note.

(i) Costs of exchange or registration

Registration of transfers will be effected without charge by or on behalf of the Issuer, the Registrar or the relevant Transfer Agent, but upon payment (or the giving of such indemnity as the Registrar or the relevant Transfer Agent may require) in respect of any tax or other governmental charges which may be imposed in relation to it provided that the Issuer shall not be responsible for any documentary stamp tax payable on the transfer of Notes effected in Korea unless the Issuer is the counterparty directly liable for that documentary stamp tax.

(i) Definitions

In this Condition, the following expressions shall have the following meanings:

"Distribution Compliance Period" means the period that ends 40 days after the completion of the distribution of each Tranche of Notes, as certified by the relevant Dealer (in the case of a non-syndicated issue) or the relevant Lead Manager (in the case of a syndicated issue);

"Institutional Accredited Investor" means "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act that are institutions;

"Legended Note" means Registered Notes in definitive form that are issued to Institutional Accredited Investors and Registered Notes (whether in definitive form or represented by a Registered Global Note) sold in private transactions to QIBs in accordance with the requirements of Rule 144A which bear a legend specifying certain restrictions on transfer (a "Legend");

"QIB" means a "qualified institutional buyer" within the meaning of Rule 144A;

"Regulation S" means Regulation S under the Securities Act;

"Regulation S Global Note" means a Registered Global Note representing Notes sold outside the United States in reliance on Regulation S;

"Rule 144A" means Rule 144A under the Securities Act;

"Rule 144A Global Note" means a Registered Global Note representing Notes sold in the United States or to QIBs; and

Securities Act means the United States Securities Act of 1933, as amended.

3 Status of the Notes

(a) Status of the Senior Notes

The Notes that are not Subordinated Notes (the "Senior Notes") and any relative Receipts and Coupons constitute direct, unconditional, unsubordinated and (subject to Condition 4) unsecured obligations of the Issuer which rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured (subject to Condition 4) and unsubordinated obligations of the Issuer, save for such as may be preferred by mandatory provisions of applicable law.

(b) Status of the Subordinated Notes

(i) Tier II Subordinated Notes

The Notes whose status is specified in the applicable Pricing Supplement as Tier II Subordinated (the "Tier II Subordinated Notes") and any relative Receipts and Coupons constitute direct, unsecured and subordinated (as described in Condition 3(c)) obligations of the Issuer which (subject to the provisions of Condition 3(d)) will at all times rank (x) junior to the Senior Indebtedness of the Issuer (as defined in Condition 3(c)), (y) *pari passu* with and rateably without any preference among themselves and all other subordinated obligations of the Issuer which do not rank or are not expressed by their terms to rank junior to the Tier II Subordinated Notes (collectively, the "Tier II Obligations") and (z) senior to, and in priority to claims of holders of, the Tier I Obligations (as defined in Condition 3(b)(ii)) and all classes of equity of the Issuer.

(ii) Tier I Subordinated Notes

The Notes whose status is specified in the applicable Pricing Supplement as Tier I Subordinated (the "Tier I Subordinated Notes" and, together with the Tier II Subordinated Notes, the "Subordinated Notes") and any relative Receipts and Coupons constitute direct, unsecured and subordinated (as described in Condition 3(c)) obligations of the Issuer which (subject to the provisions of Conditions 3(d) and 5(f)) will at all times rank (x) junior to the Senior Indebtedness of the Issuer (as defined in Condition 3(c)), (y) pari passu with and rateably without any preference among themselves and all other subordinated obligations of the Issuer which either constitute additional Tier I capital of the Issuer under applicable Korean laws and regulations or otherwise rank or are expressed by their terms to rank pari passu with the Tier I Subordinated Notes (collectively, the "Tier I Obligations") and (z) senior to, and in priority to claims of holders of, all classes of equity of the Issuer (other than equity that constitutes Tier II capital of the Issuer under applicable Korean laws and regulations). In addition, in the case of a Bankruptcy Event (as defined in Condition 3(c)), the Tier I Subordinated Notes shall be deemed not to constitute liabilities for purposes of determining whether the Issuer's liabilities exceed its assets.

(c) Subordination

This Condition 3(c) applies only to Subordinated Notes.

- (i) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Bankruptcy Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall not be payable unless and until the total amount of any and all Senior Indebtedness of the Issuer which is listed on the distribution list (as amended, if such be the case) for final distribution submitted to the court in the bankruptcy proceedings is paid in full or provided to be paid in full in such bankruptcy proceedings.
- (ii) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Rehabilitation Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall not be payable unless and until the total amount of any and all Senior Indebtedness of the Issuer which is listed on the rehabilitation plan of the Issuer at the time when the court's approval of such plan becomes final and conclusive shall have been paid in full in the rehabilitation proceedings to the extent of the original amount thereof (without regard to any adjustment of such amount in the approved rehabilitation plan).
- (iii) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Foreign Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall only become payable upon conditions equivalent to those enumerated in the above two paragraphs having been fulfilled, provided that notwithstanding any provision herein to the contrary if the imposition of any such conditions is not allowed under such proceedings, any amounts which become due under the Subordinated Notes shall become payable in accordance with the terms herein provided and not subject to such conditions.
- (iv) A holder of a Subordinated Note by its acceptance thereof or its interest therein, shall thereby agree that (i) if any payment in respect of such Note is made to such holder after the occurrence of a

Subordination Event and the amount of such payment shall exceed the amount, if any, that should have been paid to such holder upon the proper application of these subordination provisions, the payment of such excess amount shall be deemed null and void and such holder (without the Registrar or any Paying Agent having any obligation or liability with respect thereto, save to the extent that the Registrar or such Paying Agent shall return to the Issuer any such excess amount which remains held by it at the time of the notice next referred to) shall be obliged to return the amount of the excess payment within ten days of receiving notice from the Issuer of the excess payment and (ii) upon the occurrence of a Subordination Event and so long as such Subordination Event continues, such holder shall not exercise any right to set off any liabilities of the Issuer under such Note which become so payable on or after the date on which the Subordination Event occurs against any liabilities of such holder owed to the Issuer unless, until and only in such amount as the liabilities of the Issuer under such Note become payable pursuant to the proper application of these subordination provisions.

In addition, a holder of a Subordinated Note by its acceptance thereof or its interest therein shall be deemed to have waived, and agreed not to exercise, any right as a creditor to require the Issuer to redeem such Subordinated Note or provide collateral with respect thereto that may arise pursuant to the Korean Commercial Code or applicable Korean laws and regulations in connection with a merger, spin-off or other similar transaction of the Issuer.

In these Conditions:

- a "Bankruptcy Event" shall mean a court of competent jurisdiction in Korea having adjudicated the Issuer to be bankrupt pursuant to the provisions of the Act on Debtor Rehabilitation and Bankruptcy or any successor legislation thereto;
- a "Foreign Event" shall mean in any jurisdiction other than Korea, the Issuer having become subject to bankruptcy, corporate reorganization or other equivalent proceedings pursuant to any applicable law of any jurisdiction other than Korea;
- a "Rehabilitation Event" shall mean a court of competent jurisdiction in Korea having adjudicated the Issuer to be subject to the rehabilitation proceedings pursuant to the provisions of the Act on Debtor Rehabilitation and Bankruptcy or any successor legislation thereto;
- "Senior Indebtedness of the Issuer" shall mean (i) in the case of Tier II Subordinated Notes, all deposits and other liabilities of the Issuer (other than the Tier II Obligations and the Tier I Obligations) and (ii) in the case of the Tier I Subordinated Notes, all deposits and other liabilities of the Issuer (other than the Tier I Obligations) and all equity that constitutes Tier II capital of the Issuer under applicable Korean laws and regulations; and
- a "Subordination Event" shall mean any Bankruptcy Event, Rehabilitation Event or Foreign Event.
- (d) Loss Absorption upon a Trigger Event in respect of Subordinated Notes
- (i) Write-off on a Trigger Event

Effective as of the third Korean Business Day (as defined below) from the occurrence of a Trigger Event (as defined below), each Subordinated Note, including the then outstanding principal amount thereof and any accrued but unpaid interest thereon, shall be irrevocably cancelled in whole, without the need for the consent of the holders of the Subordinated Notes (such cancellation being referred to herein as a "Write-off", and "Written-off" shall be construed accordingly). Once the principal amount of, and any accrued but unpaid interest under, the Subordinated Notes has been Written-off, such amounts will not be restored in any circumstances, including where the relevant Trigger Event ceases to continue.

The Issuer shall provide a Trigger Event Notice (as defined below) to the holders of the Subordinated Notes, but such Write-off shall be effective irrespective of whether the Issuer has provided such Trigger Event Notice.

For the avoidance of doubt, any Write-off pursuant to this Condition 3(d) will not constitute an Event of Default under the Notes.

(ii) Definitions

In these Conditions and unless stated otherwise in the applicable Pricing Supplement:

"Korean Business Day" means a day (other than a Saturday or Sunday) on which banks and foreign exchange markets are open for business in Seoul, Korea;

"Trigger Event" means the designation of the Issuer as an "insolvent financial institution" pursuant to the Act on the Structural Improvement of the Financial Industry; and

"Trigger Event Notice" means the notice specifying that a Trigger Event has occurred, which shall be issued by the Issuer not more than two Korean Business Days after the occurrence of a Trigger Event to the holders of the Subordinated Notes and the Principal Paying Agent in accordance with Condition 14 and which shall state in reasonable detail the nature of the relevant Trigger Event. Notwithstanding any provisions of Condition 14 to the contrary, any such notice shall be effective as of the date of its issuance by the Issuer.

4 Negative Pledge

(a) Negative Pledge

So long as any Senior Note remains outstanding (as defined in the Agency Agreement), the Issuer will not create or permit to subsist any mortgage, charge, pledge or other security interest upon or over the whole or any part of its property, assets or revenues (whether present or future) to secure for the benefit of the holders of any International Investment Securities:

- (i) payment of any sum due in respect of any such International Investment Securities;
- (ii) payment under any guarantee in respect of any such International Investment Securities; or
- (iii) payment under any indemnity or other like obligation in respect of any such International Investment Securities,

without, in any such case and at the same time, according to the Senior Notes either the same security as is available for the benefit of the holders of such International Investment Securities or such other security as shall be approved for the purpose by an Extraordinary Resolution (as defined in the Agency Agreement) of the holders of Senior Notes.

(b) Interpretation

In these Conditions, "International Investment Securities" means notes, bonds, debentures, certificates of deposit or investment securities of any person which:

- (i) by their terms either are payable, or confer a right to receive payment, in any currency other than Won or are denominated in Won and more than one-half of the aggregate principal amount of which is initially distributed outside Korea by or with the authorization of the Issuer; and
- (ii) are for the time being, or are intended to be, quoted, listed, ordinarily dealt in or traded on any stock exchange or over-the-counter or other securities market outside Korea;

provided that "Covered Bonds" (as defined below) in the aggregate outstanding principal amount not exceeding an amount equal to 10% of the total consolidated assets as shown on the most recent consolidated accounts of the Issuer shall not constitute International Investment Securities.

In these Conditions, Covered Bonds means debt securities (including any notes, bonds, debentures, certificates of deposit or investment securities) backed by cash flows generated from an underlying investment pool consisting of mortgage loans, public sector assets, cash, cash equivalents and/or other financial assets.

5 Interest

(a) Interest on Fixed Rate Notes

Each Fixed Rate Note bears interest on its outstanding nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date at the rate(s) per annum equal to the Rate(s) of Interest. Interest will be payable in arrear on the Interest Payment Date(s) in each year up to (and including) the Maturity Date.

If the Notes are in definitive form, except as provided in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date in respect of the Fixed Interest Period ending on (but excluding) such date will amount to the Fixed Coupon Amount. Payments of interest on any Interest Payment Date will, if so specified in the applicable Pricing Supplement, amount to the Broken Amount so specified.

In these Conditions, Fixed Interest Period means the period from (and including) an Interest Payment Date (or Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date.

Except in the case of Notes in definitive form where an applicable Fixed Coupon Amount or Broken Amount is specified in the applicable Pricing Supplement, interest shall be calculated in respect of any period by applying the Rate of Interest to:

- (A) in the case of Fixed Rate Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Fixed Rate Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or
- (B) in the case of Fixed Rate Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Fixed Rate Note in definitive form is a multiple of the Calculation Amount, the amount of interest payable in respect of such Fixed Rate Note shall be the product of the amount (determined in the manner provided above) for the Calculation Amount and the amount by which the Calculation Amount is multiplied to reach the Specified Denomination, without any further rounding.

In these Terms and Conditions:

"Day Count Fraction" means, in respect of the calculation of an amount of interest, in accordance with this Condition 5(a):

- (i) if "Actual/Actual (ICMA)" is specified in the applicable Pricing Supplement;
- (a) in the case of Notes where the number of days in the relevant period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (the "Accrual Period") is equal to or shorter than the Determination Period during which the Accrual Period ends, the number of days in such Accrual Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or
- (b) in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of;
 - (1) the number of days in such Accrual Period falling in the Determination Period in which the Accrual Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and
 - (2) the number of days in such Accrual Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and
- (ii) if "30/360" is specified in the applicable Pricing Supplement, the number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement

Date) to (but excluding) the relevant payment date (such number of days being calculated on the basis of a year of 360 days with 12 30-day months) divided by 360.

In these Terms and Conditions:

"Determination Period" means each period from (and including) a Determination Date to but excluding the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date); and

"sub-unit" means, with respect to any currency other than euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, with respect to euro, means one cent.

- (b) Interest on Floating Rate Notes and Index Linked Interest Notes
- (i) Interest Payment Dates

Each Floating Rate Note and Index Linked Interest Note bears interest on its outstanding nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date and such interest will be payable in arrear on either:

- (A) the Specified Interest Payment Date(s) in each year specified in the applicable Pricing Supplement; or
- (B) if no Specified Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each such date, together with each Specified Interest Payment Date, an Interest Payment Date) which falls the number of months or other period specified as the Specified Period in the applicable Pricing Supplement after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date.

Such interest will be payable in respect of each Interest Period (which expression shall, in these Terms and Conditions, mean the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date.

If a Business Day Convention is specified in the applicable Pricing Supplement and (x) if there is no numerically corresponding day in the calendar month in which an Interest Payment Date should occur or (y) if any Interest Payment Date would otherwise fall on a day which is not a Business Day, then, if the Business Day Convention specified is:

- (1) in any case where Specified Periods are specified in accordance with Condition 5(b)(i)(B) above, the Floating Rate Convention, such Interest Payment Date (i) in the case of (x) above, shall be the last day that is a Business Day in the relevant month and the provisions of (B) below of this subparagraph (1) shall apply mutatis mutandis or (ii) in the case of (y) above, shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (A) such Interest Payment Date shall be brought forward to the immediately preceding Business Day and (B) each subsequent Interest Payment Date shall be the last Business Day in the month which falls the Specified Period after the preceding applicable Interest Payment Date occurred; or
- (2) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day; or
- (3) the Modified Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event such Interest Payment Date shall be brought forward to the immediately preceding Business Day; or
- (4) the Preceding Business Day Convention, such Interest Payment Date shall be brought forward to the immediately preceding Business Day.

In these Terms and Conditions, "Business Day" means a day which is both:

(A) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London and each Additional Business Centre specified in the applicable Pricing Supplement; and

(B) either (1) in relation to any sum payable in a Specified Currency other than euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial center of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney or Auckland, respectively) or (2) in relation to any sum payable in euro, a day on which the Trans-European Automated RealTime Gross Settlement Express Transfer (TARGET 2) System (the "TARGET 2 System") is open.

(ii) Rate of Interest

The Rate of Interest payable from time to time in respect of Floating Rate Notes and Index Linked Interest Notes will be determined in the manner specified in the applicable Pricing Supplement.

(A) ISDA Determination for Floating Rate Notes

Where ISDA Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will be the relevant ISDA Rate plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any). For the purposes of this subparagraph (A), "ISDA Rate for an Interest Period" means a rate equal to the Floating Rate that would be determined by the Calculation Agent under an interest rate swap transaction if the Calculation Agent were acting as Calculation Agent for that swap transaction under the terms of an agreement incorporating the 2006 ISDA Definitions, as published by the International Swaps and Derivatives Association, Inc. and as amended and updated as at the Issue Date of the first Tranche of the Notes (the "ISDA Definitions"), and under which:

- (1) the Floating Rate Option is as specified in the applicable Pricing Supplement;
- (2) the Designated Maturity is a period specified in the applicable Pricing Supplement; and
- (3) the relevant Reset Date is as specified in the applicable Pricing Supplement.

For the purposes of this subparagraph (A), (i) "Floating Rate", "Calculation Agent", "Floating Rate Option", "Designated Maturity and Reset Date" have the meanings given to those terms in the ISDA Definitions.

(B) Screen Rate Determination for Floating Rate Notes

- (1) Where Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will, subject as provided below, be either:
- (A) the offered quotation; or
- (B) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations,
 - (expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page (or any other such page as may replace that page on the relevant service, or such other service as may be nominated as the information vendor, for the purpose of displaying comparable rates) (the "Relevant Screen Page Rate") as at 11:00 a.m. (in the Relevant Financial Centre time) (the "Specified Time") on the Interest Determination Date in question plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any), all as determined by the Calculation Agent. If five or more offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one highest quotation, one only of those quotations) and the lowest (or, if there is more than one lowest quotation, one only of those quotations) shall be disregarded by the Calculation Agent for the purpose of determining the arithmetic mean (rounded as provided above) of such offered quotations.
- (2) The Agency Agreement contains provisions for determining the Rate of Interest in the event that the Relevant Screen Page is not available or if, in the case of (A) above, no such offered quotation appears or, in the case of (B) above, fewer than three such offered quotations appear, in each case as at the time specified in the preceding paragraph; provided, however, that Condition 5(h) shall apply if a Benchmark Transition Event (as defined in such Condition) has occurred.

(iii) Minimum Rate of Interest and/or Maximum Rate of Interest

If the applicable Pricing Supplement specifies a Minimum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (ii) above is less than such Minimum Rate of Interest, the Rate of Interest for such Interest Period shall be such Minimum Rate of Interest. If the applicable Pricing Supplement specifies a Maximum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (ii) above is greater than such Maximum Rate of Interest, the Rate of Interest for such Interest Period shall be such Maximum Rate of Interest.

Whether or not a Minimum Rate of Interest or Maximum Rate of Interest is specified in the relevant Pricing Supplement, in no event shall the Rate of Interest (including any applicable Margin) be less than zero.

(iv) Determination of Rate of Interest and Calculation of Interest Amounts

The Calculation Agent, in the case of Floating Rate Notes and Index Linked Interest Notes, will at or as soon as practicable after each time at which the Rate of Interest is to be determined, determine the Rate of Interest for the relevant Interest Period and will notify the Principal Paying Agent in writing of the Rate of Interest for the relevant Interest Period as soon as practicable after calculating the same.

The Calculation Agent will calculate the amount of interest (the "Interest Amount") payable on the Floating Rate Notes or Index Linked Interest Notes for the relevant Interest Period by applying the Rate of Interest to:

- (A) in the case of Floating Rate Notes or Index Linked Interest Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or
- (B) in the case of Floating Rate Notes or Index Linked Interest Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such subunit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Floating Rate Note or an Index Linked Interest Note in definitive form is a multiple of the Calculation Amount, the Interest Amount payable in respect of such Note shall be the product of the amount (determined in the manner provided above) for the Calculation Amount and the amount by which the Calculation Amount is multiplied to reach the Specified Denomination without any further rounding.

In these Terms and Conditions,

"Day Count Fraction" means, in respect of the calculation of an amount of interest in accordance with this Condition 5(b):

- (1) if "Actual/Actual (ISDA)" or "Actual/Actual" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 (or, if any portion of that Interest Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Interest Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Interest Period falling in a non-leap year divided by 365);
- (2) if "Actual/365 (Fixed)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365;
- (3) if "Actual/365 (Sterling)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 or, in the case of an Interest Payment Date falling in a leap year, 366;
- (4) if "Actual/360" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 360;

(5) if "30/360", "360/360" or "Bond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction =
$$\frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y₁" is the year, expressed as a number, in which the first day of the Interest Period falls;

"Y₂" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"M₁" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"M₂" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

" D_1 " is the first calendar day, expressed as a number, of the Interest Period, unless such number is 31, in which case D_1 will be 30; and

" D_2 " is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31 and D_1 is greater than 29, in which case D_2 will be 30;

(6) if "30E/360" or "Eurobond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction =
$$\frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y₁" is the year, expressed as a number, in which the first day of the Interest Period falls;

"Y₂" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"M₁" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"M₂" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

" D_1 " is the first calendar day, expressed as a number, of the Interest Period, unless such number would be 31, in which case D_1 will be 30; and

" D_2 " is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31, in which case D_2 will be 30;

(7) if "30E/360 (ISDA)" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

Day Count Fraction =
$$\frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"Y₁" is the year, expressed as a number, in which the first day of the Interest Period falls;

"Y₂" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"M₁" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"M₂" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"D₁" is the first calendar day, expressed as a number, of the Interest Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D₁ will be 30; and

" D_2 " is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31 and D_2 will be 30.

(v) Notification of Rate of Interest and Interest Amounts

The Calculation Agent will cause the Rate of Interest and each Interest Amount for each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and notice thereof to be published in accordance with Condition 14 as soon as possible after their determination but in no event later than the fourth London Business Day thereafter. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without prior notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to the Issuer and to the Noteholders in accordance with Condition 14. For the purposes of this paragraph, the expression "London Business Day" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for general business in London.

(vi) Certificates to be Final

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 5(b), whether by the Principal Paying Agent or, if applicable, the Calculation Agent, shall (in the absence of willful default, bad faith or manifest error) be binding on the Issuer, the Principal Paying Agent, the Registrar, the Calculation Agent (if applicable), the other Paying Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability to the Issuer, the Noteholders, the Receiptholders or the Couponholders shall attach to the Principal Paying Agent or the Calculation Agent (if applicable) in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

(c) Interest on Dual Currency Notes

In the case of Dual Currency Notes, if the rate or amount of interest falls to be determined by reference to an exchange rate, the rate or amount of interest payable shall be determined in the manner specified in the applicable Pricing Supplement.

(d) Interest on Partly Paid Notes

In the case of Partly Paid Notes (other than Partly Paid Notes which are Zero Coupon Notes), interest will accrue as aforesaid on the paid-up nominal amount of such Notes and otherwise as specified in the applicable Pricing Supplement.

(e) Accrual of Interest

Each Note (or in the case of the redemption of part only of a Note, that part only of such Note) will cease to bear interest (if any) from the date for its redemption unless payment of principal is improperly withheld or refused. In such event, interest will continue to accrue until whichever is the earlier of:

- (1) the date on which all amounts due in respect of such Note have been paid; and
- (2) the date on which the full amount of the moneys payable has been received by the Principal Paying Agent or the Registrar, as the case may be, and notice to that effect has been given in accordance with Condition 14.

(f) Special Provisions Relating to Interest on Tier I Subordinated Notes

Notwithstanding any provisions to the contrary in these Terms and Conditions, the following will apply with respect to interest on the Tier I Subordinated Notes:

(i) Interest on any Series of Tier I Subordinated Notes will be paid only out of the amount legally available under applicable Korean law for payment of dividends on equity of the Issuer or, if higher,

the amount legally available under applicable Korean law for payment of interest on such Tier I Subordinated Notes (the "Dividend Reserve"). To the extent that the sum of (x) the amount of interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date (or, if applicable, during a fiscal year) and (y) the aggregate amount of interest and other distributions payable by the Issuer on the other Tier I Obligations during the fiscal quarter in which such Interest Payment Date falls (or, if applicable, during such fiscal year) exceeds the Dividend Reserve as of the relevant date (or, if applicable, for such fiscal year) pursuant to, and as calculated in accordance with, the requirements of applicable Korean law, the amount of interest payable on such Tier I Subordinated Notes on such Interest Payment Date (or, if applicable, during such fiscal year) will be reduced by an amount equal to the pro rata portion (calculated based on the relative aggregate amounts of interest and other distributions payable on each Tier I Obligation during such fiscal quarter or, if applicable, such fiscal year) of such excess.

- (ii) The Issuer may, in its sole discretion, elect not to pay, in whole or in part, any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date; provided, however, that if the Issuer makes such an election, it will (unless it has set aside and deposited into an escrow account the full amount of interest that would become payable on such Tier I Subordinated Notes on the next succeeding Interest Payment Date) also make a similar election, in whole or in part on a pro rata basis, as applicable (to the fullest extent permitted by their respective terms and conditions), with respect to interest and other distributions that become payable on the other Tier I Obligations during the applicable Dividend Suspension Period (as defined below).
- (iii) The Tier I Subordinated Notes will not bear any interest during an Interest Cancellation Period (as defined below), and any interest payable on the Tier I Subordinated Notes on any Interest Payment Date falling within an Interest Cancellation Period will not be paid.
- (iv) Interest on the Tier I Subordinated Notes is non-cumulative. All amounts of such interest not paid in whole or in part pursuant to the preceding paragraphs will be deemed irrevocably cancelled, without the need for the consent of the holders of the Tier I Subordinated Notes, and will not be restored in any circumstances. For the avoidance of doubt, (A) any non-payment of interest, in whole or in part, by the Issuer pursuant to the preceding paragraphs will not constitute an Event of Default under the Notes, (B) holders of the Tier I Subordinated Notes will not have any claim or entitlement to any amount of such unpaid interest, and (C) any and all amounts of such unpaid interest may be applied by the Issuer for any purpose, including without limitation for the satisfaction of its other obligations that are due and payable.
- (v) In the event that (x) any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date will not be paid in whole or in part pursuant to the preceding paragraphs or (y) an Interest Cancellation Period has commenced or terminated, the Issuer will, no later than ten Business Days prior to the relevant Interest Payment Date or five Business Days after the commencement or termination of an Interest Cancellation Period, as applicable, provide notice of such non-payment or commencement/termination to the Paying Agents and to the holders of such Tier I Subordinated Notes in accordance with Condition 14, stating the reason for such non-payment (and specifying the amount of interest payable that will not be paid) or commencement/termination; provided, however, that the failure of the Issuer to provide such notice shall not affect the effectiveness of the cancellation of the applicable interest amounts.
- (vi) In the event that any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date is not (or, if applicable, will not be) paid in whole or in part pursuant to the preceding paragraphs, the Issuer will not:
 - (A) declare or pay any dividends or other distributions in cash with respect to any of its common shares; and
 - (B) purchase, acquire or redeem any of its common shares or permit any of its Subsidiaries to do so;

in each case during the applicable Dividend Suspension Period.

As used herein:

"Dividend Suspension Period" means the period from and including the applicable Interest Payment Date (or, if applicable, the first day of the relevant fiscal year) to but excluding the earlier of (x) the next succeeding Interest Payment Date on which the interest payable on the applicable Series of Tier I Subordinated Notes on such date is paid in full (or, if applicable, the last day of the relevant fiscal year) and (y) the date of redemption in full or Write-Off (as defined in Condition 3(d)) of the applicable Series of Tier I Subordinated Notes.

"Interest Cancellation Period" means any of the following: (x) the period during which either a "management improvement recommendation," a "management improvement requirement" or a "management improvement order" has been issued by the Financial Services Commission of Korea (the FSC) against the Issuer pursuant to Article 34, 35 or 36, respectively, of the Regulation on Supervision of Banking Business and is pending; or (y) the period during which "emergency measures" have been imposed by the FSC or its chairman against the Issuer pursuant to Article 38 of the Regulation on Supervision of Banking Business and are pending.

(g) Interest Rate Reset

If Interest Rate Reset is specified in the applicable Pricing Supplement, the Rate of Interest applicable to the Notes will be reset to the Reset Interest Rate (as defined below) effective as of each Interest Reset Date (as specified in the applicable Pricing Supplement), such that the Notes will bear interest at the Reset Interest Rate during each period from (and including) an Interest Reset Date to (but excluding) the next succeeding Interest Reset Date or, if earlier, the date of redemption (each a Reset Interest Period).

The Calculation Agent will, on the Calculation Date (as defined below) for each Reset Interest Period, calculate the Reset Interest Rate for such Reset Interest Period and cause such Reset Interest Rate and the relevant Interest Reset Date to be notified to the Issuer, and the Issuer will cause notice to the Noteholders of such Reset Interest Rate and Interest Reset Date to be published in accordance with Condition 14 as soon as possible after such Calculation Date but in no event later than the fourth New York Business Day (as defined below) thereafter.

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 5(g) by the Calculation Agent shall (in the absence of willful default, or manifest error) be binding on the Issuer, the Paying Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability to the Issuer, the Noteholders, the Receiptholders or the Couponholders shall attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

As used herein, unless otherwise specified in the applicable Pricing Supplement:

"Base Rate" means the U.S. Treasury Rate or such other rate as specified in the applicable Pricing Supplement.

"Calculation Date" means, in relation to a Reset Interest Period, the fifth New York Business Day (as defined below) preceding the Interest Reset Date on which such Reset Interest Period commences.

"Comparable Treasury Issue" means the U.S. Treasury security having a maturity comparable to the Reset Interest Period and selected by the Issuer and notified to the Calculation Agent in writing as one that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities with a maturity comparable to the Reset Interest Period.

"Comparable Treasury Price" means, with respect to a Calculation Date, the average of the three Reference Treasury Dealer Quotations selected by the Issuer (as defined below) for such Calculation Date.

"New York Business Day" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for general business (including dealing in foreign exchange and foreign currency deposits) in New York City.

"Reference Treasury Dealer Quotations" means, with respect to a Calculation Date, the average, as determined by the Calculation Agent, of the bid and asked prices for the Comparable Treasury Issue, expressed in each case as a percentage of its principal amount, quoted in writing to the Issuer at 5:00 p.m. New York time on such Calculation Date by each of the three nationally recognized investment banking firms selected by the Issuer that are primary U.S. government securities dealers.

"Reset Interest Rate" means, in relation to a Reset Interest Period, a fixed percentage rate per annum equal to the sum of (x) the Base Rate for such Reset Interest Period and (y) the Spread (as specified in the applicable Pricing Supplement).

"U.S. Treasury Rate" means, in relation to a Reset Interest Period, the percentage rate per annum equal to the yield, appearing in the most recently published statistical release designated "H.15(519)" or any successor publication that is published weekly by the Board of Governors of the U.S. Federal Reserve System (available on the website thereof at http://www.federalreserve.gov/releases/h15/current/ default.htm, or any successor site), within the column that presents the average yields for the week ending immediately prior to the Calculation Date for such Reset Interest Period, under the caption "U.S. government securities—Treasury constant maturities—Nominal," for U.S. Treasury securities having a maturity comparable to the Reset Interest Period. If such release does not appear on such website, "U.S. Treasury Rate" means the percentage rate per annum equal to the semi-annual or quarterly (as applicable) equivalent yield to maturity of the Comparable Treasury Issue, calculated using a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such Calculation Date. If no rate is available, the previous rate shall apply.

(h) Effect of Benchmark Transition Event

(i) Benchmark Replacement

If the Issuer or its designee determines that a Benchmark Transition Event (as defined herein) and its related Benchmark Replacement Date (as defined herein) have occurred prior to the Reference Time (as defined herein) in respect of any determination of the Benchmark (as defined herein) on any date, the Benchmark Replacement (as defined herein) will replace the then-current Benchmark for all purposes relating to the applicable Notes in respect of such determination on such date and all determinations on all subsequent dates.

(ii) Benchmark Replacement Conforming Changes

In connection with the implementation of a Benchmark Replacement, the Issuer or its designee will have the right to make Benchmark Replacement Conforming Changes (as defined herein) from time to time.

At the request of the Issuer, but subject to receipt by the Agents of a certificate signed by two duly authorized officers of the Issuer pursuant to Condition 5(h)(iv) and at least five London banking days prior thereof, the Agents shall (at the expense of the Issuer), without any requirement for the consent or approval of Noteholders, be obliged to concur with the Issuer in effecting any Benchmark Replacement Conforming Changes (including, inter alia, by amending or supplementing the Agency Agreement), provided that the Agents shall not be obliged so to concur if, in the opinion of any of the Agents, doing so would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to the Agents in these Conditions or the Agency Agreement (including, for the avoidance of doubt, any supplemental agency agreement) in any way.

In connection with any Benchmark Replacement Conforming Changes in accordance with this Condition 5(h)(ii), the Issuer shall comply with the rules of any stock exchange on which the applicable Notes are for the time being listed or admitted to trading.

(iii) Decisions and Determinations

Any determination, decision or election that may be made by the Issuer or its designee pursuant to this Condition 5(h), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from

taking any action or any selection, will be conclusive and binding absent manifest error, may be made in the Issuer's or its designee's sole discretion, and, notwithstanding anything to the contrary in the these Conditions or the Agency Agreement, shall become effective with respect to the applicable Notes without consent from any other party.

(iv) Notices, etc.

Any Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes determined under this Condition 5(h) will be notified promptly by the Issuer to the Principal Paying Agent and the Calculation Agent and, in accordance with Condition 16, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Replacement Conforming Changes, if any.

No later than notifying the Principal Paying Agent and the Calculation Agent of the same, the Issuer shall deliver to the Agents a certificate signed by two duly authorized officers of the Issuer:

- (A) confirming (1) that a Benchmark Transition Event has occurred and (2) the Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes, in each case as determined in accordance with the provisions of this Condition 5(h); and
- (B) certifying that the Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of the Benchmark Replacement.

The Agents shall be entitled to rely on such certificate (without liability to any person) as sufficient evidence thereof.

(v) Survival of Original Reference Rate

Without prejudice to the obligations of the Issuer under Condition 5(h)(i), (ii), (iii) and (iv), the Benchmark and the fallback provisions provided for in the Agency Agreement will continue to apply unless and until the Principal Paying Agent and the Calculation Agent have been notified of the Benchmark Replacement (including any Benchmark Replacement Adjustment) and the specific terms of any Benchmark Replacement Conforming Changes, in accordance with Condition 6(h)(iv).

(vi) Certain Defined Terms

As used in this Condition 5(h):

"Benchmark" means, initially, LIBOR (if LIBOR is specified as the Reference Rate in the applicable Pricing Supplement); provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to LIBOR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.

"Benchmark Replacement" means the Interpolated Benchmark; provided that if the Issuer or its designee cannot determine the Interpolated Benchmark as of the Benchmark Replacement Date, then "Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

- (A) the sum of: (1) Term SOFR and (2) the Benchmark Replacement Adjustment;
- (B) the sum of: (1) Compounded SOFR and (b) the Benchmark Replacement Adjustment;
- (C) the sum of: (1) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark for the applicable Corresponding Tenor and (2) the Benchmark Replacement Adjustment;
- (D) the sum of: (1) the ISDA Fallback Rate and (2) the Benchmark Replacement Adjustment;
- (E) the sum of: (1) the alternate rate of interest that has been selected by the Issuer or its designee as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar-denominated floating rate notes at such time and (2) the Benchmark Replacement Adjustment.

"Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

- (A) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;
- (B) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment;
- (C) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer or its designee giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the thencurrent Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated floating rate notes at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Interest Period," timing and frequency of determining rates and making payments of interest, changes to the definition of "Corresponding Tenor" solely when such tenor is longer than the Interest Period and other administrative matters) with respect to these Conditions, the Agency Agreement or otherwise that the Issuer or its designee decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer or its designee decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer or its designee determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer or its designee determines is reasonably necessary).

"Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark:

- (A) in the case of clause (A) or (B) of the definition of "Benchmark Transition Event," the later of (1) the date of the public statement or publication of information referenced therein and (2) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or
- (B) in the case of clause (C) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark:

- (A) a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark;
- (B) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or
- (C) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.

- "Compounded SOFR" means the compounded average of SOFRs for the applicable Corresponding Tenor, with the rate, or methodology for this rate, and conventions for this rate (which will be compounded in arrears with a lookback and/or suspension period as a mechanism to determine the interest amount payable prior to the end of each Interest Period) being established by the Issuer or its designee in accordance with:
- (A) the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:
- (B) if, and to the extent that, the issuer or its designee determines that Compounded SOFR cannot be determined in accordance with clause (A) above, then the rate, or methodology for this rate, and conventions for this rate that have been selected by the issuer or its designee giving due consideration to any industry-accepted market practice for U.S. dollar-denominated floating rate notes at such time.
- "Corresponding Tenor" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark.
- "designee" means a designee as selected and separately appointed by the Issuer in writing.
- "Federal Reserve Bank of New York's Web site" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source.
- "Interpolated Benchmark" with respect to the Benchmark means the rate determined for the Corresponding Tenor by interpolating on a linear basis between: (A) the Benchmark for the longest period (for which the Benchmark is available) that is shorter than the Corresponding Tenor and (B) the Benchmark for the shortest period (for which the Benchmark is available) that is longer than the Corresponding Tenor.
- "ISDA Definitions" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.
- "ISDA Fallback Adjustment" means the spread adjustment, (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.
- "ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.
- "Reference Time" with respect to any determination of the Benchmark means (A) if the Benchmark is LIBOR, 11:00 a.m. (London time) on the day that is two London banking days preceding the date of such determination, and (B) if the Benchmark is not LIBOR, the time determined by the Issuer or its designee in accordance with the Benchmark Replacement Conforming Changes.
- "Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.
- "SOFR" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Web site.
- "Term SOFR" means the forward-looking term rate for the applicable Corresponding Tenor based on SOFR that has been selected or recommended by the Relevant Governmental Body.
- "Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

(vii) Other

Notwithstanding any other provision of this Condition 5(h), no Agent is obliged to concur with the Issuer or its designee in respect of any changes or amendments as contemplated under this Condition 5(h) which, in the sole opinion of such Agent, would have the effect of (i) exposing such Agent to any liability against which it has not been indemnified and/or secured and/or prefunded to its satisfaction or (ii) increasing the obligations or duties, or decreasing the rights or protections, of such Agent in the Agency Agreement and/or these Conditions.

Notwithstanding any other provision of this Condition 5(h), if in the opinion of the Calculation Agent there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this Condition 5(h), the Calculation Agent shall promptly notify the Issuer thereof and the Issuer or its designee shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or is otherwise unable to make such calculation or determination for any reason, it shall notify the Issuer thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and shall not incur any liability for not doing so.

6 Payments

(a) Method of Payment

Subject as provided below:

- (i) payments in a Specified Currency other than euro will be made by credit or transfer to an account in the relevant Specified Currency maintained by the payee; and
- (ii) payments will be made in euro by credit or transfer to a euro account (or any other account to which euro may be credited or transferred) specified by the payee.

References to "Specified Currency" will include any successor currency under applicable law.

Notwithstanding the foregoing, so long as the Global Note is held on behalf of Euroclear Bank SA/NV, Clearstream Banking S.A. or an alternative clearing system, each payment in respect of the Global Note will be made to the person shown as the Noteholder in the Register at the close of business of the relevant clearing system on the Clearing System Business Day before the due date for such payments, where "Clearing System Business Day" means a weekday (Monday to Friday, inclusive) except January 1 and December 25.

(b) Payments subject to fiscal and other laws

Payments will be subject in all cases to (i) any fiscal or other laws and regulations applicable thereto in the place of payment, but without prejudice to the provisions of Condition 8, and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471 (b) of the U.S. Internal Revenue Code of 1986 (the "Code") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, official interpretations thereof, or law implementing an intergovernmental approach thereto.

(c) Presentation of definitive Bearer Notes, Receipts and Coupons

Payments of principal in respect of definitive Bearer Notes not held in the CMU will (subject as provided below) be made in the manner provided in paragraph (a) above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of definitive Bearer Notes, and payments of interest in respect of definitive Bearer Notes will (subject as provided below) be made as aforesaid only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of Coupons, in each case at the specified office of any Paying Agent outside the United States (which expression, as used herein, means the United States of America (including the States and the District of Columbia and its possessions)).

In respect of Bearer Notes not held in the CMU in definitive form, payments of instalments of principal (if any), other than the final instalment will (subject as provided below) be made in the manner provided in paragraph (a) above against presentation and surrender (or, in the case of part payment of any sum

due, endorsement) of the relevant Receipt in accordance with the preceding paragraph. Payment of the final instalment will be made in the manner provided in paragraph (a) above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the relevant Bearer Note in accordance with the preceding paragraph. Each Receipt must be presented for payment of the relevant instalment together with the definitive Bearer Note to which it appertains. Receipts presented without the definitive Bearer Note to which they appertain do not constitute valid obligations of the Issuer. Upon the date on which any definitive Bearer Note becomes due and repayable, unmatured Receipts (if any) relating thereto (whether or not attached) shall become void and no payment shall be made in respect thereof.

Fixed Rate Notes in definitive bearer form (other than Dual Currency Notes or Index Linked Notes or Long Maturity Notes (as defined below) should be presented for payment together with all unmatured Coupons appertaining thereto (which expression shall for this purpose include Coupons falling to be issued on exchange of matured Talons), failing which the amount of any missing unmatured Coupon (or, in the case of payment not being made in full, the same proportion of the amount of such missing unmatured Coupon as the sum so paid bears to the sum due) will be deducted from the sum due for payment. Each amount of principal so deducted will be paid in the manner mentioned above against surrender of the relative missing Coupon at any time before the expiry of 10 years after the Relevant Date (as defined in Condition 8) in respect of such principal (whether or not such Coupon would otherwise have become void under Condition 9) or, if later, five years from the date on which such Coupon would otherwise have become due, but in no event thereafter.

Upon any Fixed Rate Note in definitive bearer form becoming due and repayable prior to its Maturity Date, all unmatured Talons (if any) appertaining thereto will become void and no further Coupons will be issued in respect thereof.

Upon the date on which any Floating Rate Note, Dual Currency Note or Index Linked Note or Long Maturity Note in definitive bearer form not held in the CMU becomes due and repayable, unmatured Coupons and Talons (if any) relating thereto (whether or not attached) shall become void and no payment or, as the case may be, exchange for further Coupons shall be made in respect thereof. A "Long Maturity Note" is a Fixed Rate Note (other than a Fixed Rate Note which on issue had a Talon attached) whose nominal amount on issue is less than the aggregate interest payable thereon provided that such Note shall cease to be a Long Maturity Note on the Interest Payment Date on which the aggregate amount of interest remaining to be paid after that date is less than the nominal amount of such Note.

In the case of definitive Bearer Notes held in the CMU, payment will be made at the direction of the bearer to the CMU Accountholders and such payment made in accordance thereof shall discharge the obligations of the Issuer in respect of that payment.

If the due date for redemption of any definitive Bearer Note is not an Interest Payment Date, interest (if any) accrued in respect of such Note from (and including) the preceding Interest Payment Date or, as the case may be, the Interest Commencement Date shall be payable only against surrender of the relevant definitive Bearer Note.

(d) Payments in respect of Bearer Global Notes

Payments of principal and interest (if any) in respect of Bearer Notes represented by any Global Note in bearer form will (subject as provided below) be made in the manner provided in paragraph (a) above and otherwise in the manner specified in the relevant Global Note (i) in the case of a Bearer Global Note lodged with the CMU, at the direction of the bearer to the CMU Accountholders, or (ii) in the case of a Bearer Global Note not lodged with the CMU, against presentation or surrender, as the case may be, of such Global Note at the specified office of any Paying Agent outside the United States. A record of each payment made against presentation or surrender of any Global Note in bearer form, distinguishing between any payment of principal and any payment of interest, will be made on such Global Note (in the case of a Bearer Global Note not lodged with the CMU) by the Paying Agent to which it was presented or (in the case of a Bearer Global Note lodged with the CMU) on withdrawal of such Bearer Global Note by the CMU Lodging and Paying Agent, and in each such case, and such record shall be prima facie evidence that the payment in question has been made.

(e) Payments in respect of Registered Notes

Payments of principal (other than instalments of principal (if any) prior to the final instalment) in respect of each Registered Note (whether in definitive or global form) will be made against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the Registered Note at the specified office of the Registrar or any of the Paying Agents. Such payments will be made by transfer to the Designated Account (as defined below) of the holder (or the first named of joint holders) of the Registered Note appearing in the register of holders of the Registered Notes maintained by the Registrar (the "Register") (i) where in global form, at the close of the business day (being for this purpose, in respect of Notes clearing through Euroclear and Clearstream, Luxembourg, a day on which Euroclear and Clearstream, Luxembourg are open for business, in respect of Notes clearing through the CMU, a day on which the CMU is open for business and in respect of Notes clearing through DTC, a day on which DTC is open for business) before the relevant due date, and (ii) where in definitive form, at the close of business on the third business day (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar is located) before the relevant due date. For these purposes, "Designated Account" means the account (which, in the case of a payment in Japanese yen to a non-resident of Japan, shall be a non-resident account) maintained by a holder with a Designated Bank and identified as such in the Register and "Designated Bank" means (in the case of payment in a Specified Currency other than euro) a bank in the principal financial center of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Sydney or Auckland, respectively) and (in the case of a payment in euro) any bank which processes payments in euro.

Payments of interest due on a Registered Note (whether in definitive or global form) and payments of instalments of principal (if any) due on a Registered Note (other than the final instalment) will be made by credit or transfer to an account in the relevant Specified Currency maintained by the holder (or the first named of joint holders) of the Registered Note appearing in the Register (i) where in global form, at the close of the business day (being for this purpose, in respect of Notes clearing through Euroclear and Clearstream, Luxembourg, a day on which Euroclear and Clearstream, Luxembourg are open for business, in respect of Notes clearing through the CMU, a day on which the CMU is open for business and in respect of Notes clearing through DTC, a day on which DTC is open for business) before the relevant due date, and (ii) where in definitive form, at the close of business on the fifteenth day (whether or not such fifteenth day is a business day) before the relevant due date (the "Record Date"). Upon application of the holder to the specified office of the Registrar not less than three business days in the city where the specified office of the Registrar is located before the due date for any payment of interest in respect of a Registered Note, the payment may be made by transfer on the due date in the manner provided in the preceding paragraph. Any such application for transfer shall be deemed to relate to all future payments of interest (other than interest due on redemption) and instalments of principal (other than the final instalment) in respect of the Registered Notes which become payable to the holder who has made the initial application until such time as the Registrar is notified in writing to the contrary by such holder. Payment of the interest due in respect of each Registered Note on redemption and the final instalment of principal will be made in the same manner as payment of the principal amount of such Registered Note.

No commissions or expenses shall be charged to such holders by the Registrar in respect of any payments of principal or interest in respect of the Registered Notes.

All amounts payable to DTC or its nominee as registered holder of a Registered Global Note in respect of Notes denominated in a Specified Currency shall be paid by transfer by the Registrar to an account in the relevant Specified Currency on behalf of DTC or its nominee for payment in such Specified Currency or conversion into and payment in U.S. dollars in accordance with the provisions of the Agency Agreement. In the case of a Registered Note (whether or not in global form) held in the CMU, payment will be made at the direction of the registered holder to the CMU Accountholders and such payment shall discharge the obligations of the Issuer in respect of that payment.

None of the Issuer or the Agents will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

(f) General provisions applicable to payments

The holder of a Global Note (if the Global Note is not lodged with the CMU) or the CMU Accountholder at the direction of the holder of a Global Note (if the Global Note is lodged with the CMU), shall be the only person entitled to receive payments in respect of Notes represented by such Global Note and the Issuer will be discharged by payment to, or to the order of, the holder of such Global Note in respect of each amount so paid. Each of the persons shown in the records of Euroclear, Clearstream, Luxembourg, the CMU or DTC as the beneficial holder of a particular nominal amount of Notes represented by such Global Note must look solely to Euroclear, Clearstream, Luxembourg, the CMU or DTC, as the case may be, for his share of each payment so made by the Issuer to, or to the order of, the holder of such global Note. No person other than the holder of such Global Note shall have any claim against the Issuer in respect of any payments due on such Global Note.

Notwithstanding the foregoing provisions of this Condition, if any amount of principal and/or interest in respect of any Bearer Notes is payable in U.S. dollars, such U.S. dollar payments of principal and/or interest in respect of such Bearer Notes will be made at the specified office of a Paying Agent in the United States if:

- (i) the Issuer has appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment in U.S. dollars at such specified offices outside the United States of the full amount of principal and interest on the Bearer Notes in the manner provided above when due;
- (ii) payment of the full amount of such principal and interest at all such specified offices outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions on the full payment or receipt of principal and interest in U.S. dollars; and
- (iii) such payment is then permitted under United States law without involving, in the opinion of the Issuer, adverse tax consequences to the Issuer.

(g) Payment Day

If the date for payment of any amount in respect of any Note, Receipt or Coupon is not a Payment Day, the holder thereof shall not be entitled to payment until the next following Payment Day in the relevant place and shall not be entitled to further interest or other payment in respect of such delay. For these purposes, "Payment Day" means any day which (subject to Condition 9) is:

- (i) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in:
 - (A) in the case of Notes in definitive form only, the relevant place of presentation;
 - (B) each Additional Financial Centre specified in the applicable Pricing Supplement;
- (ii) either (1) in relation to any sum payable in a Specified Currency other than euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial center of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney or Auckland, respectively) or (2) in relation to any sum payable in euro, a day on which the TARGET 2 System is open; and
- (iii) in the case of any payment in respect of a Registered Global Note denominated in a Specified Currency other than U.S. dollars and registered in the name of DTC or its nominee and in respect of which an accountholder of DTC (with an interest in such Registered Global Note) has elected to receive any part of such payment in U.S. dollars, a day on which commercial banks are not authorized or required by law or regulation to be closed in New York City.

(h) Interpretation of Principal and Interest

Any reference in these Terms and Conditions to principal in respect of the Notes shall be deemed to include, as applicable:

(i) any additional amounts which may be payable with respect to principal under Condition 8;

- (ii) the Final Redemption Amount of the Notes;
- (iii) the Early Redemption Amount of the Notes;
- (iv) the Optional Redemption Amount(s) (if any) of the Notes;
- (v) in relation to Notes redeemable in instalments, the Instalment Amounts;
- (vi) in relation to Zero Coupon Notes, the Amortized Face Amount as defined in Condition 7(e); and
- (vii) any premium and any other amounts (other than interest) which may be payable by the Issuer under or in respect of the Notes.

Any reference in these Terms and Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any additional amounts which may be payable with respect to interest under Condition 8.

7 Redemption and Purchase

(a) Redemption at Maturity

Unless previously redeemed or purchased and cancelled as specified below, each Note (including each Dual Currency Redemption Note) will be redeemed by the Issuer at its Final Redemption Amount specified in, or determined in the manner specified in, the applicable Pricing Supplement in the relevant Specified Currency on the Maturity Date.

Notwithstanding any provisions to the contrary in these Terms and Conditions, the following will apply with respect to the redemption of the Tier I Subordinated Notes:

- (i) The Tier I Subordinated Notes are undated perpetual securities and shall have no fixed Maturity Date. Subject to Condition 3(c), the principal amount of the Tier I Subordinated Notes will become due and payable by the Issuer on the date on which voluntary or involuntary winding up proceedings are instituted in respect of the Issuer in accordance with, as the case may be, (i) a resolution passed at a shareholders' meeting of the Issuer, (ii) any provision of the Issuer's articles of incorporation or (iii) any applicable law or any decision of any judicial or administrative authority.
- (ii) The Tier I Subordinated Notes may not be redeemed at any time without the prior approval of the Financial Supervisory Service of Korea (the "FSS") or such other relevant regulatory authorities in Korea, to the extent such approval is necessary.

(b) Redemption for Tax Reasons

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time (if this Note is neither a Floating Rate Note, an Index Linked Interest Note or a Dual Currency Interest Note) or on any Interest Payment Date (if this Note is either a Floating Rate Note, an Index Linked Interest Note or a Dual Currency Interest Note), on giving not less than 30 nor more than 60 days' notice to the Principal Paying Agent and, in accordance with Condition 14, the Noteholders (which notice shall be irrevocable), if:

- (i) on the occasion of the next payment due under the Notes, the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 8 as a result of any change in, or amendment to, the laws or regulations of a Tax Jurisdiction (as defined in Condition 8) or any change in the application or official interpretation of such laws or regulations, which (including the cessation of tax exemptions presently applicable) change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes; and
- (ii) such obligation cannot be avoided by the Issuer taking reasonable measures available to it, provided that (1) in the case of Subordinated Notes, the prior approval of the FSS or such other relevant regulatory authorities in Korea or elsewhere shall have been obtained, if necessary, and (2) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Notes then due. Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Principal Paying Agent a certificate signed by two duly authorized officers of the Issuer stating that the

Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers of recognized standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Notes redeemed pursuant to this Condition 7(b) will be redeemed at their Early Redemption Amount referred to in paragraph (e) below together (if appropriate) with interest accrued to (but excluding) the date of redemption.

(c) Redemption at the Option of the Issuer (Issuer Call)

If Issuer Call is specified as being applicable in the applicable Pricing Supplement, the Issuer may, having given:

- (i) not less than 15 nor more than 30 days' notice to the Noteholders in accordance with Condition 14;
- (ii) not less than 15 days before the giving of the notice referred to in (i) above, notice to the Principal Paying Agent and, in the case of a redemption of Registered Notes, the Registrar (which notices shall be irrevocable and shall specify the date fixed for redemption);

redeem all or some only of the Notes then outstanding on any Optional Redemption Date and at the Optional Redemption Amount(s) specified in, or determined in the manner specified in, the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the relevant Optional Redemption Date; provided, however, that in the case of Subordinated Notes, (1) such redemption may not occur within five years of the Issue Date and (2) such redemption shall be subject to the prior approval of the FSS pursuant to regulations of the FSC of Korea in effect at the applicable time relating to, inter alia, capital adequacy ratios, replacement capital and interest rates. Any such redemption must be of a nominal amount not less than the Minimum Redemption Amount and not more than the Maximum Redemption Amount in each case as may be specified in the applicable Pricing Supplement. In the case of a partial redemption of Notes, the Notes to be redeemed (Redeemed Notes) will be selected individually by lot, in the case of Redeemed Notes represented by definitive Notes, and in accordance with the rules of Euroclear, Clearstream, Luxembourg, the CMU and/or DTC, as the case may be, in the case of Redeemed Notes represented by a Global Note, not more than 30 days prior to the date fixed for redemption (such date of selection being hereinafter called the Selection Date). In the case of Redeemed Notes represented by definitive Notes, a list of the serial numbers of such Redeemed Notes will be published in accordance with Condition 14 not less than 15 days prior to the date fixed for redemption. The aggregate nominal amount of Redeemed Notes represented by definitive Notes shall bear the same proportion to the aggregate nominal amount of all Redeemed Notes as the aggregate nominal amount of definitive Notes outstanding bears to the aggregate nominal amount of the Notes outstanding, in each case on the Selection Date, provided that such first mentioned nominal amount shall, if necessary, be rounded downwards to the nearest integral multiple of the Specified Denomination, and the aggregate nominal amount of Redeemed Notes represented by a Global Note shall be equal to the balance of the Redeemed Notes. No exchange of the relevant Global Note will be permitted during the period from (and including) the Selection Date to (and including) the date fixed for redemption pursuant to this sub-paragraph (c) and notice to that effect shall be given by the Issuer to the Noteholders in accordance with Condition 14 at least five days prior to the Selection Date.

(d) Redemption of the Senior Notes only at the Option of the Noteholders (Investor Put)

If, with respect to the Senior Notes, Investor Put is specified as being applicable in the applicable Pricing Supplement, upon the holder of any Senior Note giving to the Issuer in accordance with Condition 14 not less than 15 nor more than 30 days' notice or such other period of notice as is specified in the applicable Pricing Supplement the Issuer will, upon the expiry of such notice, redeem, subject to, and in accordance with, the terms specified in the applicable Pricing Supplement, in whole (but not in part), such Senior Note on the Optional Redemption Date and at the Optional Redemption Amount specified in, or determined in the manner specified in, the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the Optional Redemption Date. Registered Notes may be redeemed under this Condition 7(d) in any multiple of their lowest Specified Denomination.

If the Notes are in definitive form and held outside Euroclear, Clearstream, Luxembourg, DTC and the CMU, to exercise the right to require redemption of this Senior Note the holder of this Senior Note must deliver such Senior Note at the specified office of any Paying Agent (in the case of Bearer Notes) or the

Registrar (in the case of Registered Notes) at any time during normal business hours of such Paying Agent or, as the case may be, the Registrar falling within the notice period, accompanied by a duly completed and signed notice of exercise in the form (for the time being current) obtainable from any specified office of any Paying Agent or, as the case may be, the Registrar (a "Put Notice") and in which the holder must specify a bank account to which payment is to be made under this Condition and, in the case of Registered Notes, the nominal amount thereof to be redeemed and, if less than the full nominal amount of the Registered Notes so surrendered is to be redeemed, an address to which a new Registered Note in respect of the balance of such Registered Notes is to be sent subject to and in accordance with the provisions of Condition 2(b). If this Note is in definitive form, the Put Notice must be accompanied by this Note or evidence satisfactory to the Paying Agent concerned that this Note will, following delivery of the Put Notice, be held to its order or under its control.

If this Note is represented by a Global Note or is in definitive form and held through Euroclear, Clearstream, Luxembourg, the CMU or DTC, to exercise the right to require redemption of this Note the holder of this Note must, within the notice period, give notice to the Principal Paying Agent of such exercise in accordance with the standard procedures of Euroclear, Clearstream, Luxembourg, the CMU and DTC (which may include notice being given on his instruction by Euroclear, Clearstream, Luxembourg, the CMU, DTC or any depositary for them to the Principal Paying Agent by electronic means or notice being given to the CMU Lodging and Paying Agent) in a form acceptable to Euroclear, Clearstream, Luxembourg, the CMU, the CMU Lodging and Paying Agent and DTC from time to time and, if this Note is represented by a Global Note, at the same time present or procure the presentation of the relevant Global Note to the Principal Paying Agent for notation accordingly.

Any Put Notice or other notice given in accordance with the standard procedures of Euroclear, Clearstream, Luxembourg, DTC and the CMU given by a holder of any Senior Note pursuant to this paragraph shall be irrevocable except where prior to the due date of redemption an Event of Default shall have occurred and be continuing in which event such holder, at its option, may elect by notice to the Issuer to withdraw the notice given pursuant to this paragraph and instead to declare such Senior Note forthwith due and payable pursuant to Condition 10.

Each Senior Note should be presented for redemption together with all unmatured Coupons relating to it, failing which such Senior Note will be redeemed only against provision of such indemnity as the Issuer may require. Upon the date on which any Senior Note falls due for redemption or is purchased for cancellation, all unmatured Coupons appertaining thereto will become void and no payment will thereafter be made in respect thereto.

(e) Early Redemption Amounts

For the purpose of paragraph (b) above and Condition 10, the Notes will be redeemed at the Early Redemption Amount calculated as follows:

- (i) in the case of Notes with a Final Redemption Amount equal to the Issue Price, at the Final Redemption Amount thereof;
- (ii) in the case of Notes (other than Zero Coupon Notes but including Instalment Notes and Partly Paid Notes) with a Final Redemption Amount which is or may be less or greater than the Issue Price or which is payable in a Specified Currency other than that in which the Notes are denominated, at the amount specified in, or determined in the manner specified in, the applicable Pricing Supplement or, if no such amount or manner is so specified in the Pricing Supplement, at their nominal amount; or
- (iii) in the case of Zero Coupon Notes, at an amount (the "Amortized Face Amount") calculated in accordance with the following formula:

Early Redemption Amount = $RP \times (1 + AY)y$

where:

"RP" means the Reference Price; and

"AY" means the Accrual Yield expressed as a decimal; and

"y" is a fraction the numerator of which is equal to the number of days (calculated on the basis of a 360-day year consisting of 12 months of 30 days each) from (and including) the Issue Date of the first Tranche of the Notes to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator of which is 360,

or on such other calculation basis as may be specified in the applicable Pricing Supplement.

(f) Instalments

Instalment Notes will be redeemed in the Instalment Amounts and on the Instalment Dates. In the case of early redemption, the Early Redemption Amount will be determined pursuant to paragraph (e) above.

(g) Partly Paid Notes

Partly Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition and the applicable Pricing Supplement.

(h) Purchases

The Issuer may at any time purchase Senior Notes (provided that, in the case of Bearer Notes in definitive form, these are purchased together with all unmatured Receipts, Coupons and Talons appertaining thereto) at any price in the open market or otherwise. Such Notes may be held, reissued, resold or, at the option of the Issuer, surrendered to any Paying Agent and/or the Registrar for cancellation. The Issuer or any corporation or other business entity which the Issuer effectively owns or controls, including without limitation any Subsidiary of the Issuer, may not purchase Subordinated Notes.

(i) Cancellation

All Notes which are redeemed will forthwith be cancelled (together with all unmatured Receipts, Coupons and Talons attached thereto or surrendered therewith at the time of redemption). All Notes so cancelled and the Notes purchased and cancelled pursuant to paragraph (h) above (together with all unmatured Receipts and Coupons and Talons cancelled therewith) shall be forwarded to the Principal Paying Agent (which shall notify the Registrar of such cancelled Notes in the case of Registered Notes) and cannot be reissued or resold.

(j) Late payment on Zero Coupon Notes

If the amount payable in respect of any Zero Coupon Note upon redemption of such Zero Coupon Note pursuant to paragraph (a), (b), (c) or (d) above or upon its becoming due and repayable as provided in Condition 10 is improperly withheld or refused, the amount due and repayable in respect of such Zero Coupon Note shall be the amount calculated as provided in paragraph (e)(iii) above as though the references therein to the date fixed for the redemption or the date upon which such Zero Coupon Note becomes due and payable were replaced by references to the date which is the earlier of:

- (i) the date on which all amounts due in respect of such Zero Coupon Note have been paid; and
- (ii) the date on which the full amount of the moneys payable has been received by the Principal Paying Agent or, as the case may be, the Registrar and notice to that effect has been given to the Noteholders in accordance with Condition 14.

(k) Obligation to redeem

Upon the expiry of any notice as is referred to in paragraph (b), (c) or (d) above or paragraph (l) below, the Issuer shall be bound to redeem the Notes to which the notice referred at the relevant redemption price applicable at the date of such redemption together with, if appropriate, interest accrued to (but excluding) the relevant redemption date.

(l) Redemption of Tier I Subordinated Notes for tax non-deductibility or regulatory reasons

Any Series of Tier I Subordinated Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Principal Paying Agent and, in accordance with Condition 14, the Noteholders (which notice shall be irrevocable), if either a Tax Non-deductibility Event or a Regulatory Event (each as defined below) has occurred and is continuing; provided that (1) the prior approval of the FSS or such other relevant regulatory authorities in Korea or elsewhere shall have been obtained, if necessary, and (2) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which (x) the Issuer would cease to be able to claim the relevant tax deduction pursuant to such Tax Non-deductibility Event or (y) such Series of Tier I Subordinated Notes would cease to qualify (in whole or in part) as additional Tier I capital pursuant to such Regulatory Event, as applicable.

Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Principal Paying Agent a certificate signed by two duly authorized officers of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers of recognized standing to the effect that such Tax Non-deductibility Event or Regulatory Event, as applicable, has occurred and is continuing.

Notes redeemed pursuant to this Condition will be redeemed at their Final Redemption Amount, together (subject to Condition 5(f)) with interest accrued to (but excluding) the date of redemption.

As used herein:

"Regulatory Event" means, with respect to any Series of Tier I Subordinated Notes, such Notes (after having qualified as such at the time of their issuance) will no longer qualify (in whole or in part) as additional Tier I capital of the Issuer under applicable Korean laws and regulations, as a result of a change in or amendment to, or a change in the application or official interpretation of, such laws or regulations; provided, however, that such change or amendment was not pending or foreseeable at the time of issuance of such Notes.

"Tax Non-deductibility Event" means, with respect to any Series of Tier I Subordinated Notes, the Issuer (after having been entitled to claim such a deduction at the time of issuance of such Notes) will no longer be entitled to claim a deduction in respect of interest paid on such Notes for purposes of Korean corporation tax under applicable Korean laws and regulations, as a result of a change in or amendment to, or a change in the application or official interpretation of, such laws or regulations; provided, however, that such tax non-deductibility cannot be avoided by the Issuer taking reasonable measures available to it.

8 Taxation

All payments of principal and interest in respect of the Notes, Receipts and Coupons by the Issuer will be made without withholding or deduction for or on account of any present or future taxes or duties of whatever nature imposed or levied by or on behalf of any Tax Jurisdiction unless such withholding or deduction is required by law. In such event, the Issuer will pay such additional amounts as shall be necessary in order that the net amounts received by the holders of the Notes, Receipts or Coupons after such withholding or deduction shall equal the respective amounts of principal and interest which would otherwise have been receivable in respect of the Notes, Receipts or Coupons, as the case may be, in the absence of such withholding or deduction; except that no such additional amounts shall be payable with respect to any Note, Receipt or Coupon:

- (i) presented for payment by or on behalf of a Noteholder, Receiptholder or Couponholder who is liable for such taxes or duties in respect of such Note, Receipt or Coupon by reason of his having some connection with a Tax Jurisdiction other than the mere holding of such Note, Receipt or Coupon; or
- (ii) presented for payment more than 30 days after the Relevant Date (as defined below) except to the extent that the holder thereof would have been entitled to an additional amount on presenting the same for payment on such 30th day; or
- (iii) where such withholding or deduction is imposed pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, U.S. Treasury regulations or administrative guidance promulgated thereunder or an intergovernmental agreement between the United States and another jurisdiction facilitating the implementation thereof (or any law, regulation, rule or practice implementing such intergovernmental approach).

As used herein:

(A) "Tax Jurisdiction" means (i) Korea or any political subdivision or any authority thereof or therein having power to tax and (ii) if the Issuer is acting through an overseas branch (as specified in the applicable Pricing Supplement) the jurisdiction relating to such overseas branch or any political subdivision or any authority thereof or therein having power to tax; and

(B) the "Relevant Date" means the date on which such payment first becomes due, except that, if the full amount of the moneys payable has not been duly received by the Principal Paying Agent or, as the case may be, the Registrar on or prior to such due date, it means the date on which, the full amount of such moneys having been so received, notice to that effect is duly given to the Noteholders in accordance with Condition 14.

9 Prescription

The Notes (whether in bearer or registered form), Receipts and Coupons will become void unless presented for payment within a period of 10 years (in the case of principal) and five years (in the case of interest) after the Relevant Date (as defined in Condition 8) therefor.

There shall not be included in any Coupon sheet issued on exchange of a Talon any Coupon the claim for payment in respect of which would be void pursuant to this Condition or Condition 6(c) or any Talon which would be void pursuant to Condition 6(c).

10 Events of Default

(a) Applicable to Senior Notes only

If any of the following events (each an "Event of Default") occurs and is continuing:

- (i) *Non-payment*: default is made in the payment of any amount of principal or interest in respect of the Senior Notes on the due date for payment thereof and such default remains unremedied for 10 days or, in the case of default in the payment of interest, 15 days thereafter; or
- (ii) Breach of other obligations: default is made in the performance or observance of any other obligation of the Issuer under or in respect of the Senior Notes and such default remains unremedied for 60 days after written notice thereof, addressed to the Issuer by any holder of Senior Notes, has been delivered to the Issuer; or
- (iii) Cross-acceleration: (1) any Indebtedness in aggregate exceeding U.S.\$20,000,000 (or its equivalent in one or more currencies) of the Issuer is not paid within 30 days after the due date or, as the case may be, the expiry of any originally applicable grace period, (2) any Indebtedness in aggregate exceeding U.S.\$20,000,000 (or its equivalent in one or more currencies) becomes due and payable prior to its stated maturity otherwise than at the option of the Issuer or (in the absence of any event of default, howsoever described) any person entitled to such Indebtedness or (3) the Issuer fails to pay within 30 days after the due date or, as the case may be, the expiry of any originally applicable grace period, any amount in aggregate exceeding U.S.\$20,000,000 (or its equivalent in one or more currencies) payable by it under any Surety; or
- (iv) Enforcement proceedings: an execution or other legal process is levied, enforced or sued out upon or against the whole or substantially the whole of the property of the Issuer which is material in its effect upon the operations of the Issuer and is not discharged or stayed within 60 days; or
- (v) Security enforced: a secured party takes possession, or a receiver, manager or other similar officer is appointed, of the whole or substantially the whole of the undertaking, assets and revenues of the Issuer; or
- (vi) *Insolvency*, *etc.*: (1) the Issuer becomes insolvent or is unable to pay its debts generally as they fall due; (2) an administrator or liquidator of the Issuer or the whole or substantially the whole of the undertaking, assets and revenues of the Issuer is appointed (or application for any such appointment is made and is not withdrawn within 60 days thereafter) or (3) the Issuer takes any action for a readjustment or deferment of any of its obligations or makes a general assignment or an arrangement or composition with or for the benefit of its creditors or declares a moratorium in respect of any of its Indebtedness or any Surety given by it; or
- (vii) Winding up: an order is made or an effective resolution is passed for the winding up of the Issuer; or
- (viii) Analogous event: any event occurs which under the laws of Korea has an analogous effect to any of the events referred to in sub-paragraphs (iv) to (vii) above,

then the holders of at least 25 per cent. in nominal amount of any Senior Note may, by written notice addressed to the Issuer and delivered to the Issuer or to the Principal Paying Agent in accordance with Condition 14, declare such Note to be immediately due and payable whereupon it shall become immediately due and payable at its principal amount together with accrued interest without further action or formality. Any such notice shall specify the serial number of each Note in respect of which it is given.

(b) Applicable to Subordinated Notes only

- (i) If any Bankruptcy Event or the liquidation of the Issuer shall occur and be continuing (and provided that a Trigger Event has not occurred and is continuing), then, in any such event, the holder of any Subordinated Note may by written notice to the Issuer declare such Note to be forthwith due and payable upon receipt of such notice by the Issuer whereupon such Note shall become due and repayable at its principal amount plus accrued interest (if any).
- (ii) Except as expressly provided in this Condition 10(b), no holder of any Subordinated Note shall have any right to accelerate any payment of principal or interest in respect of the Subordinated Notes.
- (iii) The only action the holder of a Subordinated Note may take in Korea against the Issuer on acceleration of the Subordinated Notes is to prove claims in the liquidation or other applicable proceedings in respect of the Issuer in Korea.

(c) Interpretation

In these Conditions:

- (i) "Indebtedness" means any obligation (whether present or future, actual or contingent) for the payment or repayment of money which has been borrowed or raised (including money raised by way of acceptances or leasing).
- (ii) "Person" means any individual, company, corporation, firm, partnership, joint venture, association, organization, state, agency of a state or other entity, whether or not having a separate legal personality.
- (iii) "Surety" means any obligation of any Person(s) to pay any Indebtedness of another Person(s) in an aggregate principal amount of not less than U.S.\$5,000,000 including, without limitation, (1) any obligation to purchase such Indebtedness, (2) any obligation to lend or give money, to purchase or subscribe shares or other securities or to purchase assets or services in order to provide funds for the payment of such Indebtedness, (3) any indemnity against the consequences of a default in the payment of such Indebtedness and (4) any other agreement to be responsible for such Indebtedness.
- (iv) "Subsidiary" means, in relation to the Issuer, any company (i) in which the Issuer holds a majority of the voting rights or (ii) of which the Issuer is a member and has the right to appoint or remove a majority of the board of directors or (iii) of which the Issuer is a member and controls a majority of the voting rights, and includes any company which is a Subsidiary of a Subsidiary of the Issuer.

11 Replacement of Notes, Receipts, Coupons and Talons

Should any Note, Receipt, Coupon or Talon be lost, stolen, mutilated, defaced or destroyed, it may be replaced at the specified office of the Principal Paying Agent or the relevant Paying Agent (in the case of Bearer Notes, Receipts, Coupons and Talons) or of the Registrar (in the case of Registered Notes) upon payment by the claimant of such costs and expenses as may be incurred in connection therewith and on such terms as to evidence and indemnity as the Issuer may reasonably require. Mutilated or defaced Notes, Receipts, Coupons or Talons must be surrendered before replacements will be issued.

12 Principal Paying Agent, CMU Lodging and Paying Agent, Registrar, Paying and Transfer Agents

The names of the initial Principal Paying Agent, the initial CMU Lodging and Paying Agent, the other initial Paying Agents, the initial Registrar and the other initial Transfer Agents and their initial specified offices are set out below.

The Issuer is entitled to vary or terminate the appointment of any Paying Agent, Calculation Agent, Registrar or Transfer Agent and/or appoint additional or other Paying Agents, Registrars, Calculation

Agents, or Transfer Agents and/or approve any change in the specified office through which any of the same acts, provided that:

- (i) so long as the Notes are listed on any stock exchange, there will at all times be a Paying Agent (in the case of Bearer Notes), and a Registrar and Transfer Agent (in the case of Registered Notes) with a specified office in such place as may be required by the rules and regulations of the relevant stock exchange (or any other relevant authority);
- (ii) there will at all times be a Paying Agent and a Transfer Agent with a specified office in a city in continental Europe;
- (iii) there will at all times be a Registrar and a Transfer Agent each having a specified office in New York City;
- (iv) there will at all times be a Principal Paying Agent;
- (v) the Issuer undertakes that it will ensure that it maintains a Paying Agent in a Member State of the European Union that is not obliged to withhold or deduct tax pursuant to European Council Directive 2003/48/EC or any law implementing or complying with, or introduced in order to conform to, such Directive; and
- (vi) so long as the Notes are listed on the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") and the rules of the Singapore Stock Exchange so require, if the Notes are issued in definitive form, there will at all times be a Paying Agent in Singapore unless the Issuer obtains an exemption from the Singapore Stock Exchange.

In addition, the Issuer shall forthwith appoint a Paying Agent having a specified office in New York City in the circumstances described in the second paragraph of Condition 6(f). Notice of any variation, termination, appointment or change will be given to the Noteholders promptly by the Issuer in accordance with Condition 14.

In acting under the Agency Agreement, the Principal Paying Agent, the CMU Lodging and Paying Agent, the Registrar, the Calculation Agent, the Paying Agents and the Transfer Agents act solely as agents of the Issuer and do not assume any obligation or trust for or with any Noteholders.

13 Exchange of Talons

On and after the Interest Payment Date on which the final Coupon comprised in any Coupon sheet matures, the Talon (if any) forming part of such Coupon sheet may be surrendered at the specified office of the Principal Paying Agent or any other Paying Agent in exchange for a further Coupon sheet including (if such further Coupon sheet does not include Coupons to (and including) the final date for the payment of interest due in respect of the Note to which it appertains) a further Talon, subject to the provisions of Condition 11. Each Talon shall, for the purposes of these Terms and Conditions, be deemed to mature on the Interest Payment Date on which the final Coupon comprised in the relative Coupon sheet matures.

14 Notices

Notices to holders of Registered Notes will be deemed to be validly given if sent by first class mail or (if posted to an overseas address) by air mail to the holders (or the first named of joint holders) at their respective addresses as recorded in the Register and will be deemed to have been validly given on the fourth day after the date of such mailing and, in addition, for so long as any Registered Notes are listed on a stock exchange and the rules of that stock exchange (or any other relevant authority) so require, such notice will be published in a daily newspaper of general circulation in the place or places required by those rules.

All notices regarding the Bearer Notes shall be deemed to be validly given if published (i) in a leading English language daily newspaper of general circulation in Asia and (ii) if and for so long as the Bearer Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, a daily newspaper of general circulation in Singapore. It is expected that such publication will be made in the *Asian Wall Street Journal* in Luxembourg. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any other stock exchange (or any

other relevant authority) on which the Bearer Notes are for the time being listed. Any such notice will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of the first publication in all required newspapers.

Until such time as any definitive Notes are issued, there may (provided that, in the case of Notes listed on a stock exchange, the stock exchange agrees), so long as any Global Notes representing the Notes are held in their entirety on behalf of (i) Euroclear and/or Clearstream, Luxembourg and/or DTC, be substituted for such publication in such newspaper(s) the delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg and/or DTC for communication by them to the holders of the Notes and (ii) the CMU, be substituted for such publication in such newspaper(s) the delivery of the relevant notice to the persons shown in a CMU Instrument Position Report issued by the CMU on the second business day preceding the date of dispatch of such notice as holding interests in the relevant Global Note and, in addition, in the case of both (i) and (ii) above, for so long as any Notes are listed on a stock exchange and the rules of that stock exchange (or any other relevant authority) so require, such notice will be published in a daily newspaper of general circulation in the place or places required by those rules. Any such notice shall be deemed to have been given to the holders of the Notes on the seventh day after the day on which the said notice was given to Euroclear and/or Clearstream, Luxembourg and/or DTC and/or the persons shown in the relevant CMU Instrument Position Report.

Notices to be given by any holder of the Notes shall be in writing and given by lodging the same, together (in the case of any Note in definitive form) with the relative Note or Notes, with the Principal Paying Agent (in the case of Bearer Notes) or the Registrar (in the case of Registered Notes). Whilst any of the Notes are represented by a Global Note, such notice may be given by any holder of a Note to the Principal Paying Agent or the Registrar via Euroclear and/or Clearstream, Luxembourg and/or DTC and/or, in the case of Notes lodged with the CMU, by delivery by such holder of such notice to the CMU Lodging and Paying Agent in Hong Kong, as the case may be, in such manner as the Principal Paying Agent, the Registrar and Euroclear and/or Clearstream, Luxembourg and/or DTC and/or the CMU as the case may be, may approve for this purpose.

15 Meetings of Noteholders, Modification and Waiver

The Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of the Notes, the Receipts, the Coupons or any of the provisions of the Agency Agreement. Such a meeting may be convened by the Issuer and shall be convened by the Issuer if required in writing by Noteholders holding not less than 5.0% in nominal amount of the Notes for the time being remaining outstanding. The quorum at any such meeting for passing an Extraordinary Resolution is one or more persons holding or representing not less than 50.0% in nominal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons being or representing Noteholders whatever the nominal amount of the Notes so held or represented, except that at any meeting the business of which includes the modification of certain provisions of the Notes, Receipts or Coupons (including modifying the date of maturity of the Notes or any date for payment of interest thereof, reducing or cancelling the amount of principal or the rate of interest payable in respect of the Notes (except as a result of any modification contemplated in Condition 5(h)) or altering the currency of payment of the Notes, Receipts or Coupons), the quorum shall be one or more persons holding or representing not less than 75.0% in nominal amount of the Notes for the time being outstanding, or at any adjourned such meeting one or more persons holding or representing a clear majority, in nominal amount of the Notes for the time being outstanding. An Extraordinary Resolution passed at any meeting of the Noteholders shall be binding on all the Noteholders, whether or not they are present at the meeting, and on all Receiptholders and Couponholders.

The Agents and the Issuer may agree, without the consent of the Noteholders, Receiptholders or Couponholders, to:

- (i) any modification (except as mentioned above) of any of the provisions of the Notes, the Receipts, the Coupons, the Conditions or the Agency Agreement which is not prejudicial to the interests of the Noteholders; or
- (ii) any modification of the Notes, the Receipts, the Coupons, the Conditions, the Deed of Covenant or the Agency Agreement which is of a formal, minor or technical nature or is made to correct a

manifest error or to comply with mandatory provisions of the law of the jurisdiction in which the Issuer is incorporated.

Any such modification shall be binding on the Noteholders, the Receiptholders and the Couponholders and any such modification shall be notified to the Noteholders in accordance with Condition 14 as soon as practicable thereafter. Any determination as to prejudice applying to the interests of the Noteholders, Receiptholders or Couponholders of any Notes pursuant to this Condition shall be made by Issuer and none of the Agents shall have any responsibility or liability whatsoever with respect to such determination.

16 Further Issues

The Issuer shall be at liberty from time to time without the consent of the Noteholders, Receiptholders or Couponholders to create and issue further notes having terms and conditions the same as the Notes or the same in all respects save for the amount and date of the first payment of interest thereon and so that the same shall be consolidated and form a single Series with the outstanding Notes.

17 Provision of Information

The Issuer has covenanted in the Deed Poll for the benefit of the Noteholders, Receiptholders and Couponholders that for so long as any Notes remain outstanding and are "restricted securities" (as defined in Rule 144(a)(3) under the Securities Act), the Issuer shall, during any period in which it is neither subject to Section 13 or 15(d) of the Exchange Act nor exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, make available to any Noteholder, Receiptholder or Couponholder of, or beneficial owner of an interest in, such Notes, Receipts or Coupons in connection with any resale thereof and to any prospective purchaser designated by such Noteholder, Receiptholder or Couponholder or beneficial owner, in each case upon request, the information specified in, and meeting the requirements of, Rule 144A(d)(4) under the Securities Act.

18 Contracts (Rights of Third Parties) Act 1999

No rights are conferred on any person under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Note, but this does not affect any right or remedy of any person which exists or is available apart from that Act.

19 Governing Law and Submission to Jurisdiction

- (a) The Agency Agreement, the Deed Poll, the Deed of Covenant, the Notes, the Receipts and the Coupons and any non-contractual obligations arising out of or in connection with the Agency Agreement, the Deed Poll, the Deed of Covenant, the Notes, the Receipts and the Coupons, are and shall be governed by, and construed in accordance with, English law except that in the case of Subordinated Notes, Conditions 3(b) and 3(c) are governed by, and shall be construed in accordance with, Korean law.
- (b) The Issuer agrees, for the exclusive benefit of the Noteholders, the Receiptholders and the Couponholders that the courts of England are to have jurisdiction to settle any disputes which may arise out of or in connection with the Agency Agreement, the Notes, the Receipts and/or the Coupons (including a dispute relating to any non-contractual obligations arising out of or in connection therewith) and that accordingly any suit, action or proceedings (together referred to as "Proceedings") arising out of or in connection with the Agency Agreement, the Notes, the Receipts and the Coupons (including any Proceeding relating to any non-contractual obligations arising out of or in connection therewith) may be brought in such courts. The Issuer hereby irrevocably waives any objection which it may have now or hereafter to the laying of the venue of any such Proceedings in any such court and any claim that any such Proceedings have been brought in an inconvenient forum and hereby further irrevocably agrees that a judgment in any such Proceedings brought in the English courts shall be conclusive and binding upon it and may be enforced in the courts of any other jurisdiction. Nothing contained in this Condition shall limit any right to take Proceedings against the Issuer in any other court of competent jurisdiction, nor shall the taking of Proceedings in one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction, whether

concurrently or not. The Issuer appoints Kookmin Bank London Branch. at its registered office for the time being, currently at 6/F, Princes Court, 7 Princes Street, London EC2R 8AQ, England as its agent for service of process, and undertakes that, in the event of it ceasing so to act or ceasing to be registered in England, it will appoint another person as its agent for service of process in England in respect of any Proceedings. Nothing herein shall affect the right to serve Proceedings in any other manner permitted by law. The Issuer hereby irrevocably and unconditionally waives with respect to the Agency Agreement, the Notes, the Receipts and/or the Coupons any right to claim immunity from jurisdiction or execution and any similar defense and irrevocably and unconditionally consents to the giving of any relief or the issue of any process, including without limitation, the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgment made or given in connection with any Proceedings.

USE OF PROCEEDS

The net proceeds from each issue of Notes will be: (a) applied by the Issuer for its general corporate purposes; and/or (b) if so specified in the relevant Pricing Supplement, allocated by the Issuer towards the financing or refinancing, in whole or in part, of Green Eligible Categories, Social Eligible Categories (each as defined below) or a combination of the two categories (in the case of Sustainability Bonds) in accordance with the Kookmin Bank Sustainable Financing Framework (see "Sustainable Financing Framework").

According to the definition criteria set out by the ICMA Green Bond Principles, the ICMA Social Bond Principles or the ICMA Sustainability Bond Guidelines (as defined herein), only Tranches of Notes allocated exclusively to financing or refinancing Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) may be designated as "Green Bonds," "Social Bonds" or "Sustainability Bonds."

Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) have been defined in accordance with the broad categorization of eligibility for Green Projects, Social Projects or Sustainability Projects set out by the ICMA Green Bond Principles, the ICMA Social Bond Principles or the ICMA Sustainability Bond Guidelines.

"Green Eligible Categories" are those which comprise financing within the Green Eligible Categories set out in the Kookmin Bank Sustainable Financing Framework. Such Green Eligible Categories include those which relate to: renewable energy, energy efficiency, pollution prevention and control, environmentally sustainable management of natural resources and land use, conservation of terrestrial and aquatic biodiversity, clean transportation, sustainable water and wastewater management, climate change adaption, and green buildings.

"Social Eligible Categories" are those which comprise financing within the Social Eligible Categories set out in the Kookmin Bank Sustainable Financing Framework. Such Social Eligible Categories include those which relate to: affordable basic infrastructure, access to essential services, affordable housing, employment generation, SME financing and microfinance, socio-economic advancement and empowerment.

Financings within the fossil fuel related assets, large scale hydro power plants and/or nuclear and nuclear-related assets categories are specifically excluded from consideration for eligibility.

CAPITALIZATION

The following table sets forth the Issuer's capitalization, defined as the sum of its borrowings and debentures and its equity, as of December 31, 2019:

	As of December 31, 2019(1)
Borrowings and debentures ⁽²⁾	(in billions of Won) ₩36,783
Equity	
Common stock, par value \(\foats 5,000\) Authorized—1,000,000,000 shares	
Issued and outstanding common stock—404,379,116 shares	₩ 2,022
Hybrid securities	575
Capital surplus	5,220
Accumulated other comprehensive income	123
Retained earnings	21,065
Non-controlling interests in equity	
Total equity	₩29,004
Total capitalization	₩65,788

Notes

⁽¹⁾ There has been no material change in the capitalization of the Issuer since December 31, 2019.

⁽²⁾ Consists of borrowings of \(\psi\)18,043 billion and debentures of \(\psi\)18,740 billion.

SELECTED FINANCIAL AND OPERATING DATA

SELECTED FINANCIAL DATA

The selected financial data as of and for the years ended December 31, 2017, 2018 and 2019 set forth below have been derived from the Issuer's audited consolidated financial statements included elsewhere in this Offering Circular, which have been prepared in accordance with Korean IFRS.

Korean IFRS 1109 Financial Instruments ("Korean IFRS 1109") is effective for annual periods beginning on or after January 1, 2018 and replaces Korean IFRS 1039 Financial Instruments: Recognition and Measurement ("Korean IFRS 1039"). The Issuer has applied Korean IFRS 1109 in its consolidated financial statements as of and for the years ended December 31, 2018 and 2019 included elsewhere in this Offering Circular. As permitted by the transition rules of Korean IFRS 1109, the Issuer's consolidated financial statements as of and for the year ended December 31, 2017 included elsewhere in this Offering Circular have not been restated to retroactively apply Korean IFRS 1109. Due to the application of Korean IFRS 1109, the Issuer's financial data as of and for the years ended December 31, 2018 and 2019 set forth below may not be directly comparable to corresponding data as of and for the year ended December 31, 2017.

You should read the following data together with the Issuer's consolidated financial statements included elsewhere in this Offering Circular. Historical results do not necessarily predict future results.

	Year ended December 31,			
	2017	2018(1)	2019(1)	
Consolidated statements of comprehensive income	(in	billions of V	Von)	
Interest expense		₩10,020 (3,919)		
Net interest income		6,101	6,364	
Fee and commission income	1,471	1,423 (300)	1,483	
Net fee and commission income	1,225	1,123	1,133	
Net losses on financial instruments at fair value through profit or loss (under Korean IFRS 1039)	(71)		_	
Net gains on financial instruments at fair value through profit or loss		326	423	
Net other operating expenses	(288)	(696)	(601)	
General and administrative expenses	(3,666)	(3,767)	(3,887)	
Operating profit before provision for credit losses	2,764	3,086	3,432	
Provision for credit losses		(94)	(104)	
Operating profit	2,649	2,992	3,328	
Share of profit of associates		50 44	29 (39)	
Net non-operating profit (loss)	(36)	94	(10)	
Profit before income tax expense		3,086 (827)	3,318 (879)	
Profit for the year	₩ 2,175	₩ 2,259	₩ 2,439	
(Adjustment in profit of regulatory reserve for credit losses)	2,025	2,012	2,288	
Remeasurements of net defined benefit liabilities		(96)	,	
income		(36)	` ,	
Currency translation adjustments		_	26 —	
Share of other comprehensive income (loss) of associates	92	57 (3)	34	
operations		(25)	(6)	
Other comprehensive income (loss) for the period, net of tax		(72)		
Total comprehensive income for the period	₩ 2,358	₩ 2,187	₩ 2,428	
Profit attributable to: Shareholders of the parent company	₩ 2,175			
		₩ 2,259	₩ 2,439	
Total comprehensive income attributable to: Shareholders of the parent entity Non-controlling interests	₩ 2,358			

Note

⁽¹⁾ Figures for the years ended December 31, 2018 and 2019 reflect the application of Korean IFRS 1109 and therefore may not be directly comparable to corresponding figures for the year ended December 31, 2017.

	As of December 31,			
	2017	2018(1)	2019(1)	
	(iı	n billions of Wo	on)	
Consolidated balance sheet data				
Assets				
Cash and due from financial institutions	₩ 15,646	₩ 14,889	₩ 14,481	
Financial assets at fair value through profit or loss (under	0.400			
Korean IFRS 1039)	8,409			
Financial assets at fair value through profit or loss	2 (00	12,257	13,866	
Derivative financial assets	2,608	1,614	2,317	
Loans	251,711	276,944	293,531	
Financial investments	40,816	42,723	52,419	
Investments in associates	346	507	565	
Property and equipment	3,016	3,128	3,784	
Investment property	338	258	476	
Intangible assets	218	224	269	
Current income tax assets	3	5	14	
Deferred income tax assets	156	3 17	2 7	
Assets held for sale	156		•	
Other assets	6,500	4,390	5,692	
Total assets	₩329,766	₩356,959	₩387,425	
Liabilities				
Financial liabilities at fair value through profit or loss (under				
Korean IFRS 1039)	₩ 74	₩ —	₩ —	
Financial liabilities at fair value through profit or loss		87	80	
Derivative financial liabilities	2,609	1,642	2,169	
Deposits	252,479	272,485	300,917	
Debts	15,811	17,496	19,141	
Debentures	19,184	23,164	18,740	
Provisions	358	308	311	
Net defined benefit liabilities	9	167	179	
Current income tax liabilities	4	6	8	
Deferred income tax liabilities	172	121	249	
Other liabilities	13,744	14,816	16,626	
Total liabilities	304,442	330,291	358,421	
			330,721	
Equity	2 022	2 022	2 022	
Capital stock	2,022	2,022	2,022	
Hybrid securities			575	
Capital surplus	5,220	5,219	5,220	
Accumulated other comprehensive income	678	116	123	
Retained earnings	17,404	19,311	21,065	
(Provision of regulatory reserve for credit losses)	(2,001)	(2,151)	(2,291	
(Amounts estimated to be appropriated)	(150)	(140)	(151)	
Equity attributable to shareholders of the parent company	25,323	26,668	29,004	
Non-controlling interest equity			_	
Total equity	25.323	26.668	29.004	
Total equity Total liabilities and equity	25,323 ₩329,766	26,668 ₩356,959	29,004 ₩387,425	

Note:

⁽¹⁾ Figures as of December 31, 2018 and 2019 reflect the application of Korean IFRS 1109 and therefore may not be directly comparable to corresponding figures as of December 31, 2017.

SELECTED OPERATING DATA

Unless otherwise stated, the selected ratios and other operating data set forth below as of and for the years ended December 31, 2017, 2018 and 2019 have been calculated based on the separate financial statements of the Issuer prepared in accordance with Korean IFRS, which are not included in this Offering Circular.

Due to the application of Korean IFRS 1109, the Issuer's operating data as of and for the years ended December 31, 2018 and 2019 set forth below may not be directly comparable to corresponding data as of and for the year ended December 31, 2017.

	As of or for the year ended December 31,		
	2017	2018(1)	2019(1)
Profit as a percentage of:			
Average total assets ⁽²⁾	0.73%	0.66%	0.66%
Average equity ⁽²⁾	9.22	8.61	8.72
Ratio of non-performing credits to total credits ⁽³⁾	0.48	0.39	0.29
Ratio of allowance to total credits ⁽³⁾	1.35	1.30	1.19
Net interest spread ⁽⁴⁾	1.67	1.67	1.67
Net interest margin ⁽⁵⁾	1.71	1.71	1.67
Total capital adequacy ratio (6)(10)	16.01	15.52	15.85
Tier I capital adequacy ratio ⁽⁷⁾⁽¹⁰⁾	14.86	14.33	14.68
Common equity Tier I capital adequacy ratio ⁽⁸⁾⁽¹⁰⁾	14.86	14.33	14.37
Tier II capital adequacy ratio ⁽⁹⁾⁽¹⁰⁾	1.15	1.19	1.17

Notes:

- (1) Figures for the years ended December 31, 2018 and 2019 reflect the application of Korean IFRS 1109 and therefore may not be directly comparable to corresponding figures for the year ended December 31, 2017.
- (2) Derived by dividing profit by the daily average balance of total assets or total equity, as applicable, in each case calculated in accordance with applicable FSS reporting guidelines.
- (3) Includes loans, guarantees and other credits in both the banking and trust accounts, calculated in accordance with applicable FSS reporting guidelines.
- (4) Represents the difference between the average annual rate of interest earned on interest-earning assets and the average annual rate of interest paid on interest-bearing liabilities, calculated in accordance with applicable FSS reporting guidelines.
- (5) Derived by dividing net interest income by average interest-earning assets, calculated in accordance with applicable FSS reporting guidelines.
- (6) Calculated as the ratio of the sum of Tier I and Tier II capital to risk-weighted assets, on a consolidated basis and in accordance with guidelines issued by the FSC. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."
- (7) Calculated as the ratio of Tier I capital to risk-weighted assets, on a consolidated basis and in accordance with guidelines issued by the FSC. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."
- (8) Calculated as the ratio of common equity Tier I capital to risk-weighted assets, on a consolidated basis and in accordance with guidelines issued by the FSC. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."
- (9) Calculated as the ratio of Tier II capital to risk-weighted assets, on a consolidated basis and in accordance with guidelines issued by the FSC. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."
- (10) Calculated based on the consolidated financial statements of the Issuer prepared in accordance with Korean IFRS.

SELECTED STATISTICAL DATA

AVERAGE BALANCE SHEETS AND RELATED INTEREST

The following tables show the Issuer's average balances and interest rates for 2017, 2018 and 2019.

Year ended December 31,	
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				rear en	ded Decem	iber 51,			
		2017			2018			2019	
	Average Balance	Interest Income ⁽¹⁾	Average Yield	Average Balance	Interest Income ⁽¹⁾	Average Yield	Average Balance	Interest Income ⁽¹⁾	Average Yield
			(in b	illions of W	on, excep	t percenta	ages)		
Assets									
Interest-earning assets									
Cash and interest-earning									
deposits in other banks	₩ 5,652	₩ 73	1.29%	₩ 4,605	₩ 69	1.50%	₩ 4,099	₩ 65	1.59%
Financial assets at fair value									
through profit or loss (debt									
securities)(2)	8,764	170	1.94	8,826	222	2.52	9,479	212	2.24
Financial investments (debt									
securities)(3)	31,899	667	2.09	38,018	824	2.17	45,310	918	2.03
Loans:									
Corporate	115,659	3,482	3.01	126,771	4,104	3.24	132,343	4,385	3.31
Mortgage	59,399	1,627	2.74	65,038	1,970	3.03	72,242	2,213	3.06
Home equity	32,738	950	2.90	31,778	990	3.12	29,307	933	3.18
Other consumer	33,441	1,413	4.23	38,737	1,656	4.27	42,730	1,800	4.21
Foreign ⁽⁴⁾	3,605	127	3.52	4,223	185	4.38	6,007	254	4.23
Loans (total)	244,842	7,599	3.10	266,547	8,905	3.34	282,629	9,585	3.39
Total average interest-earning									
assets	291,157	8,509	2.92	317,996	10,020	3.15	341,517	10,780	3.16
NT									
Non-interest-earning assets Cash and due from banks	10 401			11.071			11 (00		
Financial assets at fair value	10,491	_	_	11,071	_	_	11,680	_	_
through profit or loss									
(excluding debt securities)	4.260			5 122			4.200		
(total)	4,269	_	_	5,123	_	_	4,280		_
Equity securities	315	_	_	345	_	_	289		_
Other	3,954	_	_	4,778	_	_	3,991	_	_
Financial investment (equity	2.021			1.060			1.01.6		
securities)	2,021	_	_	1,960	_	_	1,916		_
Investment in associates	350	_	_	407	_	_	532		_
Derivative financial assets	1,726	_	_	1,977	_	_	2,448		_
Premises and equipment	3,493	_	_	3,357	_	_	3,961		_
Intangible assets	215	_	_	218	_	_	255		_
Allowances for loan losses	(1,650)	_	_	(1,743)) —	_	(1,515) —	_
Other non-interest-earning				7			0.403		
assets	6,464		_	7,663			8,482		_
Total average non-interest-									
earning assets	27,379	_	_	30,033	_	_	32,039	_	_
Total average assets	₩318,536	₩8,509	2.67%	₩348,029	₩10,020	2.88%	₩373,556	₩10,780	2.89%

Notes

⁽¹⁾ The Issuer does not invest in any tax-exempt securities.

⁽²⁾ For 2018 and 2019, includes deposits and loans at fair value through profit or loss. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

⁽³⁾ Comprises financial assets at fair value through other comprehensive income and at amortized cost (formerly referred to as available-for-sale and held-to-maturity financial assets, respectively). For 2018 and 2019, also includes loans at fair value through other comprehensive income. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

⁽⁴⁾ Consists primarily of loans from the Issuer's overseas branches to affiliates of large Korean manufacturing companies for trade financing and working capital.

		Year ended December 31,								
	2017 2018						2019			
	Average Balance	Interest Expense	Average Cost	Average Balance	Interest Expense	Average Cost	Average Balance	Interest Expense	Average Cost	
		(in billions of Won, except percentages)								
Liabilities										
Interest-bearing liabilities										
Deposits:										
Demand deposits	₩108,843	₩ 277	0.25%	₩114,056	₩ 328	0.29%	₩118,621	₩ 348	0.29%	
Certificates of deposit	2,908	45	1.55	3,090	58	1.88	4,818	93	1.93	
Time deposits	126,311	1,978	1.57	140,590	2,634	1.87	155,070	3,012	1.94	
Deposits (total)	238,062	2,300	0.97	257,736	3,020	1.17	278,509	3,453	1.24	
Debts	21,648	275	1.27	23,592	397	1.68	24,879	446	1.79	
Debentures	16,558	369	2.23	21,471	502	2.34	20,865	517	2.48	
Total average interest-bearing										
liabilities	276,268	2,944	1.07	302,799	3,919	1.29	324,253	4,416	1.36	
Non-interest-bearing liabilities										
Non-interest-bearing demand										
deposits	4,117	_	_	4,061	_	_	3,987	_	_	
Derivative financial liabilities	1,718	_	_	2,038	_	_	2,402	_	_	
Financial liabilities at fair value										
through profit and loss	78	_	_	75	_	_	80	_	_	
Other non-interest-bearing										
liabilities	10,554	_	_	12,566	_	_	14,596	_	_	
Total average non-interest-				-						
bearing liabilities	16,467	_	_	18,740	_	_	21,065	_	_	
Total average liabilities		2,944	1.01	321,539	3,919	1.22	345,318	4,416	1.28	
Total equity	25,801		_	26,490		_	28,238		_	
Total average liabilities and	W210 526	W/2 0 4 4	0.030/	TT 2 4 0 0 2 0	TT72 010	1 1 2 0 /	W272 556	XX74 44 C	1 100/	
equity	₩318,336	₩2,944	0.92%	₩348,029	₩3,919	1.15%	₩373,556	₩4,416	1.18%	

ANALYSIS OF CHANGES IN NET INTEREST INCOME—VOLUME AND RATE ANALYSIS

The following table provides an analysis of changes in the Issuer's interest income, interest expense and net interest income based on changes in volume and changes in rate for 2018 compared to 2017 and 2019 compared to 2018. Information is provided with respect to: (1) effects attributable to changes in volume (changes in volume multiplied by prior rate) and (2) effects attributable to changes in rate (changes in rate multiplied by prior volume). Changes attributable to the combined impact of changes in rate and volume have been allocated proportionately to the changes due to volume changes and changes due to rate changes.

		2018 vs. 2017 crease) due t		Increase/(de	changes in	
	Volume	Rate	Total	Volume	Rate	Total
			(in billion	s of Won)		
Interest-earning assets						
Cash and interest-earning						
deposits in other banks	\mathbf{W} (15)	₩ 11	\mathbf{W} (4)	₩ (8)	₩ 4	₩ (4)
Financial assets at fair value						
through profit or loss (debt						
securities) ⁽¹⁾	1	51	52	16	(26)	(10)
Financial investments (debt						
securities) ⁽²⁾	131	26	157	150	(56)	94
Loans:						
Corporate	346	276	622	188	93	281
Mortgage	162	181	343	223	20	243
Home Equity	(29)	69	40	(76)	19	(57)
Other consumer	229	14	243	168	(24)	144
Foreign	24	34	58	76	(7)	69
Total interest income	849	662	1,511	737	23	760
Interest-bearing liabilities						
Deposits:						
Demand deposits	12	39	51	20	0	20
Certificate of deposits	3	10	13	33	2	35
Other time deposits	244	412	656	277	101	378
Debts	27	95	122	22	27	49
Debentures	114	19	133	(14)	29	15
Total interest expense	400	575	975	338	159	497
Total net interest income	₩449	₩ 87	₩ 536	₩399	W (136)	₩263

Notes:

⁽¹⁾ For 2018 and 2019, includes deposits and loans at fair value through profit or loss. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

⁽²⁾ Comprises financial assets at fair value through other comprehensive income and at amortized cost (formerly referred to as available-for-sale and held-to-maturity financial assets, respectively). For 2018 and 2019, also includes loans at fair value through fair value through other comprehensive income. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis is based on the Issuer's consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019. This discussion should be read together with the Issuer's consolidated financial statements and related notes included elsewhere in this Offering Circular. Unless otherwise specified, the information provided below is stated on a consolidated basis.

The Issuer prepares its financial statements in accordance with Korean IFRS, which differs in certain significant respects from U.S. GAAP. The Issuer has made no attempt to identify or quantify the impact of differences between Korean IFRS and U.S. GAAP.

OVERVIEW

Trends in the Korean Economy

The Issuer's financial position and results of operations have been and will continue to be significantly affected by financial and economic conditions in Korea. In recent years, commercial banks, consumer finance companies and other financial institutions in Korea have made significant investments and engaged in aggressive marketing in retail lending (including mortgage and home equity loans), leading to substantially increased competition in this segment. From the second half of 2016 to 2019, the Government introduced various measures to tighten regulations on mortgage lending and housing subscription in response to the rapid growth in consumer debt and concerns over speculative investments in real estate in certain areas. Notwithstanding such measures, demand for residential property in certain areas, including Seoul, has continued to increase, accompanied by an increase in the prices of such residential property, and the Issuer's portfolio of retail loans increased, on a separate basis, from ₩130,224 billion as of December 31, 2017 to ₩148,408 billion as of December 31, 2019. Nevertheless, a decrease in housing prices as a result of the implementation of such measures, together with the high level of consumer debt and deteriorating domestic and global economic conditions, could result in declines in consumer spending and reduced economic growth, which may lead to increases in delinquency levels of the Issuer's retail loan portfolio. On a separate basis, the Issuer recorded charge-offs of \dot 322 billion and provision for loan losses of \dot 132 billion in respect of its retail loan portfolio in 2019, compared to charge-offs of ₩274 billion and provision for loan losses of ₩122 billion in 2017. See "Risk Factors—Risks Relating to the Issuer's Retail Credit Portfolio."

The Issuer's loans to SMEs increased from \(\foatsymbol{w}\)90,265 billion as of December 31, 2017 to \(\foatsymbol{w}\)104,540 billion as of December 31, 2019. Substantial growth in lending in Korea to SMEs in recent years, and financial difficulties experienced by such enterprises as a result of, among other things, adverse changes in economic conditions in Korea and globally (such as the ongoing COVID-19 pandemic affecting many countries worldwide, including Korea), may lead to increasing delinquencies and a deterioration in overall asset quality in the credit exposures of Korean banks to SMEs. On a separate basis, the Issuer recorded charge-offs of \(\foatsymbol{w}\)16 billion in 2019 in respect of its loans to SMEs, compared to charge-offs of \(\foatsymbol{w}\)304 billion in 2017. See "Risk Factors—Risks Relating to the Issuer's Small- and Medium-Sized Enterprise (SME) Loan Portfolio—The Issuer has significant exposure to SMEs, and any financial difficulties experienced by these customers may result in a deterioration of the Issuer's asset quality and have an adverse impact on the Issuer."

The Korean economy is closely tied to, and is affected by developments in, the global economy. The overall prospects for the Korean and global economy remain uncertain. In recent years and in 2020, the global financial markets have experienced significant volatility as a result of, among other things:

- the occurrence of severe health epidemics, such as the ongoing COVID-19 pandemic caused by a new strain of coronavirus;
- interest rate fluctuations as well as changes in policy rates by the U.S. Federal Reserve and other central banks;
- financial and social difficulties affecting many countries worldwide, in particular in Latin America and Europe;

- a deterioration in economic and trade relations between the United States and its major trading partners, including China;
- escalations in trade protectionism globally and geopolitical tensions in East Asia and the Middle East;
- the slowdown of economic growth in China and other major emerging market economies;
- increased uncertainties resulting from the United Kingdom's exit from the European Union; and
- political and social instability in various countries in the Middle East, including Syria, Iraq and Yemen.

In light of the high level of interdependence of the global economy, unfavorable changes in the global financial markets, including as a result of any of the foregoing developments, could have a material adverse effect on the Korean economy and financial markets, and in turn on the Issuer's business, financial condition and results of operations. In particular, the recent global outbreak of COVID-19, which originated in or around Wuhan, China in December 2019 and was declared a "pandemic" by The World Health Organization in March 2020, has led to significant global economic and financial disruptions, including an adverse impact on international trade and business activities, sharp declines and significant volatility in the financial markets as well as decreases in interest rates worldwide. See "Risk Factors—Other Risks Relating to the Issuer's Business—The ongoing global pandemic of COVID-19 and any possible recurrence of other types of widespread infectious disease may adversely affect the Issuer's business, financial condition or results of operations."

The Issuer is also exposed to adverse changes and volatility in the global and Korean financial markets as a result of the Issuer's liabilities and assets denominated in foreign currencies and the Issuer's holdings of trading and investment securities, including structured products. The value of the Won relative to major foreign currencies in general and the U.S. dollar in particular has fluctuated widely in recent years, in particular as a result of the ongoing COVID-19 pandemic. A depreciation of the Won will increase the Issuer's cost in Won of servicing the Issuer's foreign currency-denominated debt, while continued exchange rate volatility may also result in foreign exchange losses for the Issuer. Furthermore, as a result of the deterioration in global and Korean economic conditions, there has been downward pressures on securities prices, including the stock prices of Korean and foreign companies in which the Issuer holds an interest. Such developments have resulted in and may lead to further trading and valuation losses on the Issuer's trading and investment securities portfolio as well as impairment losses on its investments accounted for under the equity method.

As a result of the ongoing impact of the COVID-19 pandemic on the Korean and global economies and financial markets, as well as factors such as fluctuations in oil and commodity prices, interest and exchange rate fluctuations, higher unemployment, lower consumer confidence, stock market volatility, changes in fiscal and monetary policies and continued tensions with North Korea, the economic outlook for the financial services sector in Korea in 2020 and for the foreseeable future remains highly uncertain.

Changes in Securities Values, Exchange Rates and Interest Rates

Fluctuations of exchange rates, interest rates and stock prices affect, among other things, the demand for the Issuer's products and services, the value of and rate of return on the Issuer's assets, the availability and cost of funding and the financial condition of the Issuer's customers. The following table shows, for the dates indicated, the stock price index of all equities listed on the KRX KOSPI Market as published in the KOSPI, the Won to U.S. dollar exchange rates and benchmark Won borrowing interest rates.

	June 30, 2017	Dec. 31, 2017	June 30, 2018	Dec. 31, 2018	June 30, 2019	Dec. 31, 2019
KOSPI	2,391.79	2,467.49(4)	2,326.13	2,041.04(5)	2,130.62	2,197.67(6)
₩/US\$ exchange rates ⁽¹⁾ ₩	₹ 1,139.6 °	₩ 1,071.4 ¥	₹ 1,121.7	₩ 1,118.1 ₹	₩ 1,156.8	₩ 1,157.8
Corporate bond rates ⁽²⁾	2.24%	2.68%	2.77%	2.29%	1.989	% 1.99%
Treasury bond rates ⁽³⁾	1.70%	2.14%	2.12%	1.82%	1.479	% 1.36%

Notes:

⁽¹⁾ Represents the Market Average Exchange Rate.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

- (2) Measured by the yield on three-year Korean corporate bonds rated as AA- by the Korean credit rating agencies.
- (3) Measured by the yield on three-year treasury bonds issued by the Ministry of Economy and Finance of Korea.
- (4) As of December 28, 2017, the last day of trading for the KRX KOSPI Market in 2017.
- (5) As of December 31, 2018, the last day of trading for the KRX KOSPI Market in 2018.
- (6) As of December 30, 2019, the last day of trading for the KRX KOSPI Market in 2019.

Changes in Accounting Policies

Adoption of Korean IFRS 1116

Korean IFRS 1116, issued in May 2017, is a new accounting standard aimed at facilitating a more faithful representation of, and improving the transparency of information relating to, lease-related assets and liabilities, and is effective for annual periods beginning on or after January 1, 2019. Korean IFRS 1116, which replaces Korean IFRS 1017, introduces a single, on-balance sheet lease accounting model for lessees and requires a lessee to recognize a right-of-use asset representing the lessee's right to use the underlying leased asset and a lease liability representing the present value of the lessee's obligation to make future lease payments. The Issuer initially adopted Korean IFRS 1116 from January 1, 2019, applying the modified retrospective approach, which allows the Issuer to recognize the cumulative impact of applying Korean IFRS 1116 as an adjustment to the opening balance of the Issuer's retained earnings as of January 1, 2019 with no comparative information for prior periods.

The Issuer has applied Korean IFRS 1116 in its consolidated financial statements as of and for the year ended December 31, 2019 included elsewhere in this Offering Circular. As permitted by the transition rules of Korean IFRS 1116, the Issuer's consolidated financial statements as of and for the years ended December 31, 2017 and 2018 included elsewhere in this Offering Circular have not been restated to retroactively apply Korean IFRS 1116.

For additional information regarding Korean IFRS 1116 and the impact of its application to the Issuer's consolidated financial statements, see Notes 2.1 and 42 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

Critical Accounting Policies

The Issuer's consolidated financial statements as of and for the years ended December 31, 2017, 2018 and 2019 included in this Offering Circular have been prepared in accordance with Korean IFRS. The preparation of these financial statements requires the Issuer to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses as well as the disclosure of contingent assets and liabilities. See Notes 2.4 and 3 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular for summaries of the Issuer's significant accounting policies that are critical to the portrayal of the Issuer's financial condition since they require the Issuer's management to make difficult, complex or subjective judgments, some of which may relate to matters that are inherently uncertain, and because of the possibility that future events affecting these estimates may differ significantly from management's current judgment.

RESULTS OF OPERATIONS

Net Interest Income

The following table shows, for the periods indicated, the principal components of the Issuer's net interest income:

	Year	ended Decem	ber 31,	Percentage Change		
	2017	2018	2019	2018/2017	2019/2018	
		(in billions o	f Won, except	percentages)	
Interest income						
Due from financial institutions ⁽¹⁾	₩ 73	₩ —	₩ —	—%	—%	
Due from financial institutions at amortized						
$cost^{(1)}$	_	68	65		(4.4)	
Loans	7,599	_	_	_		
Loans at amortized cost	_	8,905	9,585	_	7.6	
Financial assets at fair value through profit						
or loss (under Korean IFRS 1039)	170	_	_	_	_	
Financial assets at fair value through profit						
or loss ⁽²⁾	_	222	212	_	(4.5)	
Financial investments (debt securities)						
(under Korean IFRS 1039)(3)	667	_	_	_	_	
Financial investments (debt securities)(3)	_	824	918	_	11.4	
Total interest income	8,509	10,020	10,780	17.8	7.6	
Interest expense						
Deposits	2,300	3,020	3,453	31.3	14.3	
Debts	275	397	446	44.4	12.3	
Debentures	369	502	517	36.0	3.0	
Total interest expense	2,944	3,919	4,416	33.1	12.7	
Net interest income	₩5,565	₩ 6,101	₩ 6,364	9.6	4.3	
Net interest $margin^{(4)}$	1.919	% 1.929	% 1.86%	/o		

Notes:

Comparison of 2019 to 2018

Interest income

Interest income increased 7.6% from \(\mathbb{W}\)10,020 billion in 2018 to \(\mathbb{W}\)10,780 billion in 2019, primarily as a result of a 7.6% increase in interest on loans, which was enhanced by an 11.4% increase in interest on financial investments. Such increase was partially offset by a 4.5% decrease in interest on financial assets at fair value through profit or loss. The average balance of the Issuer's interest-earning assets increased 7.4% from \(\mathbb{W}\)317,996 billion in 2018 to \(\mathbb{W}\)341,517 billion in 2019, principally due to the growth in the Issuer's loan and financial investment portfolios. The effect of such increase was enhanced by a 1 basis point increase in average yields on the Issuer's interest-earning assets from 3.15% in 2018 to 3.16% in 2019, which mainly reflected an increase in the general level of interest rates in Korea in 2019 compared to 2018.

A substantial majority of loans that were previously classified as "loans" under Korean IFRS 1039 are classified since 2018 as "loans at amortized cost" under Korean IFRS 1109, while a small portion of

⁽¹⁾ Consists of cash and interest-earning deposits in other banks.

⁽²⁾ Includes securities and loans at fair value through profit or loss. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

⁽³⁾ Consists of debt securities in the Issuer's financial assets at fair value through other comprehensive income and at amortized cost (or available-for-sale and held-to-maturity financial asset) portfolios. For 2018 and 2019, also includes loans at fair value through other comprehensive income. For information on interest income arising from such financial instruments, see Note 26 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

⁽⁴⁾ The ratio of net interest income to average interest-earning assets.

loans that were previously classified as "loans" under Korean IFRS 1039 are classified since 2018 as "financial assets at fair value through profit or loss" or "financial investments (debt securities)." The 7.6% increase in interest on loans from \(\pi_8,905\) billion in 2018 to \(\pi_9,585\) billion in 2019 was primarily the result of:

- a 4.4% increase in the average volume of corporate loans from \(\pm\)126,799 billion in 2018 to \(\pm\)132,343 billion in 2019, which was enhanced by a 7 basis point increase in the average yields on such loans from 3.24% in 2018 to 3.31% in 2019;
- an 11.1% increase in the average volume of mortgage loans from \(\psi 65,038\) billion in 2018 to \(\psi 72,242\) billion in 2019, which was enhanced by a 3 basis point increase in the average yields on such loans from 3.03% in 2018 to 3.06% in 2019; and
- a 10.3% increase in the average volume of other consumer loans from \(\psi 38,737\) billion in 2018 to \(\psi 42,730\) billion in 2019, which was partially offset by a 6 basis point decrease in the average yields on such loans from 4.27% in 2018 to 4.21% in 2019.

The increase in the average volumes of corporate loans mainly reflected the Issuer's increased marketing efforts and increased demand for such loans from corporate borrowers in Korea. The increase in the average volumes of mortgage loans and other consumer loans was attributable primarily to higher demand for such loans among consumers in Korea. The average yields on corporate loans and mortgage loans increased mainly as a result of an increase in the general level of interest rates in Korea in 2019 compared to 2018. The average yields on other consumer loans decreased primarily as a result of a decrease in interest rates applicable to such loans commencing in the second half of 2019, which was reflected in such loans earlier than in other types of loans.

Overall, the average volume of the Issuer's loans increased 6.0% from \u2018 266,547 billion in 2018 to \u2018 282,629 billion in 2019, while the average yields on the Issuer's loans increased by 5 basis points from 3.34% in 2018 to 3.39% in 2019.

The Issuer's financial investments portfolio consists of financial assets at fair value through other comprehensive income (or available-for-sale financial assets) and financial instruments at amortized cost (or held-to-maturity financial assets), including debt securities issued by government-owned or controlled enterprises or financial institutions and debt securities issued by Korean banks and other financial institutions. A substantial majority of financial investments that were previously classified as "available-for-sale financial assets" under Korean IFRS 1039 are classified since 2018 as "financial assets at fair value through other comprehensive income" under Korean IFRS 1109, while a small portion of financial investments that were previously classified as "available-for-sale financial assets" under Korean IFRS 1039 are classified since 2018 as "financial assets at fair value through profit or loss" or "financial assets at amortized cost" under Korean IFRS 1109. A substantial majority of financial investments that were previously classified as "held-to-maturity financial assets" under Korean IFRS 1039 are classified since 2018 as "financial assets at amortized cost" under Korean IFRS 1109, while a small portion of financial investments that were previously classified as "held-to-maturity financial assets" under Korean IFRS 1039 are classified since 2018 as "financial assets at fair value through profit or loss" under Korean IFRS 1109. The 11.4% increase in interest on financial investments from \(\prec{\ppsi}{824}\) billion in 2018 to W918 billion in 2019 was primarily due to a 19.2% increase in the average volume of such financial investments from \(\pi38,018\) billion in 2018 to \(\pi45,310\) billion in 2019, which was partially offset by a 14 basis point decrease in the average yields on such financial investments from 2.17% in 2018 to 2.03% in 2019. The increase in the average volume of such financial investments was principally due to an increase in the Issuer's purchases of debt securities issued by Korean banks and other financial institutions. The decrease in the average yields on such financial investments mainly reflected a decrease in the general level of interest rates in Korea commencing in the second half of 2019, which was reflected in financial investments earlier than in other types of interest-earning assets.

Interest on financial assets at fair value through profit or loss decreased 4.5% from \(\forall 222 \) billion in 2018 to \(\forall 212 \) billion in 2019, primarily due to a 28 basis point decrease in the average yields on such financial assets from 2.52% in 2018 to 2.24% in 2019. Such decrease mainly reflected a decrease in the general level of interest rates in Korea commencing in the second half of 2019, which was reflected in financial assets at fair value through profit or loss earlier than in other types of interest-earning assets.

Interest expense

Interest expense increased 12.7% from \(\pi_3,919\) billion in 2018 to \(\pi_4,416\) billion in 2019, primarily due to a 14.3% increase in interest expense on deposits, which was enhanced by a 12.3% increase in interest expense on debts. The average volume of the Issuer's interest-bearing liabilities increased 7.1% from \(\pi_302,799\) billion in 2018 to \(\pi_324,253\) billion in 2019, which principally reflected an increase in the average volume of time deposits. The effect of this increase was enhanced by a 7 basis point increase in the average cost of the Issuer's interest-bearing liabilities from 1.29% in 2018 to 1.36% in 2019, which was driven mainly by an increase in the general level of interest rates in Korea in 2019 compared to 2018.

The 14.3% increase in interest expense on deposits from \(\mathbb{W}3,020\) billion in 2018 to \(\mathbb{W}3,453\) billion in 2019 was primarily due to a 10.3% increase in the average volume of time deposits from \(\mathbb{W}140,590\) billion in 2018 to \(\mathbb{W}155,070\) billion in 2019, which was enhanced by a 7 basis point increase in the average cost of such deposits from 1.87% in 2018 to 1.94% in 2019. The increase in the average volume of time deposits was principally due to customers' continuing preference for low-risk products and institutions in Korea in light of increased uncertainties in domestic and global financial markets in 2019. The increase in the average cost of time deposits mainly reflected an increase in the general level of interest rates in Korea in 2019 compared to 2018. Overall, the average volume of the Issuer's deposits increased 8.1% from \(\mathbb{W}257,736\) billion in 2018 to \(\mathbb{W}278,509\) billion in 2019, while the average cost of the Issuer's deposits increased by 7 basis points from 1.17% in 2018 to 1.24% in 2019.

The 12.3% increase in interest expense on debts from \www.397 billion in 2018 to \www.446 billion in 2019 was principally attributable to an 11 basis point increase in the average cost of debts from 1.68% in 2018 to 1.79% in 2019, which was enhanced by a 5.5% increase in the average volume of debts from \www.23,592 billion in 2018 to \www.24,879 billion in 2019. The increase in the average cost of debts mainly reflected an increase in the general level of interest rates in Korea in 2019 compared to 2018, while the increase in the average volume of debts was primarily due to the Issuer's increased use of debts to meet its funding needs.

Net interest margin

Net interest margin represents the ratio of net interest income to average interest-earning assets. The Issuer's overall net interest margin decreased from 1.92% in 2018 to 1.86% in 2019, as a 4.3% increase in the Issuer's net interest income from \(\foathbar{W}6,101\) billion in 2018 to \(\foathbar{W}6,364\) billion in 2019 was outpaced by a 7.4% increase in the average volume of the Issuer's interest-earning assets from \(\foathbar{W}317,996\) billion in 2018 to \(\foathbar{W}341,517\) billion in 2019. The growth in the average volume of the Issuer's interest-earning assets outpaced a 7.1% increase in the average volume of the Issuer's interest-bearing liabilities from \(\foatw302,799\) billion in 2018 to \(\foatw324,253\) billion in 2019, while the increase in interest income outpaced an increase in interest expense, resulting in an increase in net interest income. However, the Issuer's net interest spread, which represents the difference between the average yield on the Issuer's interest-earning assets and the average cost of the Issuer's interest-bearing liabilities, decreased from 1.86% in 2018 to 1.80% in 2019. The decrease in the Issuer's net interest spread reflected a larger increase in the average cost of the Issuer's interest-bearing liabilities, relative to the increase in the average yield of the Issuer's interest-earning assets, primarily due to the earlier adjustment of interest rates on interest-earning assets compared to interest rates on interest-bearing liabilities in the context of a lower interest rate environment in the second half of 2019.

Comparison of 2018 to 2017

Interest income

Interest income increased 17.8% from \(\mathbb{W}\)8,509 billion in 2017 to \(\mathbb{W}\)10,020 billion in 2018, primarily as a result of a 17.2% increase in interest on loans, which was enhanced by a 23.5% increase in interest on financial investments. The average balance of the Issuer's interest-earning assets increased 9.2% from \(\mathbb{W}\)291,157 billion in 2017 to \(\mathbb{W}\)317,996 billion in 2018, principally due to the growth in the Issuer's loan and financial investment portfolios. The effect of this increase was enhanced by a 23 basis point increase in average yields on the Issuer's interest-earning assets from 2.92% in 2017 to 3.15% in 2018, which mainly reflected an increase in the general level of interest rates in Korea in 2018 compared to 2017.

The 17.2% increase in interest on loans from \$7,599 billion in 2017 to \$8,905 billion in 2018 was primarily the result of:

- a 9.6% increase in the average volume of corporate loans from \text{\psi}115,659 billion in 2017 to \text{\psi}126,771 billion in 2018, which was enhanced by a 23 basis point increase in the average yields on such loans from 3.01% in 2017 to 3.24% in 2018;
- a 29 basis point increase in the average yields on mortgage loans from 2.74% in 2017 to 3.03% in 2018, which was enhanced by a 9.5% increase in the average volume of such loans from \$\psi_59,399\$ billion in 2017 to \$\psi_65,038\$ billion in 2018; and
- a 15.8% increase in the average volume of other consumer loans from \(\pi\)33,441 billion in 2017 to \(\prec{\pi}\)38,737 billion in 2018, which was enhanced by a 4 basis point increase in the average yields on such loans from 4.23% in 2017 to 4.27% in 2018.

The increase in the average volumes of corporate loans, mortgage loans and other consumer loans was mainly due to increased demand from borrowers in anticipation of further increases in the general level of interest rates in Korea. The average yields on corporate loans, mortgage loans and other consumer loans increased mainly as a result of the increase in the general level of interest rates in Korea in 2018 compared to 2017.

Overall, the average volume of the Issuer's loans increased 8.9% from \www.244,842 billion in 2017 to \www.266,547 billion in 2018, while the average yields on the Issuer's loans increased by 24 basis points from 3.10% in 2017 to 3.34% in 2018.

Interest on financial investments under Korean IFRS 1109, compared to interest on financial investments under Korean IFRS 1039, increased 23.5% from \(\foathbb{W}667\) billion in 2017 to \(\foathbb{W}824\) billion in 2018, principally as a result of a 19.2% increase in the average volume of such financial investments from \(\foathbb{W}31,899\) billion in 2017 to \(\foathbb{W}38,018\) billion in 2018, which was enhanced by an 8 basis point increase in the average yields on such financial investments from 2.09% in 2017 to 2.17% in 2018. The increase in the average volume of such financial investments was principally due to higher investments in debt securities issued by Korean financial institutions and corporations. The increase in the average yields on such financial investments was principally due to the increase in the general level of interest rates in Korea in 2018 compared to 2017.

Interest on financial assets at fair value through profit or loss under Korean IFRS 1109, compared to interest on financial assets at fair value through profit or loss under Korean IFRS 1039, increased 30.6% from \(\pi\)170 billion in 2017 to \(\pi\)222 billion in 2018, primarily due to a 58 basis point increase in the average yields on such financial assets from 1.94% in 2017 to 2.52% in 2018. Such increase mainly reflected the higher interest rate environment in Korea in 2018 compared to 2017.

Interest expense

Interest expense increased 33.1% from \(\mathbb{W}\)2,944 billion in 2017 to \(\mathbb{W}\)3,919 billion in 2018, primarily due to a 31.3% increase in interest expense on deposits, which was enhanced by a 36.0% increase in interest expense on debentures and a 44.4% increase in interest expense on debts. The average cost of the Issuer's interest-bearing liabilities increased by 22 basis points from 1.07% in 2017 to 1.29% in 2018, which was driven mainly by an increase in the general level of interest rates in Korea in 2018 compared to 2017. The effect of this increase was enhanced by a 9.6% increase in the average volume of the Issuer's interest-bearing liabilities from \(\mathbb{W}\)276,268 billion in 2017 to \(\mathbb{W}\)302,799 billion in 2018, which principally reflected an increase in the average volume of time deposits.

The 31.3% increase in interest expense on deposits from \(\mathbb{W}\)2,300 billion in 2017 to \(\mathbb{W}\)3,020 billion in 2018 was primarily due to a 30 basis point increase in the average cost of time deposits from 1.57% in 2017 to 1.87% in 2018, which was enhanced by an 11.3% increase in the average volume of such deposits from \(\mathbb{W}\)126,311 billion in 2017 to \(\mathbb{W}\)140,590 billion in 2018. The increase in the average cost of time deposits mainly reflected the higher interest rate environment in Korea in 2018 compared to 2017. The increase in the average volume of time deposits was principally due to customers' continuing preference for low-risk products and institutions in Korea in light of the continuing uncertainty in

financial markets in 2018. Overall, the average cost of the Issuer's deposits increased by 20 basis points from 0.97% in 2017 to 1.17% in 2018, while the average volume of the Issuer's deposits increased 8.3% from \textbf{\psi}238,062 billion in 2017 to \textbf{\psi}257,736 billion in 2018.

The 36.0% increase in interest expense on debentures from \display369 billion in 2017 to \display502 billion in 2018 was mainly due to a 29.7% increase in the average volume of debentures from \display16,558 billion in 2017 to \display21,471 billion in 2018, which was enhanced by an 11 basis point increase in the average cost of debentures from 2.23% in 2017 to 2.34% in 2018. The increase in the average volume of debentures was principally due to the Issuer's increased use of debentures to meet its funding needs. The increase in the average cost of debentures mainly reflected the higher interest rate environment in Korea in 2018 compared to 2017.

The 44.4% increase in interest expense on debts from \w275 billion in 2017 to \w397 billion in 2018 was principally attributable to a 41 basis point increase in the average cost of debts from 1.27% in 2017 to 1.68% in 2018, which was enhanced by a 9.0% increase in the average volume of debts from \w21,648 billion in 2017 to \w23,592 billion in 2018. The increase in the average cost of debts mainly reflected the higher interest rate environment in Korea in 2018 compared to 2017, while the increase in the average volume of debts was primarily due to an increase in the average volume of short-term as well as long-term borrowings.

Net interest margin

The Issuer's overall net interest margin increased slightly from 1.91% in 2017 to 1.92% in 2018, as a 9.6% increase in the Issuer's net interest income from \(\psi_5,565\) billion in 2017 to \(\psi_6,101\) billion in 2018 outpaced a 9.2% increase in the average volume of the Issuer's interest-earning assets from \(\psi_291,157\) billion in 2017 to \(\psi_317,996\) billion in 2018. The growth in the average volume of the Issuer's interest-earning assets outpaced a 9.6% increase in the average volume of the Issuer's interest-bearing liabilities from \(\psi_276,268\) billion in 2017 to \(\psi_302,799\) billion in 2018, while the increase in interest income outpaced an increase in interest expense, resulting in an increase in net interest income. The magnitude of this increase was enhanced by an increase in the Issuer's net interest spread from 1.85% in 2017 to 1.86% in 2018. The increase in the Issuer's net interest spread reflected a larger increase in the average yield of the Issuer's interest-earning assets, relative to the increase in the average cost of the Issuer's interest-bearing liabilities, primarily due to the earlier adjustment of interest rates on interest-earning assets compared to interest rates on interest-bearing liabilities in the context of the higher interest rate environment in 2018.

Provision for Credit Losses

Provision for credit losses includes provision for loan losses, provision for unused loan commitments, provision for acceptances and guarantees, provision for financial guarantee contracts and provision for other financial assets, in each case net of reversal of provisions. For a discussion of the Issuer's loan loss provisioning policy, see "Assets and Liabilities—Loan Portfolio—Provisioning Policy."

In accordance with the guidelines of the FSS, if the Issuer's provision for loan losses is deemed insufficient for regulatory purposes, the Issuer compensates for the difference by recording a regulatory reserve for credit losses, which is segregated within retained earnings. See "Assets and Liabilities—Loan Portfolio—Regulatory Reserve for Credit Losses" and Note 25.5 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

Comparison of 2019 to 2018

The Issuer's provision for credit losses increased 10.6% from \textbf{\textit{w}}94 billion in 2018 to \textbf{\textit{w}}104 billion in 2019, primarily due to an increase in provision for loan losses in respect of the Issuer's retail loans. Such increase resulted mainly from a deterioration in the overall asset quality of the Issuer's retail loan portfolio. The effect of such increase was offset in part by a decrease in provision for loan losses in respect of the Issuer's corporate loans, which was attributable primarily to an improvement in the overall asset quality of the Issuer's corporate loan portfolio.

The Issuer's write-offs of retail and corporate loans increased 2.7% from \wodelength 526 billion in 2018 to \wodelength 540 billion in 2019, primarily due to an increase in write-offs of retail loans.

The Issuer's reversal of provision for acceptances and guarantees and unused loan commitments decreased 70.8% from \text{\text{\text{W}}24} billion in 2018 to \text{\text{\text{W}}7} billion in 2019, due mainly to a change in provision for acceptances and guarantees from a reversal of provision of \text{\text{\text{\text{W}}26}} billion in 2018 to a provision of \text{\text{\text{\text{W}}26}} billion in 2019.

Comparison of 2018 to 2017

The Issuer's provision for credit losses decreased 18.3% from \text{\text{\$\text{W}}}115 billion in 2017 to \text{\text{\$\text{\$\text{\$\text{W}}}}94 billion in 2018, primarily due to a decrease in provision for loan losses in respect of the Issuer's corporate loans. Such decrease resulted mainly from an improvement in the overall asset quality of the Issuer's corporate loan portfolio, including a decrease in impaired corporate loans. The effect of such decrease was offset in part by an increase in provision for loan losses in respect of the Issuer's retail loans, which was attributable mainly to an overall deterioration in the asset quality of such loans.

The Issuer's write-offs of retail and corporate loans decreased 19.1% from \(\foat\)650 billion in 2017 to \(\foat\)526 billion in 2018, primarily due to a decrease in write-offs of corporate loans.

The Issuer's reversal of provision for acceptances and guarantees and unused loan commitments decreased 52.9% from \text{\$\psi}\$51 billion in 2017 to \text{\$\psi}\$24 billion in 2018, due mainly to a change in provision for unused loan commitments from a reversal of provision of \text{\$\psi}\$17 billion in 2017 to a provision of \text{\$\psi}\$1 billion in 2018.

Net Fee and Commission Income

The following table shows, for the periods indicated, the components of the Issuer's net fee and commission income:

	Year ended December 31,			Percentage Change		
	2017	2018	2019	2018/2017	2019/2018	
	(in billions of Won, except percentages)			(%)		
Fee and commission income	₩1,471	₩1,423	₩1,483	(3.3)%	4.2%	
Fee and commission expense	(247)	(300)	(350)	21.5	16.7	
Net fee and commission income	₩1,225	₩1,123	₩1,133	(8.3)	0.9	

Comparison of 2019 to 2018

The Issuer's net fee and commission income increased 0.9% from \textbf{\psi}1,123 billion in 2018 to \textbf{\psi}1,133 billion in 2019, as a 4.2% increase in fee and commission income from \textbf{\psi}1,423 billion in 2018 to \textbf{\psi}1,483 billion in 2019 more than offset a 16.7% increase in fee and commission expense from \textbf{\psi}300 billion in 2018 to \textbf{\psi}350 billion in 2019.

The 4.2% increase in fee and commission income was mainly the result of increases in trust and other fiduciary fees and banking activity fees. Trust and other fiduciary fees increased 7.3% from \textbf{\textit{W}}287 billion in 2018 to \textbf{\textit{W}}308 billion in 2019, principally as a result of an increase in sales of equity-linked savings products. Banking activity fees increased 6.2% from \textbf{\textit{W}}209 billion in 2018 to \textbf{\textit{W}}222 billion in 2019, primarily due to an increase in transfer fees related to third-party mobile payment services. The effect of such increases was offset in part by a 12.2% decrease in security activity commissions from \textbf{\textit{W}}147 billion in 2018 to \textbf{\text{W}}129 billion in 2019, which mainly reflected a decrease in sales of funds.

The 16.7% increase in fee and commission expense was attributable primarily to an increase in outsourcing related fees and credit card related fees paid. Outsourcing related fees increased 21.5% from \text{\text{W}79} billion in 2018 to \text{\text{\text{W}96}} billion in 2019, due mainly to an increase in consulting and other miscellaneous fees paid. Credit card related fees increased 61.1% from \text{\text{\text{W}18}} billion in 2018 to \text{\text{\text{\text{W}29}} billion in 2019, principally as a result of an increase in the Issuer's portion of fees incurred with respect to credit cards issued by KB Kookmin Card.

Comparison of 2018 to 2017

The Issuer's net fee and commission income decreased 8.3% from \(\pi\)1,225 billion in 2017 to \(\pi\)1,123 billion in 2018, as a 21.5% increase in fee and commission expense from \(\pi\)247 billion in 2017 to \(\pi\)300 billion in 2018 was enhanced by a 3.3% decrease in fee and commission income from \(\pi\)1,471 billion in 2017 to \(\pi\)1,423 billion in 2018.

The 21.5% increase in fee and commission expense was attributable primarily to an increase in outsourcing related fees and credit card related fees paid. Outsourcing related fees increased 29.5% from \textbf{W}61 billion in 2017 to \textbf{W}79 billion in 2018, due mainly to consulting fees incurred in connection with the acquisition of an equity interest in Bank Bukopin of Indonesia in July 2018, as well as an increase in expenses incurred in connection with ATMs installed in convenience stores. Credit card related fees increased nine-fold from \textbf{W}2 billion in 2017 to \textbf{W}18 billion in 2018, principally as a result of an increase in the Issuer's portion of fees incurred with respect to credit cards for military personnel issued by KB Kookmin Card.

The 3.3% decrease in fee and commission income was mainly the result of decreases in agent activity fees, security activity commissions and trust and other fiduciary fees received. Agent activity fees decreased 10.9% from \text{\text{\$\psi}}350 billion in 2017 to \text{\$\psi}312 billion in 2018, principally as a result of reduced sales of bancassurance products as well as a decrease in administrative agent activities provided on behalf of KB Kookmin Card. Security activity commissions decreased 16.5% from \text{\$\psi}176 billion in 2017 to \text{\$\psi}147 billion in 2018, primarily due to a decrease in sales of funds. Trust and other fiduciary fees decreased 6.2% from \text{\$\psi}306 billion in 2017 to \text{\$\psi}287 billion in 2018, mainly as a result of a decrease in trust fees attributable primarily to a decrease in the Issuer's sales of money trust products. The effect of such decreases was offset in part by an 8.0% increase in other fee and commission income from \text{\$\psi}213 billion in 2017 to \text{\$\psi}230 billion in 2018.

Net Gain (Loss) on Financial Assets and Liabilities at Fair Value through Profit or Loss

The following table shows, for the periods indicated, the components of the Issuer's net gain on financial assets and liabilities at fair value through profit or loss:

	Year ended December 31,			Percentage Change	
	2017	2018	2019	2018/2017	2019/2018
	(in bill	ions of Won, percentages)		('	%)
Net gain (loss) on financial assets at fair value					
through profit or loss/held-for-trading	₩(34)	₩ 74	₩242	$N/M^{(1)}$	227.0%
Net gain (loss) on derivatives at fair value	, ,				
through profit or loss/held-for-trading	(43)	252	181	N/M	(28.2)
Net gain (loss) on financial liabilities at fair value through profit or	,				,
loss/held-for-trading	(0)	0	(0)	N/M	N/M
Net gain on financial assets designated at fair	(- /	-	(-)		
value through profit or loss ⁽²⁾	6			$N/A^{(3)}$	N/A
Net gain (loss) on financial assets and liabilities at fair value through profit or loss	₩(71)	₩326	₩423	N/M	29.8

Notes:

Comparison of 2019 to 2018

The Issuer's net gain on financial assets and liabilities at fair value through profit or loss increased 29.8% from \text{\psi}326 billion in 2018 to \text{\psi}423 billion in 2019, primarily as a result of a more than twofold

^{(1) &}quot;N/M" means not meaningful.

⁽²⁾ Effective as of January 1, 2018, financial assets designated at fair value through profit or loss have been reclassified as financial assets at fair value through profit or loss, without the option for designation of fair value, pursuant to the application of Korean IFRS 1109.

^{(3) &}quot;N/A" means not applicable.

increase in net gain on financial assets at fair value through profit or loss from \(\mathbb{W}74\) billion in 2018 to \(\mathbb{W}242\) billion in 2019. Such increase was principally due to a 169.1% increase in net gain on debt securities at fair value through profit or loss from \(\mathbb{W}81\) billion in 2018 to \(\mathbb{W}218\) billion in 2019, the effect of which was enhanced by a change in net gain (loss) on equity securities at fair value through profit or loss from a net loss of \(\mathbb{W}7\) billion in 2018 to a net gain of \(\mathbb{W}24\) billion in 2019.

Comparison of 2018 to 2017

The Issuer's net gain (loss) on financial assets and liabilities at fair value through profit or loss changed from a net loss of \(\pi\)71 billion in 2017 to a net gain of \(\pi\)326 billion in 2018, primarily as a result of a change in net gain (loss) on derivatives at fair value through profit or loss from a net loss of \(\pi\)43 billion in 2017 to a net gain of \(\pi\)252 billion in 2018. Such change was principally due to a change in net gain (loss) on currency derivatives at fair value through profit or loss from a net loss of \(\pi\)79 billion in 2017 to a net gain of \(\pi\)294 billion in 2018, the effect of which was offset in part by a change in net gain (loss) on interest rate derivatives at fair value through profit or loss from a net gain of \(\pi\)40 billion in 2017 to a net loss of \(\pi\)45 billion in 2018.

For further information regarding the Issuer's net gain on financial assets and liabilities at fair value through profit or loss, see Note 28 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

General and Administrative Expenses

The following table shows, for the periods indicated, the components of the Issuer's general and administrative expenses:

	Year ended December 31,			Percentage Change		
	2017	2018	2019	2018/2017	2019/2018	
	(in billions	of Won, except p	(9	%)		
Employee benefits	₩2,511	₩2,536	₩2,521	1.0%	(0.6)%	
Depreciation and amortization Other general and administrative	236	246	509	4.2	106.9	
expenses	918	984	857	7.2	(12.9)	
General and administrative expenses	₩3,666	₩3,767	₩3,887	2.8	3.2	

Comparison of 2019 to 2018

The Issuer's general and administrative expenses increased 3.2% from \(\pm3,767\) billion in 2018 to \(\pm3,887\) billion in 2019, primarily as a result of a 106.9% increase in depreciation and amortization from \(\pm246\) billion in 2018 to \(\pm509\) billion in 2019, which was offset in part by a 12.9% decrease in other general and administrative expenses from \(\pm984\) billion in 2018 to \(\pm857\) billion in 2019. The increase in depreciation and amortization was mainly attributable to an increase in depreciation and amortization expenses related to the Issuer's right-of-use assets pursuant to the Issuer's adoption of Korean IFRS 1116. For additional information regarding Korean IFRS 1116 and the impact of its application on the Issuer's consolidated financial statements, see Notes 2.1 and 41 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular. The decrease in other general and administrative expenses was principally due to a 76.1% decrease in rental expenses from \(\pm259\) billion in 2018 to \(\pm62\) billion in 2019, which resulted mainly from the Issuer's adoption of Korean IFRS 1116, as discussed above.

Comparison of 2018 to 2017

The Issuer's general and administrative expenses increased 2.8% from \(\mathbb{W}\)3,666 billion in 2017 to \(\mathbb{W}\)3,767 billion in 2018, primarily as a result of a 7.2% increase in other general and administrative expenses from \(\mathbb{W}\)918 billion in 2017 to \(\mathbb{W}\)984 billion in 2018, as well as a 1.0% increase in employee

benefits from \(\mathbb{W}\)2,511 billion in 2017 to \(\mathbb{W}\)2,536 billion in 2018. The increase in other general and administrative expenses was mainly attributable to a 10.7% increase in rental expenses from \(\mathbb{W}\)234 billion in 2017 to \(\mathbb{W}\)259 billion in 2018. The increase in employee benefits was principally due to a 39.1% increase in termination benefits from \(\mathbb{W}\)151 billion in 2017 to \(\mathbb{W}\)210 billion in 2018, which resulted mainly from an increase in the number of employees participating in the voluntary early retirement programme implemented by the Issuer. Such increase was offset in part by an 87.9% decrease in share-based payments from \(\mathbb{W}\)33 billion in 2017 to \(\mathbb{W}\)4 billion in 2018, primarily due to a decrease in stock grants provided to the Issuer's employees.

Net Other Operating Expenses

The following table shows, for the periods indicated, the components of the Issuer's net other operating expenses:

	Year ended December 31,			Percentage Change		
	2017	2018	2019	2018/2017	2019/2018	
	(in billions o	of Won, except p	(%)			
Other operating income	₩ 2,553	₩ 1,384	₩ 1,915	(45.8)%	38.4%	
Other operating expenses	(2,841)	(2,080)	(2,515)	(26.8)	20.9	
Net other operating expenses	₩ (288)	₩ (696)	₩ (601)	141.7	(13.6)	

Comparison of 2019 to 2018

The Issuer's net other operating expenses decreased 13.6% from \\ \pm696 \text{ billion in 2018 to \\ \pm601 \text{ billion in 2019, as a 38.4% increase in other operating income from \\ \pm1,384 \text{ billion in 2018 to \\ \pm1,915 \text{ billion in 2019 outpaced a 20.9% increase in other operating expenses from \\ \pm2,080 \text{ billion in 2018 to \\ \pm2,515 \text{ billion in 2019.}

Other operating income includes principally gain on foreign exchange transactions, gain on sale of financial assets at fair value through other comprehensive income, dividend income and other income. The 38.4% increase in other operating income was attributable primarily to a 35.4% increase in gain on foreign exchange transactions from \text{W1,148} billion in 2018 to \text{W1,554} billion in 2019. The increase in gain on foreign exchange transactions, which was mainly the result of increased exchange rate volatility, was offset in part by a corresponding increase in loss on foreign exchange transactions, which is recorded as part of other operating expenses. On a net basis, the Issuer's net gain (loss) on foreign exchange transactions changed from a net loss of \text{W64} billion in 2018 to a net gain of \text{W39} billion in 2019.

Other operating expenses include principally loss on foreign exchange transactions, loss on sale of financial assets at fair value through other comprehensive income, loss on sale of financial assets at amortized cost and other expenses. The 20.9% increase in other operating expenses was primarily the result of a 25.0% increase in loss on foreign exchange transactions from \(\mathbb{W}\)1,212 billion in 2018 to \(\mathbb{W}\)1,515 billion in 2019. The increase in loss on foreign exchange transactions, which was principally due to an increase in the volume of the Issuer's foreign currency transactions, was more than offset by an increase in gain on foreign exchange transactions, which is recorded as part of other operating income as discussed above.

Comparison of 2018 to 2017

The Issuer's net other operating expenses increased 141.7% from \text{\text{\$\psi}}288 billion in 2017 to \text{\text{\$\psi}}696 billion in 2018, as a 45.8% decrease in other operating income from \text{\text{\$\psi}}2,553 billion in 2017 to \text{\text{\$\psi}}1,384 billion in 2018 outpaced a 26.8% decrease in other operating expenses from \text{\text{\$\psi}}2,841 billion in 2017 to \text{\text{\$\psi}}2,080 billion in 2018.

The 45.8% decrease in other operating income was attributable primarily to a 49.1% decrease in gain on foreign exchange transactions from \(\mathbb{W}\)2,257 billion in 2017 to \(\mathbb{W}\)1,148 billion in 2018. The decrease in gain on foreign exchange transactions, which was mainly the result of lower exchange rate volatility, was

offset in part by a corresponding decrease in loss on foreign exchange transactions, which is recorded as part of other operating expenses. On a net basis, the Issuer's net gain (loss) on foreign exchange transactions changed from a net gain of \(\mathbb{W}\)347 billion in 2017 to a net loss of \(\mathbb{W}\)64 billion in 2018.

The 26.8% decrease in other operating expenses was primarily the result of a 36.5% decrease in loss on foreign exchange transactions from \(\foat{\psi}\)1,910 billion in 2017 to \(\foat{\psi}\)1,212 billion in 2018. The decrease in loss on foreign exchange transactions, which was principally due to lower exchange rate volatility, was offset in part by a decrease in gain on foreign exchange transactions, which is recorded as part of other operating income as discussed above.

Net Non-operating Income (Expenses)

The following table shows, for the periods indicated, the components of the Issuer's net non-operating income (expenses):

	Year ended December 31,			Percentage Change		
	2017	2018	2019	2018/2017	2019/2018	
	(in billions o	of Won, except p	(%)			
Non-operating income Non-operating expenses	₩ 71 (144)	₩ 197 (153)	₩ 86 (125)	177.5% 6.3	(56.3)% (18.3)	
Net non-operating income (expenses)	₩ (73)	₩ 44	₩ (39)	N/M ⁽¹⁾	N/M	

Note:

Comparison of 2019 to 2018

The Issuer's net non-operating income (expenses) changed from net income of \(\pi\)44 billion in 2018 to net expenses of \(\pi\)39 billion in 2019, principally as a result of a 56.3% decrease in non-operating income from \(\pi\)197 billion in 2018 to \(\pi\)86 billion in 2019, which outpaced an 18.3% decrease in non-operating expense from \(\pi\)153 billion in 2018 to \(\pi\)125 billion in 2019.

The 56.3% decrease in non-operating income was attributable mainly to a 98.0% decrease in gains on disposal of property and equipment and assets held for sale from \text{\text{\$\text{\$\text{\$W}\$}}}153 billion in 2018 to \text{\text{\$

The 18.3% decrease in non-operating expenses resulted principally from a 8.7% decrease in donations from \(\foware \pi 2018\) to \(\foware 84\) billion in 2019.

Comparison of 2018 to 2017

The Issuer's net non-operating income (expenses) changed from net expenses of \(\mathbb{W}73\) billion in 2017 to net income of \(\mathbb{W}44\) billion in 2018, principally as a result of a 177.5% increase in non-operating income from \(\mathbb{W}71\) billion in 2017 to \(\mathbb{W}197\) billion in 2018, which outpaced a 6.3% increase in non-operating expense from \(\mathbb{W}144\) billion in 2017 to \(\mathbb{W}153\) billion in 2018.

The 177.5% increase in non-operating income was attributable mainly to a significant increase in gains on disposal of property and equipment and assets held for sale from \(\foware\)4 billion in 2017 to \(\foware\)153 billion in 2018. Such increase was primarily due to the recognition of a gain on disposal of the Issuer's former headquarters building in Seoul in 2018, compared to no such gain in 2017.

The 6.3% increase in non-operating expenses resulted principally from a 130.0% increase in donations from \(\mathbb{W}\)40 billion in 2017 to \(\mathbb{W}\)92 billion in 2018, which was offset in part by a decrease in other non-operating expenses from \(\mathbb{W}\)95 billion in 2017 to \(\mathbb{W}\)53 billion in 2018. The decrease in other

^{(1) &}quot;N/M" means not meaningful.

non-operating expenses was mainly due to a one-time contribution to the Korea Inclusive Finance Agency made by the Issuer (together with other Korean banks) in 2017 relating to income from unclaimed cashiers' checks, which was not repeated in 2018.

Income Tax Expense

The Issuer's income tax expense is calculated by adding or subtracting changes in deferred income tax liabilities and assets to income tax amounts payable for the period. Deferred income tax assets are recognized for deductible temporary differences, unused tax losses and unused tax credits, while deferred income tax liabilities are recognized for taxable temporary differences. Temporary differences are those between the carrying values of assets and liabilities for financial reporting purposes and their respective tax bases. Deferred income tax assets, including unused tax losses and credits, are recognized only to the extent it is probable that sufficient taxable profit will be available against which such deferred income tax assets can be utilized.

Comparison of 2019 to 2018

Income tax expense increased 6.3% from \wxwedge 827 billion in 2018 to \wxwedge 879 billion in 2019, primarily due to a 7.5% increase in profit before income tax expense. The statutory tax rate was 27.5% in 2018 and 2019. The Issuer's effective tax rate was 26.5% in 2019 compared to 26.8% in 2018.

Comparison of 2018 to 2017

Income tax expense increased 88.4% from \text{\$\psi}\$439 billion in 2017 to \text{\$\psi}\$827 billion in 2018, primarily due to an 18.1% increase in profit before income tax expense, the effect of which was offset in part by a 98.4% decrease in non-taxable income from \text{\$\psi}\$190 billion in 2017 to \text{\$\psi}\$3 billion in 2018. The effect of such changes was enhanced by an increase in the statutory tax rate applicable to the Issuer from 24.2% in 2017 to 27.5% in 2018 as a result of changes in Korean corporate income tax laws that became effective in January 2018. The Issuer's effective tax rate was 26.8% in 2018 compared to 16.8% in 2017.

Profit for the Year

As a result of the above, the Issuer's profit for the year was \$2,439 billion in 2019, compared to \$2,259 billion in 2018 and \$2,175 billion in 2017.

FINANCIAL CONDITION

Assets

The following table sets forth, as of the dates indicated, the principal components of the Issuer's assets:

	As	Percentage Change			
	2017	2018	2019	2018/ 2017	2019/ 2018
	(in billions o	f Won, except	percentages)	(%)
Cash and due from financial institutions	₩ 15,646	₩ 14 , 889	₩ 14,481	(4.8)%	6 (2.7)%
Financial assets at fair value through profit or loss (under K-IFRS 1039)	8,409	_	_	N/A ⁽¹⁾	N/A
loss	_	12,257	13,866	N/A	13.1
Derivative financial assets	2,608	1,614	2,317	(38.1)	43.6
Loans	251,711	276,944	293,531	10.0	6.0
Financial investments	40,816	42,723	52,419	4.7	22.7
Property and equipment	3,016	3,128	3,784	3.7	21.0
Other assets ⁽²⁾	7,563	5,404	7,025	(28.5)	30.0
Total assets	₩329,766	₩356,959	₩387,425	8.2	8.5

Notes:

For further information on the Issuer's assets, see "Assets and Liabilities."

Comparison of December 31, 2019 to December 31, 2018

Comparison of December 31, 2018 to December 31, 2017

Liabilities and Equity

The following table sets forth, as of the dates indicated, the principal components of the Issuer's liabilities and the Issuer's equity:

	A	Percentage Change			
	2017	2018	2019	2018/ 2017	2019/ 2018
	(in billions o	of Won, except	percentages)	(%	%)
Liabilities:					
Financial liabilities at fair value through					
profit or loss (under K-IFRS 1039)	₩ 74	₩ —	₩ —	$N/A^{(1)}$	% N/A%
Financial liabilities at fair value through					
profit or loss	_	87	80	N/A	(8.0)
Derivative financial liabilities	2,609	1,642	2,169	(37.1)	32.1
Deposits	252,479	272,485	300,917	7.9	10.4
Debts	15,811	17,496	19,141	10.7	9.4
Debentures	19,184	23,164	18,740	20.7	(19.1)
Provisions	358	308	311	(14.0)	1.0
Other liabilities ⁽²⁾	13,928	15,110	17,062	8.5	12.9
Total liabilities	304,442	330,291	358,421	8.5	8.5
Equity:					
Capital stock	2,022	2,022	2,022	0.0	0.0
Hybrid securities	_	_	575	N/A	N/A
Capital surplus	5,220	5,219	5,220	0.0	0.0
Accumulated other comprehensive		,			
income	678	116	123	(82.9)	6.0
Retained earnings	17,404	19,311	21,065	11.0	9.1
Equity attributable to shareholders of the					
parent entity	25,323	26,668	29,004	5.3	8.8
Non-controlling interest equity				_	_
Total equity	25,323	26,668	29,004	5.3	8.8
Total liabilities and equity	₩329,766	₩356,959	₩387,425	8.2	8.5

^{(1) &}quot;N/A" means not applicable.

⁽²⁾ Includes investment in associates, investment property, intangible assets, current income tax assets, deferred income tax assets, assets held for sale and other assets.

Notes:

(1) "N/A" means not applicable.

(2) Includes net defined benefit liabilities, current income tax liabilities, deferred income tax liabilities and other liabilities.

Comparison of December 31, 2019 to December 31, 2018

The Issuer's total liabilities increased 8.5% from \www.330,291 billion as of December 31, 2018 to \www.358,421 billion as of December 31, 2019, principally due to a 10.4% increase in deposits from \ww.272,485 billion as of December 31, 2018 to \ww.300,917 billion as of December 31, 2019, which was offset in part by a 19.1% decrease in debentures from \ww.23,164 billion as of December 31, 2018 to \ww.18,740 billion as of December 31, 2019. The Issuer's deposits increased mainly as a result of an increase in time deposits.

The Issuer's total equity increased 8.8% from \(\foat\)26,668 billion as of December 31, 2018 to \(\foat\)29,004 billion as of December 31, 2019. This increase resulted principally from an increase in the Issuer's retained earnings, which was attributable to the profit the Issuer generated in 2019.

Comparison of December 31, 2018 to December 31, 2017

The Issuer's total liabilities increased 8.5% from \w304,442 billion as of December 31, 2017 to \w330,291 billion as of December 31, 2018, principally due to a 7.9% increase in deposits from \w252,479 billion as of December 31, 2017 to \w272,485 billion as of December 31, 2018, as well as a 20.7% increase in debentures from \w19,184 billion as of December 31, 2017 to \w23,164 billion as of December 31, 2018. The Issuer's deposits increased mainly as a result of an increase in time deposits.

The Issuer's total equity increased 5.3% from \(\psi 25,323\) billion as of December 31, 2017 to \(\psi 26,668\) billion as of December 31, 2018. This increase resulted principally from an increase in the Issuer's retained earnings, which was attributable to the profit the Issuer generated in 2018.

Liquidity

The Issuer's primary source of funding has historically been and continues to be deposits. Deposits and 2019, which represented approximately 87.8%, 87.0% and 88.8% of the Issuer's total funding, respectively. The Issuer has been able to use customer deposits to finance its operations generally, including meeting a portion of its liquidity requirements. Although the majority of deposits are shortterm, it has been the Issuer's experience that the majority of the Issuer's depositors generally roll over their deposits at maturity, thus providing the Issuer with a stable source of funding. However, in the event that a substantial number of the Issuer's depositors do not roll over their deposits or otherwise decide to withdraw their deposited funds, the Issuer would need to place increased reliance on alternative sources of funding, some of which may be more expensive than customer deposits, in order to finance the Issuer's operations. See "Risk Factors—Risks Relating to the Issuer's Liquidity and Capital Management—The Issuer's funding is highly dependent on short-term deposits, which dependence may adversely affect the Issuer's operations." In particular, the Issuer may increase its utilization of alternative funding sources such as short-term borrowings and cash and cash equivalents (including funds from maturing loans), as well as liquidating the Issuer's positions in financial assets and using the proceeds to fund parts of its operations, as necessary.

The Issuer also obtains funding through debentures and debts to meet its liquidity needs. Debentures represented 6.7%, 7.4% and 5.5% of its total funding as of December 31, 2017, 2018 and 2019, respectively. Debts represented 5.5%, 5.6% and 5.6% of its total funding as of December 31, 2017, 2018 and 2019, respectively. For further information on the Issuer's sources of funding, see "Assets and Liabilities."

The FSC requires each bank in Korea to maintain a liquidity coverage ratio and a foreign currency liquidity ratio. These ratios require the Issuer to keep the ratio of liquid assets to liquid liabilities above certain minimum levels. For a description of these requirements, see "Regulation and Supervision—Legal and Regulatory Framework in Korea—Liquidity."

The Issuer is exposed to liquidity risk arising from withdrawals of deposits and maturities of its debentures and debts, as well as the need to fund its lending, trading and investment activities (including its capital expenditures) and the management of its trading positions. The goal of liquidity management is for the Issuer to be able, even under adverse conditions, to meet all of its liability repayments on time and fund all investment opportunities. For an explanation of how the Issuer manages its liquidity risk, see "Risk Management—Liquidity Risk Management."

Commitments and Guarantees

The following table sets forth, on a separate basis, the Issuer's commitments and guarantees as of December 31, 2019. These commitments and guarantees are not included within the Issuer's statements of financial position.

	Payments Due by Period					
	Total	1 Year or Less	1-3 Years	3-5 Years	More Than 5 Years	
		(in	billions of Wo	on)	_	
Financial guarantees ⁽¹⁾	₩ 5,077	₩ 1,034	₩ 3,141	₩ 853	₩ 49	
Confirmed acceptances and guarantees	5,769	3,791	1,756	195	27	
Commitments	87,695	55,390	5,109	1,344	25,852	
Total	₩98,541	₩60,215	₩10,006	₩2,392	₩25,928	

Note:

Capital Adequacy

The Issuer is subject to FSC capital adequacy requirements applicable to Korean banks. The requirements applicable commencing in December 2013 pursuant to amended FSC regulations promulgated in July 2013 were formulated based on Basel III, which was first introduced by the Basel Committee on Banking Supervision, Bank for International Settlements in December 2009. Under the amended FSC regulations, all banks in Korea are required to maintain certain minimum ratios of common equity Tier I capital, total Tier I capital and total Tier I and Tier II capital to risk-weighted assets. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Capital Adequacy."

The following table sets forth a summary of the Issuer's capital and capital adequacy ratios as of December 31, 2017, 2018 and 2019 based on applicable regulatory reporting standards.

	As of December 31,		
	2017	2018	2019
	(in billions of	Won, except pe	ercentages)
Tier I capital	₩ 24 , 040	₩ 25,568	₩ 27,610
Common equity Tier I capital	24,040	25,568	27,035
Additional Tier I capital	_	_	575
Tier II capital	1,873	2,126	2,200
Total core and supplementary capital	25,913	27,694	29,810
Risk-weighted assets	161,825	178,433	188,075
Credit risk	145,959	163,693	172,985
Market risk	5,747	4,748	5,151
Operational risk	10,119	9,992	9,939
Total Tier I and Tier II capital adequacy ratio	16.01%	15.52%	15.85%
Tier I capital adequacy ratio	14.86%	14.33%	14.68%
Common equity Tier I capital adequacy ratio	14.86%	14.33%	14.37%
Tier II capital adequacy ratio	1.15%	1.19%	1.17%

Recent Accounting Pronouncements

See Note 2.1 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular for a description of other recent accounting pronouncements under Korean IFRS that have been issued but are not yet effective.

⁽¹⁾ Includes \(\psi_3,987\) billion of irrevocable commitments to provide contingent liquidity credit lines to special purpose entities for which the Issuer serves as the administrator.

BUSINESS

Overview

The Issuer is one of the largest commercial banks in Korea in terms of total assets (including loans). As of December 31, 2019, the Issuer had total assets of \(\mathbb{W}\)387,425 billion and total deposits of \(\mathbb{W}\)300,917 billion.

The Issuer provides credit and related financial services to individuals and SMEs and, to a lesser extent, to large corporate customers. The Issuer also provides a full range of deposit products and related services to both individuals and enterprises of all sizes.

By their nature, the Issuer's core consumer and SME operations place a high premium on customer access and convenience. The Issuer's network of 1,051 branches as of December 31, 2019, one of the most extensive in Korea, provides the Issuer with access to a large, stable and cost-effective funding source, enables the Issuer to provide its customers convenient access and gives the Issuer the ability to provide the customer attention and service essential to conducting its business, particularly in an increasingly competitive environment. The Issuer's branch network is further enhanced by automated banking machines and fixed-line, smartphone and Internet banking. As of December 31, 2019, the Issuer had a customer base of approximately 31.5 million retail customers, which represented over one-half of the Korean population.

The following table shows the principal components of the Issuer's lending business as of the dates indicated, on a separate basis:

			As of Decem	ber 31,			
	2017		2018		2019		
	(in billions of Won, except percentages)						
Retail	₩130,224	51.8%	₩141,755	51.3%	₩148,407	50.7%	
Corporate	119,080	47.3	131,669	47.6	138,832	47.4	
Foreign	2,204	0.9	3,095	1.1	5,501	1.9	
Total loans	₩251,508	100.0%	₩276,519	100.0%	₩292,740	100.0%	

The Issuer provides a full range of personal lending products and retail banking services to individual customers, including mortgage loans. The Issuer is the largest private sector home equity loan provider in Korea.

Lending to SMEs is the single largest component of the Issuer's non-retail credit portfolio and represents a widely diversified exposure to a broad spectrum of the Korean corporate community, both by type of lending and type of customer, with one of the categories being collateralized loans to SOHO customers that are among the smallest of the SMEs. The volume of the Issuer's loans to SMEs requires a customer-oriented approach that is facilitated by the Issuer's large and geographically diverse branch network.

With respect to large corporate customers, the Issuer continues to seek to maintain and expand quality relationships by providing them with an increasing range of fee-related services.

The legal name of the Issuer is Kookmin Bank. The Issuer is registered in Korea and incorporated with limited liability under the laws of Korea (registration number: 110111-2365321) and operates pursuant to the Bank Act of 1950, as amended (the "Bank Act") and the Bank of Korea Act of 1950, as amended (the "Bank of Korea Act"), as well as regulations and supervision of the BOK, the BOK's Monetary Policy Board (the "MPB"), the FSC and its executive body, the FSS. The Issuer's registered office is located at 26, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul 07331, Korea (telephone: + (822) 2073-7114).

Organizational Structure

In September 2008, the Issuer completed a "comprehensive stock transfer" under Article 360-15 of the Korean Commercial Code, whereby KB Financial Group Inc. ("KB Financial Group") became the holding company of the Issuer and eight additional entities that were originally the Issuer's subsidiaries. See "—History and Development—Establishment of KB Financial Group." Currently, the Issuer is a wholly-owned subsidiary of KB Financial Group and the Issuer's operating subsidiaries comprise Kookmin Bank Cambodia PLC, Kookmin Bank (China) Ltd. and KB Microfinance Myanmar Co., Ltd. The following tables provide summary information for the Issuer's operating subsidiaries, including their total assets, net income, operating income and shareholder's equity as of and for the year ended December 31, 2019:

	As of December 31, 2019				r ended oer 31, 2019		
	Percentage of ownership	Total assets	Equity	Operating revenue	Profit (Loss) for the period		
	(in millions of Won, except percentages)						
Subsidiaries ⁽¹⁾							
Kookmin Bank Cambodia PLC	100.0	307,604	98,934	15,815	2,851		
Kookmin Bank (China) Ltd	100.0	3,032,642	433,126	135,117	12,462		
KB Microfinance Myanmar Co., Ltd	100.0	24,188	21,629	4,349	(149)		

Note:

Further information regarding the Issuer's subsidiaries is provided below:

- The Issuer acquired a controlling interest in *Kookmin Bank Cambodia PLC* (formerly Khmer Union Bank) in May 2009, to enable the Issuer to provide various banking services in Cambodia.
- Kookmin Bank (China) Ltd. was established in China in November 2012 to provide a broad range of corporate banking services.
- *KB Microfinance Myanmar Co., Ltd.* was established in Myanmar in March 2017 to provide a variety of microfinance-related services.

History and Development

History of the Former Kookmin Bank

The former Kookmin Bank was established by the Government in 1963 under its original name of Citizens National Bank under the Citizens National Bank Act of Korea with majority government ownership. Under this Act, the Issuer was limited to providing banking services to the general public and to SMEs. In September 1994, Citizens National Bank completed its initial public offering in Korea and listed its shares on the KRX KOSPI Market of the Korea Exchange (the "KRX KOSPI Market").

In January 1995, the Citizens National Bank Act of Korea was repealed and replaced by the Repeal Act of the Citizens National Bank Act. Citizens National Bank's status was changed from a specialized bank to a nationwide commercial bank and in February 1995, it changed its name to Kookmin Bank. The Repeal Act allowed the former Kookmin Bank to engage in lending to large businesses.

History of Housing & Commercial Bank

Housing & Commercial Bank ("H&CB") was established by the Government in 1967 under the name Korea Housing Finance Corporation. In 1969, Korea Housing Finance Corporation became the Korea Housing Bank pursuant to the Korea Housing Bank Act. H&CB was originally established to provide low and middle income households with long-term, low-interest mortgages in order to help them purchase their own homes, and to promote the increase of housing supply in Korea by providing low-interest housing loans to construction companies. Until 1997 when the Korea Housing Bank Act was repealed, H&CB was the only entity in Korea allowed to provide mortgage loans with a term of longer than ten years. H&CB also had the exclusive ability to offer housing-related deposit accounts offering preferential rights to subscribe for newly-built apartments.

⁽¹⁾ Kookmin Bank Int'l Ltd. (London) is currently in the process of being liquidated. Its assets, liabilities and equity as of December 31, 2019 were \(\mathbf{W}\)37,404 million, \(\mathbf{W}\)887 million and \(\mathbf{W}\)36,517 million, respectively. Its operating revenue and profit for the period in the year ended December 31, 2019 were \(\mathbf{W}\)558 million and \(\mathbf{W}\)293 million, respectively.

The Merger of the Former Kookmin Bank and H&CB

Effective November 1, 2001, the former Kookmin Bank and H&CB merged into a new entity named Kookmin Bank. This merger resulted in the Issuer becoming the largest commercial bank in Korea by total assets (including loans), according to the data compiled by the FSS. American depositary shares ("ADSs") representing the Issuer's common stock were listed on the New York Stock Exchange on November 1, 2001 and its common stock was listed on the KRX KOSPI Market on November 9, 2001.

The Merger with Kookmin Credit Card

On May 30, 2003, the Issuer entered into a merger agreement with Kookmin Credit Card, previously a 75% owned and consolidated subsidiary. On July 23, 2003, the Issuer's board approved the merger with Kookmin Credit Card and on September 5, 2003, the merger was approved by the shareholders of Kookmin Credit Card. On September 30, 2003, the Issuer merged with Kookmin Credit Card.

Establishment of KB Financial Group

KB Financial Group was established on September 29, 2008 pursuant to a comprehensive stock transfer under Article 360-15 of the Korean Commercial Code, whereby holders of the common stock of the Issuer and certain of its subsidiaries transferred all of their shares to KB Financial Group, a new financial holding company, and in return received shares of KB Financial Group's common stock. In the stock transfer, each holder of one share of the Issuer's common stock received one share of KB Financial Group's common stock, par value \\ \psi_5,000 \text{ per share. Holders of the Issuer's ADSs and global depositary shares, each of which represented one share of the Issuer's common stock, received one of KB Financial Group's ADSs for every ADS or global depositary share they owned. In addition, holders of the common stock of KB Investment & Securities Co., Ltd., KB Asset Management Co., Ltd., KB Real Estate Trust Co., Ltd., KB Investment Co., Ltd., KB Futures Co., Ltd., KB Credit Information Co., Ltd. and KB Data Systems Co., Ltd., all of which were the Issuer's subsidiaries, transferred all of their shares to KB Financial Group and, as consideration for such transferred shares, received shares of KB Financial Group's common stock in accordance with the specified stock transfer ratio applicable to each such subsidiary. Following the completion of the stock transfer, the Issuer and the aforementioned subsidiaries of the Issuer became KB Financial Group's wholly-owned subsidiaries. Following the stock transfer, KB Financial Group's common stock was listed on the KRX KOSPI Market on October 10, 2008 and its ADSs were listed on the New York Stock Exchange on September 29, 2008.

Spin-off of the Credit Card Business

On September 28, 2010, the board of directors of the Issuer resolved to effect a horizontal spin-off of its credit card business, such that the business would be operated by a newly established sister company of the Issuer that is wholly-owned by KB Financial Group. Pursuant to such resolution, the assets and liabilities of the Issuer which were directly or indirectly related to its credit card business were transferred to a newly established company, KB Card, on February 28, 2011, and all of the shares of common stock of KB Card were distributed to KB Financial Group on March 2, 2011. Pursuant to the Korean Commercial Code, the Issuer will remain jointly and severally liable for the spun-off liabilities of the credit card business and KB Card will be jointly and severally liable for the liabilities of the Issuer existing as of the date of the spin-off, in each case for an indefinite period.

Strategy

The Issuer's strategic focus is to become a world-class banking service provider that ranks among the leaders of the financial industry in Asia and globally. The Issuer plans to solidify its market position as Korea's leading bank, enhance its ability to provide comprehensive financial services to its retail and corporate customers and strengthen its overseas operating platform and network. The Issuer believes its strong market position is an important competitive advantage, which will enable the Issuer to compete more effectively based on convenient delivery, product breadth and differentiation, and service quality while focusing on the Issuer's profitability.

The key elements of the Issuer's strategy are as follows:

Identifying, targeting and marketing to attractive customer segments and providing superior customer value and service to such segments

In recent years, rather than focusing on developing products and services to satisfy the overall needs of the general population, the Issuer has increasingly targeted specific market segments that the Issuer expects to generate superior growth and profitability. The Issuer will continue to implement a targeted marketing approach that seeks to identify the most attractive customer segments and to develop strategies to build market share in those segments. In particular, the Issuer intends to increase its "wallet share" of superior existing customers by using its advanced customer relationship management technology to better identify and meet the needs of its most creditworthy and high net worth customers, on whom the Issuer intends to concentrate its marketing efforts. For example, as part of this strategy, the Issuer operates a "priority customer" programme called KB Star Club. The Issuer selects and classifies KB Star Club customers based on their transaction history and provides such customers with preferential treatment in various areas, including interest rates and transaction fees, depending upon how they are classified. The Issuer also provides private banking services, including personal wealth management services through its exclusive brand "Gold & Wise," to increase its share of the priority customer market and in turn increase its profitability and strengthen its position in retail banking.

The Issuer is also focusing on attracting and retaining creditworthy customers by offering more differentiated fee-based products and services that are tailored to meet their specific needs. The development and marketing of the Issuer's products and services are, in part, driven by customer segmentation to ensure the Issuer meets the needs of each customer segment. For instance, the Issuer continues to develop hybrid financial products with enhanced features, including various deposit products and investment products, for which consumer demand has increased in recent years. The Issuer is also focusing on addressing the needs of its customers by providing the highest-quality products and services and developing an open-architecture strategy, which allows the Issuer to sell such products through one of the largest branch networks in Korea. In short, the Issuer aims to offer its customers a convenient one-stop financial services destination where they can meet their traditional retail and corporate banking requirements, as well as find a broad array of fee-based products and services tailored to address more specific banking and wealth management needs. The Issuer believes such differentiated, comprehensive services and cross-selling will not only enhance customer loyalty but also increase profitability.

One of the Issuer's key customer-related strategies continues to be creating greater value and better service for the Issuer's customers. The Issuer intends to continue improving its customer service, including through:

- Improved customer relationship management technology. Management has devoted substantial resources towards the development of the Issuer's customer relationship management system, which is designed to provide the Issuer's employees with the information needed to continually improve the level of service and incentives offered to the Issuer's preferred customers. The Issuer's system is based on an integrated customer database, which allows for better customer management and streamlines the Issuer's customer reward system. The Issuer has also developed state-of-the-art call centers, smartphone applications and online Internet capabilities to provide shorter response times to customers seeking information or to execute transactions. The Issuer's goals are to continually focus on improving customer service to satisfy its customer's needs through continuing efforts to deliver new and improved services and to upgrade the Issuer's customer relationship management system to provide the best possible service to the Issuer's customers in the future.
- Enhanced distribution channels. The Issuer also believes it can improve customer retention and usage rates by increasing the range of products and services the Issuer offers and by developing a differentiated, multi-channel distribution network, including branches, ATMs, call centers, smartphone banking and Internet banking. The Issuer believes that its leading market position in the commercial banking area in Korea gives it a competitive advantage in developing and enhancing its distribution capabilities.

Focusing on expanding and improving credit quality in the Issuer's corporate lending business and increasing market share in the corporate financial services market

The Issuer plans to focus on corporate lending as one of the Issuer's core businesses through attracting top-tier corporate customers and providing customized and distinctive products and services to build the Issuer's position as a leading bank in the Korean corporate financial market. To increase the Issuer's market share in providing financial services to the corporate market, the Issuer intends to:

- promote a more balanced and strengthened portfolio with respect to the Issuer's corporate business by developing the Issuer's large corporate customer base and utilizing the Issuer's improved credit management operations to better evaluate new large corporate and SME customers;
- develop and sell more varied corporate financial products, consisting of transactional banking products which provide higher margin and less risk;
- generate more fee income from large corporate customers through business-to-business transactions, foreign exchange transactions and derivative and other investment products;
- strengthen the Issuer's marketing system based on the Issuer's accumulated expertise in order to attract top-tier corporate customers;
- focus on enhancing the Issuer's channel network in order to provide the best service by strengthening its corporate customer management; and
- further develop and train the Issuer's core professionals with respect to this market, including through programmes such as the "Career Development Path."

Strengthening internal risk management capabilities

The Issuer believes that ensuring strong asset quality through effective credit risk management is critical to maintaining stable growth and profitability, and risk management will continue to be one of the Issuer's key focus areas. One of the Issuer's highest priorities is to improve the Issuer's asset quality and more effectively price the Issuer's lending products to take into account inherent credit risk in the Issuer's portfolio. The Issuer's goal is to maintain the soundness of the Issuer's credit portfolio, profitability and capital base. To this end, the Issuer intends to continue to strengthen its internal risk management capabilities by tightening its underwriting and management policies and improving its internal compliance policies. To accomplish this objective, the Issuer has undertaken the following initiatives:

- Strengthening underwriting procedures with advanced credit scoring techniques. The Issuer has centralized its credit management operations into its credit group. Through such centralization, the Issuer aims to enhance its credit management expertise and improve its system of checks-and-balances with respect to its credit portfolio. The Issuer has also improved its ability to evaluate the credit of the Issuer's SME customers through assigning experienced credit officers to the Issuer's regional credit offices. The Issuer also requires one officer to evaluate, review and monitor the outstanding loans and other credits with respect to a customer, which the Issuer believes enhances the expertise and improves the efficiency and accountability of such officer, while enabling the Issuer to maintain a consistent credit policy. The Issuer has also, as a general matter, implemented enhanced credit analysis and scoring techniques, which the Issuer believes will enable it to make better-informed decisions about the credit the Issuer extends and improve the Issuer's ability to respond more quickly to incipient credit problems. The Issuer is also focusing on enhancing its asset quality through improvement of the Issuer's early monitoring systems and collection procedures.
- Improving internal compliance policies and ensuring strict application in daily operations. The Issuer has improved its monitoring capabilities with respect to its internal compliance by providing training and educational programmes to its management and employees. The Issuer has also implemented strict compliance policies to maintain the integrity of the Issuer's risk management system.

Cultivating a performance-based, customer-oriented culture that emphasizes market best practices

The Issuer believes a strong and dedicated workforce is critical to its ability to offer its customers the highest quality banking services and is integral to its goal of maintaining its position as one of Korea's

leading financial service providers. In the past, the Issuer has dedicated significant resources to develop and train its core professionals, and the Issuer intends to continue to enhance the productivity of its employees, including by regularly sponsoring in-house training and educational programmes. The Issuer has also been seeking to cultivate a performance-based culture to create a work environment where members of its staff are incentivized to maximize their potential and in which the Issuer's employees are directly rewarded for superior performance. The Issuer intends to maintain a professional workforce whose high quality of customer service reflects its goal to achieve and maintain global best practice standards in all areas of operations.

Branch Network

As of December 31, 2019, the Issuer had 1,051 branches and sub-branches in Korea, which represented one of the largest branch networks among Korean commercial banks. An extensive branch network is important to attracting and maintaining retail customers, who use branches extensively and value convenience. The following table presents the geographical distribution of the Issuer's branch network in Korea as of December 31, 2019:

	Number of	
	Branches	Percentage
Area		
Seoul	376	35.8%
Six largest cities (other than Seoul)	246	23.4%
Other	429	40.8%
Total	1,051	100.0%

In addition, the Issuer has continued to implement the specialization of its branch functions. Of its branch network as of December 31, 2019, the Issuer had three branches that primarily handled large corporate banking.

In order to support the Issuer's branch network, the Issuer has established an extensive network of ATMs, which are located in branches and in unmanned outlets known as "autobanks." As of December 31, 2019, the Issuer had 6,777 ATMs.

The Issuer has actively promoted the use of these distribution outlets in order to provide convenient service to customers, as well as to maximize the marketing and sales functions at the branch level, reduce employee costs and improve profitability. The aggregate number of transactions conducted using the Issuer's ATMs amounted to approximately 460 million in 2017, 417 million in 2018 and 372 million in 2019.

Retail Banking

Due to the Issuer's history and development as a retail bank and the know-how and expertise the Issuer has acquired from its activities in that market, retail banking has been and will continue to remain one of the Issuer's core businesses. The Issuer's retail banking activities consist primarily of lending and deposit-taking.

Lending Activities

The Issuer offers various loan products that target different segments of the population, with features tailored to each segment's financial profile and other characteristics. The following table sets forth the balances and the percentage of the Issuer's total domestic retail lending represented by the categories of the Issuer's domestic retail loans as of the dates indicated, on a separate basis:

	As of December 31,					
	2017	201	3 201	9		
		(in billions of Won, ex	(cept percentages)			
Retail:						
Mortgage and home equity loans	₩ 95,354	73.2% ₩100 , 972	71.2% ₩105,296	71.0%		
Other consumer loans ⁽¹⁾	34,870	26.8 40,782	28.7 43,111	29.0		
Total	₩130,224	<u>100.0</u> % <u>₩141,755</u>	100.0% W 148,407	100.0%		

Note:

The Issuer's retail loans consist of:

- Mortgage loans, which are loans made to customers to finance home purchases, construction, improvements or rentals, and home equity loans, which are loans made to the Issuer's customers secured by their homes to ensure loan repayment. The Issuer also provides overdraft loans in connection with the Issuer's home equity loans.
- Other consumer loans, which are loans made to customers for any purpose (other than mortgage and home equity loans). These include overdraft loans, which are loans extended to customers to cover insufficient funds when they withdraw funds from their demand deposit accounts with the Issuer in excess of the amount in such accounts up to a limit established by the Issuer.

For secured loans, including mortgage and home equity loans, the Issuer's policy is to lend up to 100% of the adjusted collateral value (except in areas of high speculation designated by the government where the Issuer generally limits its lending to between 10% to 60% of the appraised value of collateral) minus the value of any lien or other security interests that are prior to the Issuer's security interest. In calculating the adjusted collateral value for real estate, the Issuer uses the appraisal value of the collateral multiplied by a factor, generally between 39% to 85% (10% to 70%) in the case of mortgage and home equity loans). This factor varies depending upon the location and use of the real estate and is established in part by taking into account court-supervised auction prices for nearby properties.

A borrower's eligibility for the Issuer's mortgage loans depends on the value of the mortgage property, the appropriateness of the use of proceeds and the borrower's creditworthiness. A borrower's eligibility for home equity loans is determined by the borrower's credit and the value of the property, while the borrower's eligibility for other consumer loans is primarily determined by the borrower's credit. If the borrower's credit deteriorates, it may be difficult for the Issuer to recover the loan. As a result, the Issuer reviews the borrower's creditworthiness, collateral value, credit scoring and third party guarantees when evaluating a borrower. In addition, to reduce the interest rate of a loan or to qualify for a loan, a borrower may provide collateral, deposits or guarantees from third parties.

Mortgage and Home Equity Lending

The housing finance market in Korea is divided into public sector and private sector lending. In the public sector, two government entities, the National Housing and Urban Fund and the National Agricultural Cooperative Federation, are responsible for most of the mortgage lending.

Private sector mortgage and home equity lending in Korea has expanded substantially in recent years. The Issuer provides customers with a number of mortgage and home equity loan products that have flexible features, including terms, repayment schedules, amounts and eligibility for loans, and the Issuer

⁽¹⁾ Includes overdraft loans.

offers interest rates on a commercial basis. The maximum term of mortgage loans is 35 years and the majority of the Issuer's mortgage loans have long-term maturities, which may be renewed. Non-amortizing home equity loans have a maturity of one to five years and home equity loans subject to amortization of principal may have a maximum term of up to 35 years. Any customer is eligible for a mortgage or an individual home equity loan regardless of whether it participates in one of the Issuer's housing related savings programs and so long as that customer is not barred by regulation from obtaining a loan because of bad credit history. However, customers with whom the Issuer frequently transacts business and who provide the Issuer with significant revenue receive preferential interest rates on loans.

Contrary to prevailing practice in many other countries, a portion of the Issuer's mortgage loans are unsecured (although the use of proceeds from these loans is restricted to the financing of home purchases, and some of these loans are guaranteed by a third party). One reason for this phenomenon is that the Issuer, along with other Korean banks, provides advance loans to borrowers for the down payment of new housing (particularly apartments) that is in the process of being built. Once construction is completed, which may take several years, these mortgage loans become secured by the new housing purchased by these borrowers.

Pricing. The interest rates on the Issuer's retail mortgage loans are generally based on a periodic floating rate (which is based on a base rate determined for three-month, six-month or 12-month periods using the Issuer's Market Opportunity Rate system, which reflects the Issuer's internal cost of funding, further adjusted to account for the Issuer's expenses related to lending). The Issuer's interest rates also incorporate a margin based among other things on the type of security, the credit score of the borrower and the estimated loss on the security. The Issuer can adjust the price to reflect the borrower's current and/or expected future contribution to it. The applicable interest rate is determined at the time of the loan. If a loan is terminated prior to its maturity, the borrower is obligated to pay the Issuer an early termination fee of approximately 1.2% to 1.4% of the loan amount in addition to the accrued interest.

The interest rates on the Issuer's home equity loans are determined on the same basis as the Issuer's retail mortgage loans.

Other Consumer Loans

Other consumer loans are primarily unsecured. However, such loans may be secured by real estate, deposits or securities, or guaranteed by a third party. Overdraft loans are also classified as other consumer loans, are primarily unsecured and generally have an initial maturity of one year, which is typically extended automatically on an annual basis and may be extended up to a maximum of five years.

Pricing. The interest rates on the Issuer's other consumer loans (including overdraft loans) are determined on the same basis as on the Issuer's mortgage and home equity loans, except that, for unsecured loans, the borrower's credit score as determined during the Issuer's loan approval process is also taken into account. See "*Risk Management*—*Credit Risk Management*."

Deposit-taking Activities

Due to the Issuer's extensive nationwide network of branches, together with the Issuer's long history of development and the Issuer's resulting know-how and expertise, as of December 31, 2019, the Issuer had the largest number of retail customers and retail deposits among Korean commercial banks. The total amount of deposits from the Issuer's retail customers amounted to \widetatle 181,529 billion as of December 31, 2019, or 60.3% of the Issuer's total deposits.

The Issuer offers many deposit products that target different segments of its retail customer base, with features tailored to each segment's financial profile, characteristics and needs, including:

• *Demand deposits*, which either do not accrue interest or accrue interest at a lower rate than time deposits. Demand deposits allow the customer to deposit and withdraw funds at any time and, if they are interest-bearing, accrue interest at a variable rate depending on the amount of deposit.

- *Time deposits*, which generally require the customer to maintain a deposit for a fixed term, during which the deposit accrues interest at a fixed rate or a variable rate based on the KOSPI, or to deposit specified amounts on an instalment basis. If the amount of the deposit is withdrawn prior to the end of the fixed term, the customer will be paid a lower interest rate than that originally offered. The term for time deposits typically ranges from one month to three years, and the term for instalment savings deposits ranges from six months to five years. Most instalment savings deposits offer fixed interest rates.
- Certificates of deposit, the maturities of which typically range from 30 days to 730 days with a required minimum deposit of \(\mathbb{W}10 \) million. Interest rates on certificates of deposit are determined based on the length of the deposit and prevailing market rates. The Issuer's certificates of deposit are sold at a discount to their face value, reflecting the interest payable on the certificates of deposit.
- Foreign currency deposits, which are available to Korean and foreign residents, non-residents and overseas immigrants. The Issuer offers foreign currency demand deposits and time deposits as well as checking accounts in 11 currencies. Foreign currency demand deposits, which accrue interest at a variable rate, allow customers to deposit and withdraw funds at any time. Foreign currency time deposits generally require customers to maintain the deposit for a fixed term, during which the deposit accrues interest at a fixed rate. If the funds in a foreign currency time deposit are withdrawn prior to the end of the fixed term, the customer will be paid a lower interest rate than that originally offered.

The Issuer offers varying interest rates on its deposit products depending upon average funding costs, the rate of return on the Issuer's interest-earning assets and the interest rates offered by other commercial banks.

The Issuer also offers comprehensive savings deposits for housing subscription, which are monthly instalment savings deposits that provide the holder with preferential rights to subscribe for both public and private housing under the Housing Act. This law is the basic law setting forth various measures supporting the purchase of houses and the supply of such houses by construction companies. These deposits require monthly instalments of \(\mathbb{W}20,000\) to \(\mathbb{W}500,000\) and accrue interest at variable rates depending on the term. An eligible account holder with \(\mathbb{W}70\) million or less in annual salary income may also claim a tax deduction for 40% of its annual instalment amounts, subject to a maximum deductible amount, in its income tax return for the year under the Special Tax Treatment Control Law.

In 2002, after significant research and planning, the Issuer launched private banking operations at its headquarters. Shortly thereafter, the Issuer launched a comprehensive strategy with respect to customers with higher net worth, which included staffing appropriate representatives, marketing aggressively, establishing IT systems, selecting appropriate branch locations and readying such branches with the necessary facilities to service such customers. As of December 31, 2019, the Issuer operated 21 private banking centers.

The MPB imposes a reserve requirement on Won currency deposits of commercial banks based generally on the type of deposit instrument. The reserve requirement is currently up to 7%. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Liquidity."

The Depositor Protection Act provides for a deposit insurance system where the KDIC guarantees to depositors the repayment of their eligible bank deposits. The deposit insurance system insures up to a total of \text{\psi}50 million per depositor per bank. See "Regulation and Supervision—Legal and Regulatory Framework in Korea—Deposit Insurance System." The Issuer paid \text{\psi}405 billion of premiums to the KDIC in 2019 for such deposit insurance.

Corporate Banking

The Issuer lends to and takes deposits from SMEs and, to a lesser extent, large corporate customers. The Issuer also receives fee revenue from "cash management" services offered to corporate customers, which include "firm banking" services such as inter-account transfers, transfers of funds from various branches and agencies of a company (such as insurance premium payments) to the account of the headquarters of such company and transfers of funds from various customers of a company to the main account of such company. Of the Issuer's branch network as of December 31, 2019, three branches primarily handled large corporate banking.

The following table sets forth the balances and the percentage of the Issuer's total domestic corporate lending represented by its domestic SME loans and large corporate loans as of the dates indicated, on a separate basis, estimated based on the Issuer's internal classifications of corporate borrowers:

			As of Decem	ber 31,		
	2017		2018			
		(in billio	ons of Won, exc	ept percent	ages)	
Corporate:						
SME loans	₩ 90,265	75.8%	₩ 99,142	75.3%	₩104,540	75.3%
Large corporate loans	28,815	24.2	32,527	24.7	34,292	24.7
Total	₩119,080	100.0%	₩131,669	100.0%	₩138,832	100.0%

On the deposit-taking side, the Issuer currently offers its corporate customers several types of corporate deposits. The Issuer's corporate deposit products can be divided into two general categories: (1) demand deposits that have no restrictions on deposits or withdrawals, but which offer a relatively low interest rate; and (2) deposits from which withdrawals are restricted for a period of time, but offer higher interest rates. The Issuer also offers instalment savings deposits, certificates of deposit and repurchase instruments. The Issuer offers varying interest rates on deposit products depending upon the rate of return on the Issuer's income-earning assets, average funding costs and interest rates offered by other nationwide commercial banks.

The total amount of deposits from the Issuer's corporate customers amounted to \\ \pm\$113,282 billion as of December 31, 2019, or 37.6% of the Issuer's total deposits.

SME Banking

The Issuer's SME banking business has traditionally been and will remain one of the Issuer's core businesses because of both the Issuer's historical development and its accumulated expertise. The Issuer believes that it possesses the necessary elements to succeed in the SME market, including its extensive branch network, its credit rating system for credit approval, its marketing capabilities (which the Issuer believes have provided the Issuer with significant brand loyalty) and its ability to take advantage of economies of scale.

The Issuer uses the term "SMEs" as defined in the Framework Act on Small and Medium Enterprises and related regulations. Under the Framework Act on Small and Medium Enterprises and related regulations, an enterprise must meet each of the following criteria in order to meet the definition of an SME: (i) total assets at the end of the immediately preceding fiscal year must be less than \text{\$\psi}500\$ billion, (ii) the average or annual sales revenue standards as prescribed by the Enforcement Decree of the Framework Act on Small and Medium Enterprises that are applicable to the enterprise's primary business must be met and (iii) the standards of management independence as prescribed by the Enforcement Decree of the Framework Act on Small and Medium Enterprises must be met. However, pursuant to an amendment to the Framework Act on Small and Medium Enterprises, which will become effective in June 2020, an enterprise that qualifies as a small- and medium-sized enterprise pursuant to the above definition shall no longer be considered a small- and medium-sized enterprise if it is incorporated into, or is deemed to be incorporated into, a business group subject to certain disclosure requirements under the Monopoly Regulation and Fair Trade Act. Moreover, certified social enterprises (as defined in the Social Enterprise Promotion Act) and cooperatives and federations of cooperatives (each as defined in the Framework Act on Cooperatives and the Consumer Cooperatives Act) that satisfy the requirements prescribed by the Framework Act on Small and Medium Enterprises may also qualify as small- and medium-sized enterprises.

Lending Activities

The Issuer's principal loan products for its SME customers are working capital loans and facilities loans. Working capital loans are provided to finance working capital requirements and include notes discounted and trade financing. Facilities loans are provided to finance the purchase of equipment and the establishment of manufacturing assembly plants. As of December 31, 2019, the Issuer had over 308,702 SME customers on the lending side.

Loans to SMEs may be secured by real estate or deposits or may be unsecured. Working capital loans generally have a maturity of one year, but may be extended for additional terms of up to one year in length for an aggregate term of five years. Facilities loans have a maximum maturity of 15 years.

When evaluating the extension of working capital loans, the Issuer reviews the corporate customer's creditworthiness and capability to generate cash. Furthermore, the Issuer takes credit guaranty letters from other financial institutions and uses time deposits that the borrower has with the Issuer as collateral, and may require additional collateral.

The value of any collateral is defined using a formula that takes into account the appraised value of the property, any prior liens or other claims against the property and an adjustment factor based on a number of considerations including, with respect to property, the value of any nearby property sold in a court-supervised auction during the previous five years. The Issuer revalues any collateral on a periodic basis (generally every year) or if a trigger event occurs with respect to the loan in question.

The Issuer also offers mortgage loans to home builders or developers who build or sell single- or multifamily housing units, principally apartment buildings. Many of these builders and developers are categorized as SMEs. The Issuer offers a variety of such mortgage loans, including loans to purchase property or finance the construction of housing units and loans to contractors used for working capital purposes. Such mortgage loans subject the Issuer to the risk that the housing units will not be sold. As a result, the Issuer reviews the probability of the sale of the housing unit when evaluating the extension of a loan. The Issuer also reviews the borrower's creditworthiness and the adequacy of the intended use of proceeds. Furthermore, the Issuer takes a lien on the land on which the housing unit is to be constructed as collateral. If the collateral is not sufficient to cover the loan, the Issuer also takes a guarantee from the Housing Finance Credit Guarantee Fund as security.

A substantial number of the Issuer's SME customers are SOHOs, which the Issuer currently defines to include sole proprietorships and individual business interests. With respect to SOHOs, the Issuer applies credit risk evaluation models, which not only uses quantitative analysis related to a customer's accounts, personal credit and financial information and due amounts but also requires the Issuer's credit officers to perform a qualitative analysis of each potential SOHO customer. With respect to SOHO loans in excess of \(\forall 1\) billion, the Issuer's credit risk evaluation model also includes a quantitative analysis of the financial statements of the underlying business. The Issuer generally lends to SOHOs on a secured basis, although a small portion of the Issuer's SOHO exposures are unsecured.

Pricing

The Issuer establishes the price for its corporate loan products based principally on transaction risk, the Issuer's cost of funding and market considerations. Transaction risk is measured by such factors as the credit rating assigned to a particular borrower, the size of the borrower and the value and type of collateral. The Issuer's loans are priced based on the Market Opportunity Rate system, which is a periodic floating rate system that takes into account the current market interest rate.

While the Issuer generally utilizes the Market Opportunity Rate system, depending on the price and other terms set by competing banks for similar borrowers, the Issuer may adjust the interest rate it charges to compete more effectively with other banks.

Large Corporate Banking

Large corporate customers include all companies that are not SME customers. The Issuer's articles of incorporation provide that financial services to large corporate customers must be no more than 40% of the total amount of the Issuer's Won-denominated loans. The Issuer's business focus with respect to large corporate banking is to selectively increase the proportion of high quality large corporate customers. Specifically, the Issuer is carrying out various initiatives to improve the Issuer's customer relationship with large corporate customers and has been seeking to expand the Issuer's service offerings to this segment.

Lending Activities

The Issuer's principal loan products for the Issuer's large corporate customers are working capital loans and facilities loans. Working capital loans generally have a maturity of one year, but may be extended

for additional terms ranging from six months to one year in length for an aggregate term of five years. Facilities loans have a maximum maturity of 15 years. The Issuer also offers mortgage loans to large corporate clients who build or sell single- or multi-family housing units, as described above under "—SME Banking—Lending Activities."

In the Issuer's unsecured lending to large corporate customers, a critical consideration is the borrower's creditworthiness. The Issuer assigns each borrower a credit rating based on the judgment of its experts or scores calculated using the appropriate credit rating system, taking into account both financial factors and non-financial factors (such as its perception of a borrower's reliability, management and operational risk and risk relating to the borrower's industry). The credit ratings, along with such factors, are key determinants in the Issuer's lending to large corporate customers. Large corporate customers generally have higher credit ratings due to their higher repayment capability compared to other types of borrowers, such as SME borrowers. In addition, large corporate borrowers generally are affected to a lesser extent than SME borrowers by fluctuations in the Korean economy and also maintain more sophisticated financial records.

The Issuer monitors the credit status of large corporate borrowers and collects information to adjust its ratings appropriately. The Issuer also manages and monitors its large corporate customers through the Large Corporate Business Department. In addition, the Credit Risk Department manages the Issuer's exposure to each large corporate customer and conducts in-depth analysis of various economic and industry-related risks that are relevant to large corporate customers.

Pricing

The Issuer determines pricing of its large corporate loans in the same way as the Issuer determines the pricing of its SME loans. See "—SME Banking—Pricing."

Capital Markets Activities and International Banking

Through the Issuer's capital markets operations, the Issuer invests and trades in debt and equity securities and, to a lesser extent, engages in derivatives and asset securitization transactions and makes call loans. The Issuer also provides investment banking services to corporate customers.

Securities Investment and Trading

The Issuer invests in and trades securities for the Issuer's own account in order to maintain adequate sources of liquidity and to generate interest and dividend income and capital gains. As of December 31, 2017, 2018 and 2019, the Issuer's investment portfolio, which consists primarily of financial instruments at amortized cost and financial assets at fair value through other comprehensive income (formerly referred to as held-to-maturity financial assets and available-for-sale financial assets, respectively), and the Issuer's trading portfolio had a combined total carrying amount of \(\formall \pm 49,224\) billion, \(\formall 54,418\) billion and \(\formall 65,753\) billion and represented 14.9%, 15.2% and 17.0% of the Issuer's total assets, respectively.

The Issuer's trading and investment portfolios consist primarily of Korean treasury securities and debt securities issued by Government agencies, local governments or certain government-invested enterprises and debt securities issued by financial institutions.

From time to time the Issuer also purchases equity securities for the Issuer's securities portfolios. The Issuer's equity securities consist primarily of marketable beneficiary certificates and equities listed on the KRX KOSPI Market, the KRX KOSDAQ Market of the Korea Exchange or the KRX KONEX Market of the Korea Exchange.

The Issuer's trading portfolio also includes derivative-linked securities, the underlying assets of which were linked to, among other things, interest rates, exchange rates, stock price indices or credit risks.

The following tables set forth the carrying amounts of the securities in the Issuer's trading and investment portfolios as of the dates indicated:

	As of December 31,
	2017
	(in billions of Won)
Financial assets at fair value through profit or loss	,
Financial assets held for trading	
Debt securities:	
Government and public bonds	₩ 1,639
Financial bonds	3,727
Corporate bonds	2,025
Asset-backed securities	149
Others Equity securities:	360
Stocks	122
Beneficiary certificates	217
Others	74
Total financial assets held for trading	8,313
Financial assets designated at fair value through profit or loss ⁽¹⁾	0.5
Derivative linked securities	95
Total financial assets designated at fair value through profit or loss	95
Total financial assets at fair value through profit or loss	₩ 8,409
Financial investments Available for sale financial assets Debt securities:	
Government and public bonds	₩ 2,820
Financial bonds	15,839
Corporate bonds	6,741
Asset-backed securities	2,205
Stocks	1,923
Equity investments	144
Beneficiary certificates	2,405
Others	1
Total available for sale financial assets	32,078
Held to maturity financial assets Debt securities:	
Government and public bonds	1,303
Financial bonds	1,878
Corporate bonds	1,361
Asset-backed securities	4,195
Total held to maturity financial assets	8,737
Total financial investments	₩40,816

	As of December 31, 2018			As of December 31, 2019				
	Amortized Cost	Net Unrealized Gain and Loss	Loss Allowance for Expected Credit Losses	Fair Value	Amortized Cost	Net Unrealized Gain and Loss	Loss Allowance for Expected Credit Losses	Fair Value
				(in billion	s of Won)			
Financial assets at fair value through profit or loss								
Debt securities:								
Government and public bonds	₩ 1.949	₩ —	_	₩ 1,949	₩ 1,974	₩ —	₩—	₩ 1,974
Financial bonds	4,934		_	4,934	,		_	6,368
Corporate bonds	1,897	_	_	1,897			_	1,773
Asset-backed securities	60	_	_	60	100	_	_	100
Beneficiary certificates	2,341	_	_	2,341		_	_	2,283
Others Equity securities:	702	_	_	702	949	_	_	949
Stocks	82	_		82	151	_		151
Others	79	_	_	79	80	_	_	80
Total financial assets at fair value								
through profit or loss	₩12,044	₩ —	₩—	₩12,044	₩13,678	W —	₩—	₩13,678
Financial investments								
Financial assets at fair value through other comprehensive income Debt securities:								
Government and public bonds	₩ 2,936	₩ 6	₩ 0	₩ 2,941	₩ 8,178	₩ (6)	₩ 0	₩ 8,172
Financial bonds	16,895	8	0	16,902	18,075	35	0	18,110
Corporate bonds	6,956	17	2	6,971			2	9,219
Asset-backed securities Equity securities:	868	0	0	868	615	1	0	616
Stocks	1,407	455	_	1,862	1,518	436	_	1,954
Equity investments	57	(20)	_	37	57	(17)	_	40
Beneficiary certificates	_	_		_		_	_	
Others								
Total financial assets at fair value through other comprehensive								
income	29,119	465	2	29,581	37,617	496	2	38,111
Financial instruments at amortized								
cost								
Debt securities:								
Government and public bonds	545	37	_	582			_	577
Financial bonds	6,246		0	6,194			0	7,617
Corporate bonds	1,413	21	0	1,434			0	1,771
Asset-backed securities	4,590	24	1	4,614	4,065	28	1	4,092
Financial instruments at amortized								
cost	12,793	31	1	12,824		92	1	14,057
Total financial investments	₩53,957	₩497 ====	₩ 3	₩54,449	₩65,261	₩588 ====	₩ 3	₩65,846

Note:

Derivatives Trading

The Issuer provides and trades a range of derivatives products, including:

- interest rate swaps and options, relating to interest rate risks;
- cross-currency swaps, forwards and options relating to foreign exchange risks; and
- stock price index options linked to the KOSPI index.

⁽¹⁾ Effective as of January 1, 2018, financial assets designated at fair value through profit or loss have been reclassified as financial assets at fair value through profit or loss, without the option for designation of fair value, pursuant to the application of Korean IFRS 1109.

The following table shows the estimated fair value of the Issuer's derivatives as of the dates indicated:

	As of December 31,						
	20	17	2018		2019		
	Estimated Fair Value Assets	Estimated Fair Value Liabilities	Estimated Estimated Fair Value Assets Liabilities		Estimated Fair Value Assets	Estimated Fair Value Liabilities	
			(in billion	s of Won)			
Foreign exchange derivatives ⁽¹⁾	₩2,011	₩2,002	₩1,010	₩ 949	₩1,504	₩ 1,283	
Interest rate derivatives ⁽¹⁾	578	605	604	692	814	885	
Equity derivatives	0	0	0	0	0	0	
Others ⁽¹⁾	18	1		1		0	
Total	₩2,607	₩2,608	₩1,614	₩1,642	₩2,318	₩2,168	

Note:

The Issuer's derivatives operations focus on addressing the needs of the Issuer's corporate clients to hedge their risk exposure and the need to hedge the Issuer's risk exposure that results from such client contracts. The Issuer also engages in derivatives trading activities to hedge the interest rate and foreign currency risk exposures that arise from the Issuer's own assets and liabilities. In addition, the Issuer engages in proprietary trading of derivatives within the Issuer's regulated open position limits.

Asset Securitization Transactions

The Issuer is active in the Korean asset-backed securities market. Based on the Issuer's diverse experience with respect to product development and management capabilities relating to asset securitization, the Issuer offers customers a wide range of financial products to reinforce the Issuer's position as a leading bank with respect to the asset securitization market.

Call Loans

The Issuer makes call loans and borrows call money in the short-term money market. Call loans are defined as short-term lending among banks and financial institutions either in Won or in foreign currencies with maturities of 90 days or less. Typically, call loans have maturities of one day.

Investment Banking

The Issuer has focused on selectively expanding its investment banking activities in order to increase its fee income and diversify its revenue base. The main focus of the Issuer's investment banking operations is project finance and financial advisory services. The Issuer's principal investment banking services include:

- project finance and financial advisory services for social overhead capital projects such as highway, port, power, water and sewage projects;
- financing and financial advisory services for real estate development projects;
- structured finance; and
- financing for mergers and acquisitions.

International Banking

The Issuer engages in various international banking activities, including foreign exchange services and derivatives dealing, import and export-related services, offshore lending, syndicated loans and foreign currency securities investment. These services are provided primarily to the Issuer's domestic customers and overseas subsidiaries and affiliates of Korean corporations. The Issuer also raises foreign currency funds through its international banking operations.

⁽¹⁾ Includes those for trading purposes and hedging purposes.

The table below sets forth certain information regarding the Issuer's foreign currency assets and borrowings:

	As of December 31,			
	2017	2017 2018		
	(in	billions of W	on)	
Total foreign currency assets	₩23,907	₩25,536	₩30,557	
Foreign currency borrowings:				
Debts	7,265	9,295	9,250	
Debentures	2,940	4,035	4,185	
Total borrowings	₩10,205	₩13,329	₩13,435	

The table below sets forth the Issuer's overseas branches and representative offices in operation as of the date of this Offering Circular:

3ra	nc	hes	

Kookmin Bank (China) Ltd., Beijing Branch	China
Kookmin Bank (China) Ltd., Guangzhou Branch	China
Kookmin Bank (China) Ltd., Harbin Branch	China
Kookmin Bank (China) Ltd., Shanghai Branch	China
Kookmin Bank (China) Ltd., Suzhou Branch	China
Kookmin Bank, Tokyo Branch	Japan
Kookmin Bank, Auckland Branch	New Zealand
Kookmin Bank, New York Branch	United States
Kookmin Bank, London Branch	United Kingdom
Kookmin Bank, Ho Chi Minh City Branch	Vietnam
Kookmin Bank, Hanoi Branch	Vietnam
Kookmin Bank, Hong Kong Branch	Hong Kong
Kookmin Bank, Gurugram Branch	India
Kookmin Bank Cambodia PLC, Toul Kork Branch	Cambodia
Kookmin Bank Cambodia PLC, Toul Tompong Branch	Cambodia
Kookmin Bank Cambodia PLC, Tuek Thla Branch	Cambodia
Kookmin Bank Cambodia PLC, Stueng Meanchey Branch	Cambodia
Kookmin Bank Cambodia PLC, Chbar Ampov Branch	Cambodia
KB Microfinance Myanmar Co., Ltd., Hlaingtharya Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Shwepyithar Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Thanlyin Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Pyinmana Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Twantay Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Magway Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Thaketa Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Chanmyatharzi Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Pakkokku Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Lewe Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Kyaukse Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Tatkon Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Salin Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Singu Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Monywa Branch	Myanmar
KB Microfinance Myanmar Co., Ltd., Shwebo Branch	Myanmar
Panyacantativa Offices	

Representative Offices

Kookmin Bank, Yangon Representative Office Myanmar

The Issuer's overseas branches and subsidiaries principally provide Korean companies and nationals in overseas markets with trade financing, local currency funding and foreign exchange services, in conjunction with the operations of the Issuer's headquarters.

Trustee and Custodian Services Relating to Investment Trusts and Other Functions

The Issuer acts as a trustee for financial investment companies with a collective investment license, which invest in investment assets using funds raised by the sale of beneficiary certificates of investment trusts to investors. The Issuer also acts as custodian for financial institutions and as fund administrator for financial institutions with respect to various investments, as well as acting as settlement agent in connection with such services. The Issuer receives a fee for acting in these capacities and generally performs the following functions:

- holding assets for the benefit of the investment trusts or institutional investors;
- receiving and making payments in respect of such investments;
- acting as settlement agent in respect of such investments on behalf of the investment trust or institutional investors, in the domestic and overseas markets;
- providing reports on assets held in custody;
- providing certain foreign exchange services for overseas investment and foreign investors; and
- providing fund-related administration and accounting services.

Other Businesses

Trust Account Management Services

Money Trust Management Services

The Issuer provides trust account management services for both specified money trusts and unspecified money trusts. The Issuer receives fees for its trust account management services consisting of basic fees that are based upon a percentage of either the net asset value of the assets or the principal under management and, for certain types of trust account operations, performance fees that are based upon the performance of the trust account operations. In 2019, the Issuer's basic fees ranged from 0.1% to 2.0% of total assets under management depending on the type of trust account. The Issuer also charges performance fees with respect to certain types of trust account products. The Issuer receives penalty payments when customers terminate their trust accounts prior to the original contract maturity.

The Issuer provides trust account management services for various types of money trusts. The maturities of the money trusts the Issuer manages vary by the type of the trust. Approximately 3.9% of the Issuer's money trusts also provide periodic payments of dividends which are added to the assets held in such trusts and not distributed.

Under Korean law, the assets of the Issuer's trust accounts are segregated from the Issuer's banking account assets and are not available to satisfy the claims of any of the Issuer's potential creditors. The Issuer is, however, permitted to deposit surplus funds generated by trust assets into the Issuer's banking accounts in certain circumstances as set forth under the Financial Investment Services and Capital Markets Act (the "FSCMA") and the regulations thereunder.

As of December 31, 2019, the total balance of the Issuer's money trusts was \\ \pm49,065 \text{ billion} (as calculated in accordance with Statement of Korea Accounting Standard No. 5004, \textit{Trust Accounts}, and the Enforcement Regulations of Financial Investment Services under the FSCMA, which the Issuer refers to as an "SKAS basis").

As for unspecified money trust accounts, the Issuer has investment discretion over all money trusts, which are pooled and managed jointly for each type of trust account. Specified money trust accounts are established on behalf of individual customers who direct the Issuer's investment of trust assets.

The following table shows the balances of the Issuer's money trusts by type as of the dates indicated. Under Korean IFRS, the Issuer consolidates trust accounts for which it guarantees both the repayment of the principal amount and a fixed rate of interest as well as trust accounts for which it guarantees only the repayment of the principal amount.

	As of December 31,					
	20	17	201	8	20	019
	(in billions of Won)					
Principal and interest guaranteed trusts ⁽¹⁾	₩	0	₩	0	₩	0
Principal guaranteed trusts ⁽¹⁾	3	,694	3,	783	3	3,875
Performance trusts ⁽¹⁾⁽²⁾		,060	43,	629	45	5,190
Total	₩38	,754	₩47,	412	₩49	,065

Notes:

- (1) Calculated on an SKAS basis.
- (2) Trusts which are primarily non-guaranteed.

As of December 31, 2019, the trust assets the Issuer managed consisted principally of securities investments and loans from the trust accounts. As of December 31, 2019, on an SKAS basis, the Issuer's trust accounts had invested in securities in the aggregate amount of \(\frac{\pmathbf{W}}{24}\),171 billion, of which \(\frac{\pmathbf{W}}{19}\),129 billion was debt securities and derivative-linked securities. Securities investments consist of Government-related debt securities, corporate debt securities, including bonds and commercial paper, equity securities, derivative-linked securities and other securities. Loans made by the Issuer's trust account operations are similar in type to the loans made by the Issuer's bank account operations. As of December 31, 2019, on an SKAS basis, the Issuer's trust accounts had made loans in the amount of \(\frac{\pmathbf{W}}{203}\) billion (excluding loans from the trust accounts to the Issuer's banking accounts of \(\frac{\pmathbf{W}}{1,364}\) billion), which accounted for 0.4% of the Issuer's money trust assets. Loans by the Issuer's money trusts are subject to the same credit approval process as loans from the Issuer's banking accounts. As of December 31, 2019, substantially all of the loans from the Issuer's money trust accounts were collateralized or guaranteed.

The Issuer's money trust accounts also invest, to a lesser extent, in equity securities, including beneficiary certificates issued by financial investment companies with a collective investment license. On an SKAS basis, as of December 31, 2019, equity securities in the Issuer's money trust accounts amounted to \$\pm\$5,042 billion, which accounted for 10.0% of the Issuer's total money trust assets. Of this amount, \$\pm\$4,904 billion was from specified money trusts and \$\pm\$138 billion was from unspecified money trusts.

If the income from a money trust for which the Issuer provides a guarantee is less than the amount of the payments the Issuer has guaranteed, the Issuer will need to pay the amount of the shortfall with funds from special reserves maintained with respect to trust accounts followed by basic fees from that money trust and funds from the Issuer's general banking operations. In 2017, 2018 and 2019, the Issuer made no such payments from the Issuer's banking accounts to cover shortfalls in the Issuer's guaranteed trusts.

Property Trust Management Services

The Issuer also offers property trust management services, where the Issuer manages non-cash assets in return for a fee. Non-cash assets include mostly securities, but can also include other liquid receivables and real estate. Under these arrangements, the Issuer renders custodial services for the property in question and collects fee income in return.

In 2019, the Issuer's property trust fees ranged from 0.001% to 0.3% of total assets under management depending on the type of trust accounts. On an SKAS basis, as of December 31, 2019, the aggregate balance of the Issuer's property trusts increased to \\\$5,846\text{ billion, compared to }\\$3,506\text{ billion as of December 31, 2018.}

Bancassurance

The Issuer offers insurance products of other institutions to retail customers in Korea. The Issuer currently markets a wide range of bancassurance products and seeks to generate additional fee-based revenues by expanding its offering of these products. As of December 31, 2019, the Issuer's bancassurance business had alliances with 22 life insurance companies (including its affiliate, KB Life Insurance) and ten non-life insurance companies (including its affiliate, KB Insurance) and offered 107 different products through the Issuer's branch network.

Management of the National Housing and Urban Fund

The National Housing and Urban Fund is a Government fund that provides financial support to low-income households in Korea by providing mortgage financing and construction loans for projects to build small-sized housing. The operations of the National Housing and Urban Fund include providing and managing National Housing and Urban Fund loans, issuing National Housing and Urban Fund bonds and collecting subscription savings deposits.

In February 2013, the Ministry of Land, Infrastructure and Transport (formerly the Ministry of Land, Transport and Maritime Affairs) designated the Issuer as one of the managers of the National Housing and Urban Fund.

The financial accounting for the National Housing and Urban Fund is entirely separate from the Issuer's financial accounting, and the non-performing loans and loan losses of the National Housing and Urban Fund, in general, do not impact the Issuer's financial condition. Regulations and guidelines for managing the National Housing and Urban Fund are issued by the Minister of Land, Infrastructure and Transport pursuant to the Housing Act.

Other Banking Channels

The following table sets forth information, for the periods indicated, on the number of users and transactions of the other banking channels for the Issuer's retail and corporate banking customers, which are discussed below:

	For the year ended December 31,			
	2017	2018	2019	
Internet banking:				
Number of users ⁽¹⁾	22,288,850	23,281,390	24,165,164	
Number of transactions (thousands) ⁽²⁾	5,427,142	5,471,484	8,426,630	
Phone banking:				
Number of users ⁽³⁾	5,020,272	5,046,634	5,063,703	
Number of transactions (thousands) ⁽²⁾	119,059	104,163	93,112	
Smartphone banking:				
Number of users ⁽⁴⁾	13,533,359	14,645,787	15,501,894	
Number of transactions (thousands) $^{(2)}$	6,192,633	7,142,958	9,009,727	

Notes:

- (1) Number of users is defined as the total cumulative number of retail and corporate customers who have registered through branch offices to use Internet banking services.
- (2) Number of transactions includes balance and transaction inquiries, fund transfers and other transactions.
- (3) Number of users is defined as the total cumulative number of retail and corporate customers who have registered through branch offices to use phone banking services.
- (4) Number of users is defined as the total cumulative number of retail customers who have registered through branch offices, or the customers' smartphones, to use smartphone banking services.

Internet Banking

The Issuer's goal is to consolidate the Issuer's position as a market leader in online banking. The Issuer's Internet banking services currently include:

- basic banking services, including fund transfers, balance and transaction inquiries, pre-set automatic transfers, product inquiries, online bill payments and foreign exchange services;
- investment services, including opening deposit accounts and investing in funds;

- processing of loan applications;
- electronic certification services, which permit the Issuer's Internet banking service users to authenticate transactions on a confidential basis through digital signatures; and
- wealth management and advisory services, including financial planning and real estate information services.

Phone Banking

The Issuer offers a variety of phone banking services, including inter-account fund transfers, balance and transaction inquiries, customer service inquiries and bill payments. The Issuer also has call centers, which the Issuer primarily uses to:

- advise clients with respect to deposits and loans and to provide the Issuer's customers a way to report any emergencies with respect to their accounts;
- allow the Issuer's customers to conduct transactions with respect to their accounts, such as balance and transfer inquiries, transfers or payments and opening accounts; and
- conduct telemarketing to the Issuer's customers or potential customers to advertise products or services.

Smartphone Banking

"KB Star Banking," the Issuer's mobile banking application for smartphones, allows its customers the flexibility to conduct a variety of financial transactions, including balance and transaction inquiries, fund transfers and asset management, anywhere at any time. The Issuer's smartphone banking services currently include:

- basic banking services, including fund transfers, balance and transaction inquiries, bill payments and foreign exchange services;
- investment services, including investing in savings deposits that are designed specifically for and offered to smartphone banking customers; and
- processing of loan applications and bancassurance services.

The Issuer also continues to develop innovative mobile applications that cater to specific customer needs and lifestyles. For example, the Issuer offers "Liiv," a mobile banking platform designed to make routine transactions easier for the Issuer's customers, including providing easy access to banking services without the additional electronic certification process, foreign currency exchange services with lower fees and functions that allow customers to easily split bills and transfer money. Through "Liiv Talk Talk," a mobile peer-to-peer payment and messaging application, the Issuer also allow its customers to perform routine banking tasks with voice commands and interactive messaging. More recently, the Issuer launched "Liiv M," a budget phone service that offers a hybrid of mobile banking and phone services, and "Liiv Pay," an overseas mobile payment service. The Issuer provides its customers with a number of other useful tools, such as "KB Star Alerts," which are free text messages that contain real-time account activity information as well as security alerts, and "KB My Money," a mobile application that allows customers to manage a wide range of assets deposited with various financial institutions.

Other Channels

The Issuer provides cash management services, which include automatic transfers, connection services to other financial institutions, real-time firm banking, automatic fund concentration and transmittal of trading information.

Competition

The Issuer competes principally with other nationwide commercial banks in Korea, as well as regional banks, development banks, specialized banks and branches of foreign banks operating in Korea. The Issuer also competes with other types of financial institutions in Korea, including savings institutions (such as mutual savings and finance companies and credit unions and credit cooperatives), investment institutions (such as merchant banking corporations), life insurance companies, non-life insurance companies, securities companies and other financial investment companies.

Competition in the domestic banking industry is generally based on the types and quality of the products and services offered, including the size and location of retail networks, the level of automation and interest rates charged and paid. Competition has increased significantly in the Issuer's traditional core businesses, retail banking and SME banking, contributing to some extent to the asset quality deterioration in retail and SME loans. As a result, the Issuer's margins on lending activities may decrease in the future.

Furthermore, the introduction of Internet-only banks in Korea is expected to increase competition in the Korean banking industry. Internet-only banks operate without branches and conduct most of their operations through electronic means, which enables them to minimize cost and offer customers higher interest rates on deposits or lower lending rates. In April 2017, K Bank, the first Internet-only bank in Korea, commenced operations. Kakao Bank, another Internet-only bank, in which the Issuer holds a 9.9% equity interest, commenced operations in July 2017. In December 2019, Toss Bank was granted a preliminary license by the FSC to operate as an Internet-only bank and is expected to begin operations in July 2021 upon receiving final approval from the FSC.

In addition, general regulatory reforms in the Korean financial industry have increased competition among banks and other financial institutions in Korea. As the reform of the financial sector continues, foreign financial institutions, some with greater resources than the Issuer, have entered, and may continue to enter, the Korean market either by themselves or in partnership with existing Korean financial institutions and compete with the Issuer in providing financial and related services.

Moreover, the Korean commercial banking sector is undergoing significant consolidation. The number of nationwide commercial banks in Korea has decreased from 16 as of December 31, 1997, to six as of December 31, 2019. A number of significant mergers and acquisitions in the financial industry have taken place in Korea in recent years, including Hana Financial Group's acquisition of a controlling interest in Korea Exchange Bank in 2012 and the subsequent merger of Hana Bank into Korea Exchange Bank in 2015. In addition, as part of the Government's plans to privatize Woori Finance Holdings (the financial holding company of Woori Bank), certain subsidiaries of Woori Finance Holdings were sold to other financial institutions and Woori Finance Holdings itself was merged into Woori Bank in 2014, which established a new financial holding company, Woori Financial Group Inc., in January 2019. The Issuer expects that consolidation in the Korean financial industry will continue. The financial institutions resulting from such consolidation may, by virtue of their increased size and business scope, provide significantly greater competition for the Issuer. The Issuer and its parent, KB Financial Group, intend to review potential acquisition opportunities as they arise. The Issuer cannot guarantee that it will not be involved in any future mergers or acquisitions.

Information Technology

The Issuer regularly implements various IT system-related initiatives and upgrades. The Issuer believes that continuous improvement of its IT systems is crucial in supporting its operations and management and providing high-quality customer service. Accordingly, the Issuer continues to upgrade and improve its systems through various activities, including projects to develop next-generation banking systems, further strengthen system security and timely develop and implement various new IT systems and services that support its business operations and risk management activities.

The Issuer's mainframe-based banking IT systems are designed to ensure continuity of services even where there is a failure of the host data center due to a natural disaster or other accidents by utilizing backup systems in disaster recovery data centers. In addition, through the implementation of Parallel Sysplex, a "multi-CPU system," the Issuer's banking systems are designed and operated to be able to process transactions without material interruption in the event of CPU failure. In 2010, the Issuer launched a next-generation banking IT system that is designed to ensure greater reliability in financial transactions and allow more efficient development of new financial products. The Issuer also launched a new disaster recovery system to ensure continuity of operations. In addition, the Issuer implemented new technologies, including Multi-Channel Integration and Enterprise Application Integration systems, to standardize its IT system and better manage IT system operational risk.

The integrity and the ability of the Issuer's IT systems to withstand potential catastrophic events (such as natural calamities and internal system failures) are crucial to the Issuer's continuing operations. The

Issuer currently tests its disaster recovery systems on a quarterly basis. For additional information, see "Risk Management—Operational Risk Management."

Property, Plant and Equipment

The Issuer's registered office and headquarters is located at 26, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul 07331, Korea. The following table presents information regarding certain of the Issuer's properties in Korea:

Type of facility/building	Location	Area (square meters)
Registered office and headquarters	Yeongdeungpo-gu, Seoul	5,354
Training institute	Ilsan	207,560
Training institute	Daecheon	4,158
Training institute	Sokcho	15,559
Training institute	Cheonan	196,649
IT center	Gangseo-gu, Seoul	13,116
IT center	Yeouido, Seoul	5,928
IT center	Yeouido, Seoul	2,006
IT center	Gimpo	13,144
Support center	Seongbuk-gu, Seoul	9,939

In addition, the Issuer entered into a land purchase agreement in March 2016 to purchase a site of approximately 4,727 square meters located in Yeouido, Seoul, on which it plans to construct a new headquarters building (with a floor space of approximately 67,683 square meters) by 2020.

As of the date of this Offering Circular, the Issuer had a countrywide network of 1,051 branches and sub-branches. Approximately one-fifth of these facilities are housed in buildings owned by the Issuer, while the remaining branches are leased properties. See "—Organizational Structure" for a list of the Issuer's overseas subsidiaries and see "—Capital Markets Activities and International Banking— International Banking" for a list of the Issuer's overseas branches and representative and liaison offices in operation as of December 31, 2019. Kookmin Bank International Ltd., previously one of the Issuer's operating subsidiaries, was converted to a branch in London in May 2018. Kookmin Bank, Gurgaon Representative Office in India converted to Kookmin Bank, Gurugram Branch in February 2019. Kookmin Bank, Hanoi Representative Office is currently being liquidated. Lease terms are generally from two to three years and seldom exceed five years. The Issuer does not own any material properties outside of Korea.

Employees

The following table sets forth information, for the periods indicated, regarding the Issuer's employees:

	As of December 31,		
	2017	2018	2019
Full-time employees ⁽¹⁾	16,925	16,802	16,413
Contractual employees	1,422	1,309	1,545
Managerial employees	9,799	9,615	9,276
Members of Korea Financial Industry Union	14,501	14,667	14,658

Note:

The Issuer considers its relations with its employees to be satisfactory. Every year, the Issuer's labor union and the Issuer's management negotiate and enter into a new collective bargaining agreement and negotiate annual wage adjustments.

The Issuer's compensation packages consist of base salary and base bonuses. The Issuer also provides performance-based compensation to employees and management. Executive officers, heads of regional headquarters and employees in positions that require professional skills, such as fund managers and dealers, are compensated depending on their individual annual performance evaluation. The Issuer has also implemented a profit-sharing system in order to enhance the performance of its employees. Under

⁽¹⁾ Excluding executive officers.

this system, the Issuer pays bonuses to its employees, in addition to the base salary and depending on the Issuer's annual performance.

In January 2016, KB Financial Group implemented a "mileage stock" program, pursuant to which it may grant to the Issuer's and its subsidiaries' employees performance-based cash payments that correspond to the market value of KB Financial Group's common stock. The accumulated "miles" of common stock can be exercised for cash during a two-year period commencing on the one-year anniversary of the grant date.

The Issuer provides a wide range of benefits to its employees, including its executive directors. These benefits include medical insurance, employment insurance, workers compensation, employee and spouse life insurance, free medical examinations, child tuition and fee reimbursement, disabled child financial assistance and reimbursement for medical expenses.

In accordance with the National Pension Act, the Issuer contributes an amount equal to 4.5% of employee wages, and each employee contributes 4.5% of his or her wages, into each employee's personal pension account. In addition, in accordance with the Guarantee of Worker's Retirement Benefits Act, the Issuer has adopted retirement pension plans for its employees. Contributions under the retirement pension plans are deposited annually into a financial institution, and an employee may elect to receive a monthly pension or a lump-sum amount upon retirement. The Issuer's retirement pension plans are provided in the form of a defined benefit plan and a defined contribution plan. The defined benefit plan guarantees a certain payout at retirement, according to a fixed formula based on the employee's average salary and the number of years for which the employee has been a plan member. The defined contribution plan, in which the employer's contribution is determined in advance based on one-twelfth of an employee's total annual pay, is managed directly by the employees. Under Korean law, the Issuer may not terminate the employment of full-time employees except under certain limited circumstances. However, the Issuer regularly invites its employees to apply for its early retirement programs, which provide for varying amounts of severance pay based on the duration of time an employee has worked for the Issuer, along with several other key features. The Issuer believes that such programs enhance its productivity and efficiency by improving its labor structure.

In June 2009, KB Financial Group established an employee stock ownership association. All of the Issuer's employees are eligible to participate in this association. Members of KB Financial Group's employee stock ownership association have pre-emptive rights to acquire up to 20% of the shares issued in public offerings by KB Financial Group pursuant to the FSCMA.

Employees of the Issuer have been eligible to participate in its employee stock ownership association, which will be terminated once all of KB Financial Group's common stock held by the association (which the association received following the transfer of the Issuer's shares held by it as a result of the comprehensive stock transfer pursuant to which KB Financial Group was established) has been distributed to the relevant employees of the Issuer at the request of such employees following the expiration of the required holding periods. As of December 31, 2019, the Issuer's employee stock ownership association held 306,615 shares of KB Financial Group common stock.

Legal Proceedings

Excluding the legal proceedings discussed below, the Issuer is not a party to any legal or administrative proceedings and no proceedings are known by the Issuer to be contemplated by governmental authorities or third parties, which, if adversely determined, may have a material adverse effect on the Issuer's financial condition or results of operations.

In June 2010, Fairfield Sentry Limited ("Fairfield"), which is currently in liquidation and whose assets were directly or indirectly invested with Bernard L. Madoff Investment Securities LLC ("BLMIS"), filed a lawsuit in the Supreme Court of the State of New York against the Issuer, which acted as a trustee bank for its clients who invested in Fairfield. Fairfield seeks recovery of approximately US\$42 million paid to the Issuer by its clients in connection with share redemptions on the ground that such payments were made by mistake, based on inflated values resulting from BLMIS' fraud. In September 2010, the case was transferred to the United States Bankruptcy Court for the Southern District of New York (the "Bankruptcy Court"), which in turn ordered that the case be returned to a state court in September 2011 but then stayed the lawsuit before it was sent to state court. While the case was stayed, the Bankruptcy

Court issued an opinion in December 2018 holding that the claims against the Issuer were deficiently pleaded and thus should be dismissed. In July 2019, the Bankruptcy Court issued an order to the effect that the case would proceed in a federal court, instead of returning to a state court. Fairfield has appealed the Bankruptcy Court's dismissal to the United States District Court for the Southern District of New York (the "District Court"). Legal arguments are currently being filed and the District Court is expected to rule on the appeal during 2020. Fairfield has filed similar actions against numerous other fund investors to seek recovery of redemption payments.

In May 2012, the trustee appointed for the liquidation of BLMIS filed a lawsuit against the Issuer in the Bankruptcy Court. The trustee seeks recovery of approximately US\$42 million, the amount of funds that were allegedly redeemed by the Issuer from Fairfield between June 2004 and January 2006. The trustee alleges that Fairfield was a "feeder fund" that invested in BLMIS and that redemptions from such BLMIS feeder fund are avoidable and recoverable under the U.S. Bankruptcy Code and New York law. The Bankruptcy Court issued an order to dismiss the case during the pleading stage of the litigation in March 2017, and the trustee appealed such decision to the United States Court of Appeals for the Second Circuit (the "Second Circuit"), which reversed the dismissal and vacated the judgment in February 2019. The Issuer, along with other defendants, filed a motion asking the Second Circuit to reconsider its ruling and, after such motion was denied, filed a petition asking the United States Supreme Court to accept an appeal of the Second Circuit's ruling, which petition is currently pending. The trustee has filed similar clawback actions against numerous other institutions.

In November 2012, the Issuer filed a lawsuit against the Export-Import Bank of Korea and other creditor financial institutions comprising the creditors' committee of a Korean shipbuilding company which was a borrower of the Issuer and was in workout. The Issuer voted against extending new credit to such borrower and exercised its appraisal rights. The Issuer sought \text{\club 103} billion as compensation for damages and payment of the purchase price of debt held by the Issuer. In November 2012, the Export-Import Bank of Korea and other creditor financial institutions of the borrower filed a counter lawsuit against the Issuer seeking \text{\club 46} billion in damages in connection with the borrower's debt restructuring plan. In August 2014, the Seoul Central District Court ruled partially in favor of the Issuer in its lawsuit against the Export-Import Bank of Korea and other creditor financial institutions of the borrower, but ruled against the Issuer in the counter lawsuit brought against the Issuer. Both cases were appealed to the Seoul High Court, which dismissed the appeals in February 2016. Both cases were further appealed to the Supreme Court of Korea, which dismissed the appeals in February 2019.

In February 2018, pursuant to a request by the FSS, the Supreme Prosecutors' Office of Korea commenced an investigation into alleged irregularities in hiring practices at certain Korean banks, including the Issuer. In May 2018, the prosecutors charged four current and former executive officers and employees of the Issuer with obstruction of business and violation of the Act on the Equal Employment for Both Sexes, for violating certain regulations relating to the evaluation and hiring of certain individuals in 2015 and 2016. In October 2018, the Seoul Southern District Court sentenced such executive officers and employees to probation and ordered the Issuer to pay a fine in the amount of \$\psis\$5 million. The individuals and the Issuer have since appealed such ruling.

In May 2008, the Issuer, in its capacity as a trustee for, and pursuant to instructions from, an asset management company, facilitated the investment of \(\foathbf{W}53.9\) billion (in the form of a loan) by a real estate fund managed by such asset management company to a real estate developer in Cambodia. Upon the failure of such real estate developer to repay such loan in 2012, the Issuer obtained four orders of provisional attachment from 2014 to 2017 with respect to properties in Cambodia owned by the real estate developer, in accordance with instructions from the asset management company. The property that had been subject to the first provisional attachment was changed in February 2014, and the second to fourth provisional attachments were canceled in February 2017. Subsequently, the real estate developer filed two lawsuits against the Issuer in Cambodian courts for damages in the amount of US\$12.1 million and US\$44.4 million, respectively, on the ground that the provisional attachments were excessive. The real estate developer has since withdrawn both lawsuits upon receipt of a partial payment from the Issuer, the amount of which is considered immaterial.

ASSETS AND LIABILITIES

The tables below set out selected financial highlights regarding the Issuer's assets and liabilities, on a consolidated basis, except as otherwise indicated.

Loan Portfolio

Loan Types

The following table presents, on a separate basis, loans by type as of the dates indicated. Except where specified otherwise, all loan amounts stated below are before deduction of allowances for loan losses. Total loans reflect the Issuer's loan portfolio, including past due amounts, on a separate basis.

	A	As of December 31,			
	2017	2018	2019		
	(iı	n billions of Wo	on)		
Domestic:					
Corporate					
SME	₩ 90,265	₩ 99,142	₩104,540		
Large corporate ⁽¹⁾	28,815	32,527	34,292		
Retail					
Mortgage and home equity	95,354	100,972	105,296		
Other consumer	34,870	40,782	43,111		
Total domestic	249,304	273,424	287,239		
Foreign	2,204	3,095	5,501		
Total gross loans	₩251,508	₩276,519	₩292,740		

Note:

Twenty Largest Exposures by Borrower

As of December 31, 2019, on a separate basis, the Issuer's 20 largest exposures totaled \$14,330 billion and accounted for 3.9% of its total exposures. The following table sets forth, on a separate basis, the Issuer's total exposures to these top 20 borrowers or issuers as of December 31, 2019:

	Loa	ans			Guarantees	
	Won	Foreign	Equity	Debt	and	Total
Company ⁽¹⁾	Currency	Currency	Securities	Securities	Acceptances	Exposures
			(in billi	ons of Won))	
Samsung Securities Co., Ltd	₩1,500	₩ —	₩ —	₩ —	₩ —	₩1,500
Shinhan Investment Corp	1,261	_	_	_	_	1,261
LG Display Co., Ltd	_	232	_	4	810	1,046
Hyundai Motor Company	_	947	_	_	37	984
Hyundai Steel Co., Ltd	263	399	_	225	12	899
SK Corp	250	104	459	40	10	863
KEB Hana Bank	206	391	_	265	_	862
Hyundai Heavy Industries Co., Ltd	_	99	_	_	702	801
Hyundai Capital Services Inc	510	_	_	189	_	699
Lotte Property & Development Co.,						
Ltd					579	579
POSCO		1	373	201	_	575
Mirae Asset Daewoo Co., Ltd	500	_	_	53	_	553
Meritz Investment & Securities	454	69	_	_	_	523
LG Electronics Inc	380	_	_	98	20	498
ICBC	_	402	_	84	_	486

⁽¹⁾ Large corporate loans include loans to the Government or Government-related agencies (including KDIC).

	Lo	ans			Guarantees	
Company ⁽¹⁾	Won Currency	Foreign Currency	Equity Securities	Debt Securities	and Acceptances	Total Exposures
			(in billi			
Samsung Heavy Industries Co., Ltd	_	54	_	_	418	472
Goldman Sachs Group	_	_	_	443	_	443
Shin Young Securities Co., Ltd	438	_	_	_	_	438
NH Investment & Securities Co., Ltd	397	31	_	_	_	428
S-Oil Corporation	89	301	_	30	_	420
Total	₩6,248	₩3,030	₩832	₩1,632	₩2,588	₩14,330

Note:

As of December 31, 2019, 12 of these top 20 borrowers or issuers were companies belonging to the 30 largest highly-indebted business groups among chaebols in Korea designated as such by the FSS based on their outstanding exposures.

Exposure to Chaebols

As of December 31, 2019, on a separate basis, 6.2% of the Issuer's total exposure was to the 30 largest highly-indebted business groups among chaebols in Korea designated as such by the FSS based on their outstanding exposures. The following table shows, on a separate basis, the Issuer's total exposures to the ten chaebol groups to which it has the largest exposure as of December 31, 2019:

	Lo	ans				
Chaebol	Won Currency	Foreign Currency	Equity Securities	Debt Securities	Guarantees and Acceptances	Total Exposures
			(in billi	ons of Won)		
Hyundai Motor	₩1,112	₩1,701	₩ —	₩ 486	₩ 551	₩ 3,850
Samsung	1,707	609	105	152	669	3,242
SK	599	627	459	715	182	2,582
Lotte	366	261	_	185	633	1,445
LG	412	251	_	350	948	1,961
Hanwha	852	264	4	240	159	1,519
Hyundai Heavy Industries	54	243	_	60	1,081	1,438
POSCO	101	40	373	278	109	901
GS	96	25	_	265	209	595
DSME	37	56	30		215	338
Total	₩5,336	₩4,077	₩971	₩2,731	₩4,756	₩17,871

⁽¹⁾ Excludes exposures to Government-owned or -controlled enterprises or financial institutions, including the BOK, Korea Housing Finance Corporation, Korea Land & Housing Corporation, KDIC and the Korea Development Bank.

Loan Concentration by Industry

The following table presents, on a separate basis, the aggregate balance of the Issuer's domestic and foreign corporate loans, by industry concentration, as of the dates indicated:

	As of December 31,							
	2017		2018		2019			
Industry	Amount	%	Amount	%	Amount	%		
		(in billio	ns of Won, exc	ept percen	tages)			
Services	₩ 52,525	43.3%	₩ 58,908	43.6%	₩ 62,474	43.2%		
Manufacturing	38,076	31.4	40,971	30.3	41,584	28.7		
Wholesale and retail	14,124	11.7	16,012	11.9	17,594	12.2		
Financial institutions	9,464	7.8	11,356	8.4	14,085	9.7		
Construction	2,526	2.1	2,628	1.9	2,671	1.8		
Public sector	817	0.7	821	0.6	1,162	0.8		
Others	3,672	3.0	4,490	3.3	5,143	3.6		
Total	₩121,204	100.0%	₩135,186	100.0%	₩144,713	100.0%		

Maturity Analysis

The Issuer typically rolls over its working capital loans and unsecured consumer loans (other than those payable in instalments) after it conducts its normal loan review in accordance with its loan review procedures. Working capital loans may generally be extended on an annual basis for an aggregate term of five years and unsecured consumer loans may generally be extended for another term of up to 12 months for an aggregate term of ten years.

The following table sets out, on a separate basis, the scheduled maturities (time remaining until maturity) of the Issuer's loan portfolio as of December 31, 2019. The amounts disclosed are before deduction of allowances for loan losses:

	1 Year or Less	Over 1 year But Not More Than 5 Years	Over 5 Years	Total
		(in billions	of Won)	
Domestic:				
Corporate				
SMEs	₩ 77,198	₩22,683	₩ 4,660	₩104,540
Large corporate	23,753	7,876	2,663	34,292
Total corporate	100,951	30,559	7,323	138,832
Retail				
Mortgage and home equity	12,983	14,453	77,860	105,296
Other consumer	30,070	8,327	4,714	43,111
Total retail	43,053	22,780	82,574	148,407
Total domestic	144,004	53,339	88,897	287,239
Foreign	2,662	2,267	571	5,501
Total gross loans	₩146,666	₩55,606	₩90,468	₩292,740

Interest Rate Sensitivity

The following table shows, on a separate basis, the total amount of loans due after one year which have fixed interest rates and variable or adjustable interest rates as of December 31, 2019:

	As of December 31, 2019
	(in billions of Won)
Fixed rate ⁽¹⁾	₩ 30,400
Variable or adjustable rates ⁽²⁾	115,674
Total gross loans	₩146,074

Notes:

- (1) Fixed rate loans are loans for which the interest rate is fixed for the entire term.
- (2) Variable or adjustable rate loans are loans for which the interest rate is not fixed for the entire term.

For additional information regarding the Issuer's management of interest rate risk, see "Risk Management—Market Risk Management."

Credit Exposures to Companies in Workout, Restructuring or Rehabilitation

Workout is a voluntary procedure through which the Issuer, together with the borrower and other creditors, seeks to restore the borrower's financial stability and viability. Previously, workouts were regulated under a series of Corporate Restructuring Promotion Acts, which last expired on June 30, 2018. In September 2018, the National Assembly of Korea adopted a new Corporate Restructuring Promotion Act, which became effective in October 2018 and is scheduled to expire in October 2023.

Under the new Corporate Restructuring Promotion Act, creditors of a financially troubled borrower may participate in a creditors' committee, which is authorized to prohibit such creditors from exercising their rights against the borrower, commence workout procedures and approve or make revisions to a reorganization plan prepared by the lead creditor bank, the borrower and external experts. The composition of the creditors' committee is determined at the initial meeting of the committee by the approval of creditors holding not less than 75% of the borrower's total outstanding debt held by creditors who were notified of the initial meeting of the committee. Although creditors that are not financial institutions or hold less than 1% of the total outstanding debt of the borrower need not be notified of the initial meeting of the creditors' committee, if such creditors wish to participate, they may not be excluded. Any decision of the creditors' committee required the approval of creditors holding not less than 75% of the total outstanding debt of the borrower. However, if a single creditor holds 75% or more of the borrower's total outstanding debt held by the creditors comprising the creditors' committee, any decision of the creditors' committee requires the approval of not less than 40% of the total number of creditors (including such single creditor) comprising the committee. An additional approval of creditors holding not less than 75% of the secured debt is required with respect to the borrower's debt restructuring. Once approved, any decision made by the creditors' committee is binding on all creditors of the borrower, with the exception of those creditors that are excluded by a resolution of the committee at its initial meeting and those who exercise their right to request that their claims be purchased. Creditors that vote against commencement of workout, approval or revision of the reorganization plan, debt restructuring, granting of new credit, extension of the joint management process or other resolutions of the committee have the right to request the creditors that vote in favor of such matters to purchase their claims at a mutually agreed price. In the event that the parties are not able to agree on the terms of purchase, a coordination committee consisting of experts would determine the terms. The creditors that oppose a decision made by the coordination committee may request a court to change such decision.

Upon approval of a workout plan, a credit exposure is initially classified as precautionary or lower and thereafter cannot be classified higher than precautionary with limited exceptions. If a corporate borrower is in workout, restructuring or rehabilitation, the Issuer takes the status of the borrower into account in valuing the Issuer's loans to and collateral from that borrower for purposes of establishing the Issuer's allowances for credit losses.

Korean law also provides for corporate rehabilitation proceedings, which are court-supervised procedures to rehabilitate an insolvent company. Under these procedures, a restructuring plan is adopted at a meeting of interested parties, including creditors of the company. Such restructuring plan is subject to court approval.

As of December 31, 2019, on a separate basis, the Issuer's loans and guarantees to companies that were in workout, restructuring or rehabilitation amounted to \(\fomage 401\) billion or 0.1% of the Issuer's total loans and guarantees, most of which were classified as impaired.

The following table shows, on a separate basis, the Issuer's ten largest credit exposures that were in workout, restructuring or rehabilitation as of December 31, 2019:

	Loa	ans		Guarantees			Amounts
Company	Won Currency	Foreign Currency	Equity Securities	Debt Securities	and Acceptances	Total Exposures	Classified as Impaired Loans
				(in billion	s of Won)		
Orient Shipyard Co., Ltd	₩ 49	₩ 2	₩ 0	₩—	₩—	₩ 51	₩ 51
Dong Il Construction Co.,							
Ltd	40	_	_	_	_	40	40
Dreample Co., Ltd	_	16	_	_	_	16	16
Ubcell Co., Ltd	13	_	_	_	1	14	13
Trans-Pacific Resources Co.,							
Ltd	_	10	_	_	3	13	10
Shinsegae Tomboy Inc	_	_	0	_	12	12	_
Donghwa IND Co., Ltd	10	_	_	_	0	10	10
Woojeon Co., Ltd	_	10	_	_	_	10	10
Grand Hotel Pyeongtaek							
Lake	9	_	_	_	_	9	_
Goli Co., Ltd	9		0			9	
Total	₩130	₩38	₩ 0	₩—	₩16	₩184	₩150

Provisioning Policy

Under Korean IFRS 1109, which replaced Korean IFRS 1039, for annual periods commencing on or after January 1, 2018, the Issuer establishes allowances for credit losses based on expected credit losses instead of incurred losses (as was the case under Korean IFRS 1039) by assessing changes in expected credit losses and recognizing such changes as impairment loss (or reversal of impairment loss) in profit or loss. According to three stages of credit risk deterioration since initial recognition under Korean IFRS 1109, the allowance required to be established with respect to a loan or receivable is (i) the amount of the expected 12-month credit loss for stage 1 loans or receivables and (ii) the expected lifetime credit loss for stages 2 and 3 loans or receivables.

For periods prior to 2018, under Korean IFRS 1039, the Issuer assessed individually significant loans on a case-by-case basis and other loans on a collective basis. In addition, if the Issuer determined that no objective evidence of impairment existed for a loan, it included such loan in a group of loans with similar credit risk characteristics and assessed them collectively for impairment regardless of whether such loan was significant. For individually significant loans, allowances for loan losses were recorded if objective evidence of impairment existed as a result of one or more events that occurred after initial recognition. For collectively assessed loans, the Issuer based the level of allowances for loan losses on its evaluation of the risk characteristics of such loans, taking into account such factors as historical loss experience, the financial condition of the borrowers and current economic conditions.

If additions or changes to the allowances for loan losses are required, then the Issuer records a provision for loan losses, which is included in impairment losses on credit loss and treated as a charge against current income. Credit exposures that the Issuer deems to be uncollectible, including actual loan losses, net of recoveries of previously charged-off amounts, are charged directly against the allowances for loan losses.

The Issuer generally considers the following loans to be impaired loans:

- loans that are past due by 90 days or more;
- loans that are subject to legal proceedings related to collection;
- loans to a borrower that has received a warning from the Korea Federation of Banks indicating that such borrower has exhibited difficulties in making timely payments of principal and interest;
- loans to corporate borrowers that are rated C or D according to the Issuer's internal credit ratings for large companies or SMEs;
- loans related to refinancing for a borrower that exhibited difficulties making timely payments of principal and interest on an existing loan; and
- loans related to debt restructuring.

The Issuer regularly evaluates the adequacy of the overall allowances for loan losses and the Issuer believes that the allowances for loan losses reflect its best estimate of probable loan losses as of each balance sheet date.

Loan Aging Schedule

The following table shows, on a separate basis, the Issuer's loan aging schedule (excluding accrued interest) as of the dates indicated:

As of December 31,	Normal Amount	%	Amount Past Due 1-3 Months	%	Amount Past Due 3-6 Months	%	Amount Past Due 6 Months or More	%	Total Amount
			(in billi	ons of V	Von, except p	ercenta	iges)		
2017	₩250,808	99.7%	₩253	0.1%	₩132	0.1%	₩314	0.1%	% ₩251,508
2018	275,838	99.8	288	0.1	207	0.1	185	0.1	276,518
2019	292,029	99.8	279	0.1	217	0.1	215	0.1	292,740

Non-performing Loans

Non-performing loans are defined as loans that are past due by 90 days or more. These loans are generally classified as substandard or below. For further information on the classification of non-performing loans under Korean regulatory requirements, see "—*Regulatory Reserve for Credit Losses*" below.

The following table shows, on a separate basis, certain details of the Issuer's total non-performing loan portfolio as of the dates indicated:

	As c	As of December 31,			
_	2017	2018	2019		
	in billions of \	Won, except p	ercentages)		
Total non-performing loans	₩446	₩392	₩432		
As a percentage of total loans	0.2%	0.1%	0.1%		

The Issuer has also issued securities backed by non-performing loans and collateralized bond obligations. Some of these transactions involve transfers of loans through securitizations where control of the loans has not been surrendered and, therefore, are not treated as sale transactions. Instead, the assets remain on the Issuer's balance sheet with the securitization proceeds treated as secured borrowings.

Analysis of Non-Performing Loans

The following table sets forth, on a separate basis, the Issuer's total non-performing loans by type of borrower as of the dates indicated:

	As of December 31,							
	20	17	201	18	201	19		
	Amount	%	Amount	%	Amount	%		
		(in billions	of Won, e	xcept perce	ntages)			
Domestic:								
Corporate								
SMEs	₩148	33.2%	₩ 188	48.0%	₩ 176	40.8%		
Large corporate	136	30.5	12	3.0	6	1.4		
Total corporate	284	63.7	_200	51.0	182	42.2		
Retail								
Mortgage and home equity	100	22.4	128	32.7	180	41.7		
Other consumer	62	13.9	64	16.3	70	16.1		
Total retail	162	36.3	192	49.0	250	57.8		
Total domestic	446	100.0	392	100.0	432	100.0		
Foreign								
Total non-performing loans	₩446	100.0%	₩392	100.0%	₩432	100.0%		

Top 20 Non-Performing Loans

As of December 31, 2019, the Issuer's 20 largest non-performing loans accounted for, on a separate basis, 17.1% of its total non-performing loan portfolio. The following table shows, on a separate basis, certain information regarding the Issuer's 20 largest non-performing loans as of December 31, 2019:

	Industry	Gross Principal Outstanding	Allowances for Loan Losses ⁽¹⁾
		(in billions of Won)	
Borrower A	Manufacturing	₩17,369	₩ 6,294
Borrower B	Construction	5,450	5,450
Borrower C	Service	4,967	1,268
Borrower D	Manufacturing	4,775	3,859
Borrower E	Manufacturing	4,746	1,654
Borrower F	Service	3,777	122
Borrower G	Manufacturing	3,626	880
Borrower H	Service	3,321	266
Borrower I	Service	2,875	551
Borrower J	Manufacturing	2,696	1,415
Borrower K	Manufacturing	2,691	604
Borrower L	Service	2,460	70
Borrower M	Service	2,355	268
Borrower N	Construction	2,182	15
Borrower O	Service	2,000	19
Borrower P	Others	1,932	81
Borrower Q	Public	1,925	81
Borrower R	Manufacturing	1,804	399
Borrower S	Service	1,800	205
Borrower T	Service	1,460	252
Total		₩74,210	₩23,753

Note:

⁽¹⁾ If the estimated recovery value of collateral for a non-performing loan is sufficient compared to the outstanding loan balance, no allowances for loan losses for such non-performing loan is recorded.

Non-performing Loan Strategy

One of the Issuer's primary objectives is to prevent the Issuer's loans from becoming non-performing. Through the Issuer's corporate credit rating systems, the Issuer believes that it has reduced its risks relating to future non-performing loans. The Issuer's credit rating systems are designed to prevent the Issuer's loan officers from extending new loans to borrowers with high credit risks based on the borrower's credit rating. The Issuer's early warning system is designed to bring any sudden increase in a borrower's credit risk to the attention of the Issuer's loan officers, who then closely monitor such loans. See "Risk Management—Credit Risk Management."

Notwithstanding the above, if a loan becomes non-performing, an officer at the branch level responsible for monitoring non-performing loans will commence a due diligence review of the borrower's assets, send a notice either demanding payment or stating that the Issuer will take legal action and prepare for legal action.

At the same time, the Issuer will also initiate its non-performing loan management process, which begins with:

- identifying loans subject to a proposed sale by assessing the estimated losses from such sale based on the estimated recovery value of collateral, if any, for such non-performing loans;
- identifying loans subject to charge-off based on the estimated recovery value of collateral, if any, for such non-performing loans and the estimated rate of recovery of unsecured loans; and
- on a limited basis, identifying corporate loans subject to normalization efforts based on the cash flow situation of the borrower.

Once the details of a non-performing loan are identified, the Issuer pursues early solutions for recovery. While the overall process is the responsibility of the Issuer's Credit Division, actual recovery efforts on non-performing loans are handled at the operating branch level.

Methods for resolving non-performing loans include the following:

- non-performing loans are managed by the operating branches until such loans are charged off;
- a demand note is dispatched by mail if payment is generally one month past due;
- calls and visits are made by the operating branches to customers encouraging them to make payments;
- borrowers who are past due on payments of interest and principal are registered on the Korea Federation of Issuers' database of non-performing loans;
- for unsecured loans, the loans are transferred to the Issuer's affiliate, KB Credit Information, for collection on a case-by-case basis;
- for secured loans, actions to enforce or protect the security interests (including foreclosure and auction of the collateral) are commenced within four months of such loans becoming past due; and
- charged off loans are given to KB Credit Information for collection, except for loans where the cost
 of collection exceeds the possible recovery or where the statute of limitations for collection has
 expired.

If a loan becomes non-performing, it is managed by an operating branch until such loan is charged off. However, in order to promote speedy recovery on loans subject to foreclosures and litigation, the Issuer's policy is to permit the branch responsible for handling these loans to request one of the Issuer's regional head offices for assistance with litigation proceedings and proceedings related to foreclosure and auction of the collateral.

In addition to making efforts to collect on these non-performing loans, the Issuer also undertakes measures to reduce the level of the Issuer's non-performing loans, which include:

- selling the Issuer's non-performing loans to third parties, including the Korea Asset Management Corporation; and
- entering into asset securitization transactions with respect to the Issuer's non-performing loans.

The Issuer generally expects to suffer a partial loss on loans that it sells or securitizes, to the extent such sales and securitizations are recognized under Korean IFRS as sale transactions.

Allocation and Analysis of Allowances for Loan Losses

The following table presents, on a separate basis, the allocation of the Issuer's allowances for loan losses by loan type as of the dates indicated. The ratio represents, on a separate basis, the percentage of allowances for loan losses in each category to total allowances for loan losses.

	As of December 31,							
	2017		2018		201	9		
	Amount	%	Amount	%	Amount	%		
		(in billio	ns of Won, e	xcept perce	ntages)			
Domestic								
Corporate								
SME	₩ 487	35.1%	₩ 536	35.0%	₩ 500	38.0%		
Large corporate	563	40.6	541	35.3	327	24.9		
Total corporate	1,050	75.7	1,077	70.3	827	62.9		
Retail								
Mortgage and home equity	19	1.4	37	2.4	44	3.3		
Other consumer	299	21.5	408	26.6	430	32.7		
Total retail	318	22.9	445	29.0	474	36.0		
Total domestic	1,368	98.6	1,522	99.3	1,301	98.9		
$Foreign^{(1)}\ \dots \dots \dots \dots \dots \dots$	20	1.4	11	0.7	14	1.1		
Total allowances for loan losses	₩1,388	100.0%	₩1,533	100.0 %	₩1,315	100.0%		

Note:

The following table analyzes, on a separate basis, the Issuer's allowances for loan losses and loan loss experience for each of the periods indicated:

	For the year ended December 31,
	2017
	(in billions of Won, except percentages)
Balance at the beginning of the period	₩1,568
Amounts charged against income	163
Sale	(18)
Gross charge-offs:	
Domestic:	
Corporate	
SME	304
Large corporate	72
Retail	
Mortgage and home equity	5
Other consumer	269
Foreign:	0
Total gross charge-offs	(650)

⁽¹⁾ Consists primarily of loans to corporations.

	For the year ended December 31,
	2017
	(in billions of Won, except percentages)
Recoveries:	
Domestic:	
Corporate	
SME	273
Large corporate	_
Mortgage and home equity	30
Other consumer	107
Foreign:	0
Total recoveries	410
Net charge-offs	(240)
Other charges	(83)
Balance, at the end of the period	₩1,388
Ratio of net charge-offs during the period to average loans outstanding during the period	0.1%

		As of Decem	nber 31, 2018		As of December 31, 2019			
	Financial instruments applying 12-month expected credit losses	Financial in applying lifet credit	ime expected	Total	Financial instruments applying 12-month expected credit losses	Financial in applying lifeti credit	me expected	Total
		Non-impaired	Impaired			Non-impaired	Impaired	
			(in m	illions of Won,	except percen	tages)		
Balance at the beginning of the $period^{(1)}$	₩ 342,707	₩ 419,159	₩ 877,784	₩1,639,650	₩ 362,742	₩ 452,643	₩ 717,442	₩1,532,827
Amounts charged against income	8,005	97,271	16,929	122,205	(17,403)	(18,252)	148,014	112,359
Sale	(321)	(4)	(15,175)	(15,500)	(467)	(4)	(9,676)	(10,147)
Stage transference: Transfer to 12-month expected credit	120.500	(127 (24)	(0.64)		217 (02	(204.166)	(12.517)	
losses	138,588	(137,624)	(964)) —	217,683	(204,166)	(13,517)	_
Transfer to lifetime expected credit losses (non-impaired) Transfer to lifetime expected credit	(124,450)	146,855	(22,405)	_	(194,020)	286,230	(92,210)	_
losses (impaired)	(3,042)	(73,819)	76,861	_	(2,143)	(82,091)	84,234	_
Domestic: Corporate Small and medium sized								
enterprise	_	_	(30,785)	(30,785)	_	_	(16,283)	(16,283)
Large corporate	0	(5)	(198,115)	(198,120)	_	2	(201,250)	(201,248)
Mortgage and home								
equity	_	(1)	(5,034)	(5,035)	_	(1)	(4,499)	(4,500)
Other consumer		(1)	(292,194)	(292,195)	(2)	25	(317,576)	(317,553)
Credit cards		_	_	_	_	_	_	_
Foreign:								
Total gross charge offs		(7)	(526,128)	(526,135)	(2)	26	(539,608)	(539,584)
Recoveries: Domestic: Corporate Small and medium sized								
enterprise	_	_	35,382	35,382	_	_	57,299	57,299
Large corporate Retail	_	_	134,731	134,731	_	_	72,909	72,909
Mortgage and home								
equity		_	8,532	8,532	_	_	2,421	2,421
Other consumer		_	105,813	105,813	_	_	108,552	108,552
Credit cards		_	_	_	_	_	_	_
Foreign:								
Total recoveries			284,458	284,458			241,181	241,181
Net charge offs		(7) 812	(241,670) 26,082) (241,677) 28,148	(2) 432	26 2,985	(298,427) (25,499)	(298,403) (22,082)
Balance at the end of the period	₩ 362,741	₩ 452,643	₩ 717,442	₩1,532,826	₩ 366,822	₩ 437,371	₩ 510,361	₩1,314,554
Ratio of net charge offs during the period to average loans outstanding during the period				0.19				0.1%

Note:

Regulatory Reserve for Credit Losses

If the Issuer's allowances for credit losses are deemed insufficient for regulatory purposes, the Issuer is required to compensate for the difference by recording a regulatory reserve for credit losses, which is segregated within the Issuer's retained earnings. Regulatory reserve for credit losses is not available for distribution to shareholders as dividends. The level of regulatory reserve for credit losses required to be recorded is equal to the amount by which the Issuer's allowances for credit losses are less than the greater of (x) the amount of expected loss calculated using the internal ratings-based approach under Basel III and as approved by the FSS and (y) the required amount of credit loss reserve calculated based on standards prescribed by the FSC. As of December 31, 2019, on a separate basis, the Issuer's regulatory reserve for credit losses was \(\forall 2,404\) billion.

⁽¹⁾ The balance at the beginning of the year ended December 31, 2018 reflects increases in the Issuer's allowance for loan losses (as compared to the balance at the beginning of the year ended December 31, 2017) due to the application of Korean IFRS 1109.

The following tables set forth the FSC's guidelines for the classification of loans and the minimum percentages of the outstanding principal amount of the relevant loans or balances that the credit loss reserve must cover:

Loan Classification	Loan Characteristics
Normal	Loans extended to customers that, based on the Issuer's consideration of their business, financial position and future cash flows, do not raise concerns regarding their ability to repay the loans.
Precautionary	Loans extended to customers that (i) based on the Issuer's consideration of their business, financial position and future cash flows, show potential risks with respect to their ability to repay the loans, although showing no immediate default risk or (ii) are in arrears for one month or more but less than three months.
Substandard	(i) Loans extended to customers that, based on the Issuer's consideration of their business, financial position and future cash flows, are judged to have incurred considerable default risks as their ability to repay has deteriorated; or
	 (ii) the portion that the Issuer expects to collect of total loans (a) extended to customers that have been in arrears for three months or more, (b) extended to customers that have incurred serious default risks due to the occurrence of, among other things, final refusal to pay their debt instruments, entry into liquidation or bankruptcy proceedings, or closure of their businesses, or (c) extended to customers who have outstanding loans that are classified as "doubtful" or "estimated loss."
Doubtful	Loans exceeding the amount that the Issuer expects to collect of total loans to customers that:
	(i) based on the Issuer's consideration of their business, financial position and future cash flows, have incurred serious default risks due to noticeable deterioration in their ability to repay; or
	(ii) have been in arrears for three months or more but less than 12 months.
Estimated loss	Loans exceeding the amount that the Issuer expects to collect of total loans to customers that:
	(i) based on the Issuer's consideration of their business, financial position and future cash flows, are judged to be accounted as a loss because the inability to repay became certain due to serious deterioration in their ability to repay;
	(ii) have been in arrears for 12 months or more; or
	(iii) have incurred serious risks of default in repayment due to the occurrence of, among other things, final refusal to pay their debt instruments,

Loan Classifications	Corporate ⁽¹⁾	Consumer
Normal	0.85% or above	1% or above
Precautionary	7% or above	10% or above
Substandard	20% or above	20% or above
Doubtful	50% or above	55% or above
Estimated loss	100%	100%

liquidation or bankruptcy proceedings or closure of their business.

Note:

⁽¹⁾ Subject to certain exceptions pursuant to the Banking Industry Supervision Regulation of Korea.

Loan Charge-Offs

Basic Principles

The Issuer attempts to minimize loans to be charged off by adhering to a sound credit approval process based on credit risk analysis prior to extending loans and a systematic management of outstanding loans. However, if charge-offs are necessary, the Issuer charges off loans subject to its charge-off policy at an early stage in order to maximize accounting transparency, to minimize any waste of resources in managing loans which have a low probability of being collected and to reduce the Issuer's non-performing loan ratio.

Loans to Be Charged Off

Loans are charged off if they are deemed to be uncollectible by falling under any of the following categories:

- loans for which collection is not foreseeable due to insolvency, bankruptcy, compulsory execution, disorganization, dissolution or the shutting down of the business of the debtor;
- loans for which collection is not foreseeable due to the death or disappearance of the debtor;
- loans for which expenses of collection exceed the collectable amount;
- loans on which collection is not possible through legal or any other means; and
- the portion of loans classified as "estimated loss," net of any recovery from collateral, which is deemed to be uncollectible.

Procedure for Charge-off Approval

In order to charge off corporate loans, an application for a charge-off must be submitted to the Credit Management Department promptly after the corporate loan is classified as estimated loss or deemed uncollectible. The Credit Management Department refers the charge-off application to the Issuer's Branch Audit Department for their review to ensure compliance with the Issuer's internal procedures for charge-offs. Then, the Credit Management Department, after reviewing the application to confirm that it meets relevant requirements, seeks an approval from the FSS for the Issuer's charge-offs, which is typically granted. Once the Issuer receives approval from the FSS, the Issuer must also obtain approval from its senior management to charge off those loans. For accounting purposes, the Issuer recognizes charge-offs of corporate loans under Korean IFRS prior to approval from the FSS.

With respect to unsecured retail loans, the Issuer follows a different process to determine which unsecured retail loans should be charged off, based on the length of time those loans are past due. The Issuer charges off unsecured retail loans deemed to be uncollectible under Korean IFRS.

Treatment of Loans Charged Off

Once loans are charged off, the Issuer classifies them as charged-off loans and removes them from its balance sheet. These loans are managed based on a different set of procedures. The Issuer continues its collection efforts in respect of these loans although loans may be charged off before the Issuer begins collection efforts in some circumstances.

If a collateralized loan is overdue, the Issuer will, typically within one year from the time that such loan became overdue (or after a longer period in certain circumstances), petition a court to foreclose and sell the collateral through a court-supervised auction. If a debtor ultimately fails to repay and the court grants its approval for foreclosure, the Issuer will sell the collateral, net of expenses incurred from the auction.

Investment Portfolio

Investment Policy

The Issuer invests in and trades Won-denominated and, to a lesser extent, foreign currency-denominated securities for its own account to:

- maintain the stability and diversification of the Issuer's assets;
- maintain adequate sources of back-up liquidity to match the Issuer's funding requirements; and
- supplement income from the Issuer's core lending activities.

In making securities investments, the Issuer takes into account a number of factors, including macroeconomic trends, industry analysis, credit evaluation and maturity in determining whether to make particular investments in securities.

The Issuer's investments in securities are also subject to a number of guidelines, including limitations prescribed under the Financial Holding Company Act and the Bank Act. Under these regulations, the Issuer must limit its investments in equity securities and bonds with a maturity in excess of three years (other than monetary stabilization bonds issued by the BOK and national government bonds) to 100% of its total Tier I and Tier II capital amount (less any capital deductions). Generally, the Issuer is also prohibited from acquiring more than 15% of the shares with voting rights issued by any other corporation subject to certain exceptions. Pursuant to the Bank Act, a bank and its trust accounts are prohibited from acquiring the shares of a major shareholder (for the definition of "major shareholder," see "Regulation and Supervision—Legal and Regulatory Framework in Korea—Financial Exposure to Any Individual Customer or Major Shareholder") of that bank in excess of an amount equal to 1% of the sum of the bank's Tier I and Tier II capital (less any capital deductions). Further information on the regulatory environment governing the Issuer's investment activities is set out in "Regulation and Supervision—Legal and Regulatory Framework in Korea—Liquidity" and "Regulation and Supervision—Legal and Regulatory Framework in Korea—Restrictions on Shareholdings in Other Companies."

For the definitions of the three categories of securities the Issuer holds (financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income and financial instruments at amortized cost), see Note 3.5 of the notes to the Issuer's consolidated financial statements for 2017 and 2018 included elsewhere in this Offering Circular. The Issuer also holds limited balances of venture capital securities, non-marketable and restricted equity securities and derivative instruments.

Carrying Amount and Fair Value

The following tables set out the carrying amount and fair value of securities in the Issuer's securities portfolio as of the dates indicated:

	As of December 31,	
	20	17
	Carrying Amount	Fair Value
	(in billion	s of Won)
Available-for-sale financial assets: Equity securities	₩ 4,472	₩ 4,472
Korean treasury securities and government agency securities Debt securities issued by financial institutions Corporate debt securities Asset-backed securities	6,741	2,820 15,839 6,741 2,205
Total available-for-sale financial assets	32,078	32,078
Held-to-maturity financial assets: Debt securities Korean treasury securities and government agency securities	1,303	1,353
Debt securities issued by financial institutions	1,878	1,846
Corporate debt securities	1,361	1,385 4,191
Total held-to-maturity financial assets	8,737	8,770
Financial assets at fair value through profit or loss ⁽¹⁾ : Equity securities	339	339
Korean treasury securities and government agency securities	1,639	1,639
Debt securities issued by financial institutions	3,727	3,727
Corporate debt securities	2,025	2,025
Others	149 360	149 360
Others		74
Total financial assets at fair value through profit or loss		8,313
Financial assets designated at fair value through profit or loss: Derivative linked securities	95	95
Total financial assets designated at fair value through profit or loss	95	95
Total financial assets at fair value through profit or loss		8,409
Total securities	₩49,224	₩49,262

		As of Dec	ember 31,	
	20	18	20)19
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
		(in billion	s of Won)	
Financial assets at fair value through other comprehensive				
income:				
Equity securities	W 1 0 62	W 4 0 62	W 1 0 5 1	XX 4 0 5 4
Stocks	₩ 1,862	-	-	
Equity investments	37	37	40	40
Other equity securities	_			_
Debt securities				
Korean treasury securities and government agency	2.044	2.044	0.472	0.472
securities	2,941	2,941	8,172	8,172
Debt securities issued by financial institutions	16,902	16,902	18,110	18,110
Corporate debt securities	6,971	6,971	9,219	9,219
Asset-backed securities	868	868	616	616
Others				
Total financial assets at fair value through other				
comprehensive income	29,581	29,581	38,111	38,111
Financial assets at amortized cost: Debt securities				
Korean treasury securities and government agency				
securities	545	582	539	577
Debt securities issued by financial institutions	6,246	6,194	7,608	7,617
Corporate debt securities	1,413	1,434	1,754	1,771
Asset-backed securities	4,590	4,614	4,065	4,092
Allowance	(1)		(1)	
Total financial assets at amortized cost	12,793	12,824	13,965	14,056
Financial assets at fair value through profit or loss: Equity securities				
Stocks	83	83	152	152
Other equity securities			_	
Debt securities				
Korean treasury securities and government agency				
securities	1,949	1,949	1,974	1,974
Debt securities issued by financial institutions	4,934	4,934	6,368	6,368
Corporate debt securities	1,897	1,897	1,773	1,773
Asset-backed securities	60	60	100	100
Puttable instruments (investment funds, etc.)	2,341	2,341	2,283	2,283
Derivative linked securities	126	126	161	161
Others	576	576	788	788
Others	79	79	80	80
Total financial assets held for trading/at fair value through				
profit or loss	12,044	12,044	13,678	13,678
Total securities	₩54,418	₩54,450	₩65,754	₩65,845
Total seculities	<u>*** 57,718</u>	*************************************	<u>*** 03,/34</u>	<u>*** 03,043</u>

Note:

⁽¹⁾ Effective as of January 1, 2018, financial assets designated at fair value through profit or loss have been reclassified as financial assets at fair value through profit or loss, without the option for designation of fair value, pursuant to the application of Korean IFRS 1109.

Maturity Analysis

For information regarding the scheduled maturities of the Issuer's securities portfolio and other financial assets as of December 31, 2019, see Note 4.3.3 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

Concentrations of Risk

As of December 31, 2019, the Issuer held the following securities of individual issuers where the aggregate carrying amount of those securities exceeded 10% of the Issuer's total equity at such date. As of December 31, 2019, the Issuer's total equity was \(\pi 29,004\) billion.

	Carrying Amount	Fair Value
	(in billion	s of Won)
Name of issuer:		
The Government	₩ 9,780	₩ 9,818
The BOK	9,576	9,578
Korea Housing Finance Corporation	5,093	5,120
The Korea Development Bank	8,145	8,147
Total	₩32,594	₩32,663

Korea Housing Finance Corporation is owned by the Government and the BOK, and the Korea Development Bank is owned by the Government. The BOK is controlled by the Government.

Funding

The Issuer obtains funding for its lending activities from a variety of sources, both domestic and foreign. The Issuer's principal source of funding is customer deposits. In addition, the Issuer acquires funding through long-term borrowings (comprising debentures and debts), short-term borrowings, including borrowings from the BOK, and call money.

The Issuer's primary funding strategy has been to achieve low-cost funding by increasing the average balances of low-cost retail deposits, in particular demand deposits and time deposits. The Issuer also has focused its marketing efforts on higher net worth individuals, who account for a significant portion of the assets in its retail deposit base.

The Issuer's borrowings consist of issuances of debentures and debt from financial institutions, the Government and government-affiliated funds. The majority of the Issuer's debt is long-term, with maturities ranging from one year to 30 years.

Deposits

Although the majority of the Issuer's deposits are short-term, it has been the Issuer's experience that the majority of the Issuer's depositors generally roll over their deposits at maturity, providing the Issuer with a stable source of funding.

The following table shows the average balances of the Issuer's deposits and the average rates paid on such deposits for the periods indicated:

For the years	ended	December	31,
---------------	-------	----------	-----

			•			
	2017		2018		201	9
	Average Balance ⁽¹⁾	Average Rate Paid	Average Balance ⁽¹⁾	Average Rate Paid	Average Balance ⁽¹⁾	Average Rate Paid
	(in billions of Won, except percentages)					
Demand deposits:						
Non-interest-bearing	₩ 4,117	_	₩ 4,061	_	₩ 3 , 987	_
Interest-bearing	108,834	0.25%	114,056	0.29%	118,621	0.29%
Time deposits	126,364	1.57%	140,590	1.87%	155,070	1.94%
Certificates of deposit	2,908	1.55%	3,090	1.88%	4,818	1.93%
Average total deposits	₩242,223	0.95%	₩261,797	1.15%	₩282,496	1.22%

Note.

For a description of the Issuer's retail deposit products, see "Business—Retail Banking—Deposit-Taking Activities."

Time Deposits and Certificates of Deposit

The following table presents the remaining maturities of the Issuer's time deposits and certificates of deposit which had a fixed maturity in excess of \text{\psi}100 million as of December 31, 2019:

		Certificates of	
	Time Deposits	Deposit	Total
	(in	billions of Wo	n)
Maturing within three months	₩25,777	₩1,053	₩ 26,830
After three but within six months	20,484	736	21,220
After six but within 12 months	47,301	2,408	49,709
After 12 months	3,733		3,733
Total	₩97,295	₩4,197	₩101,492

Long-Term Borrowings

The aggregate amount of contractual maturities of all long-term borrowings (comprising debentures and debt) of the Issuer as of December 31, 2019 was as follows:

	As of December 31, 2019
	(in billions of Won)
Due in the year ended December 31, 2020	₩11,315
Due in the year ended December 31, 2021	5,133
Due in the year ended December 31, 2022	3,556
Due in the year ended December 31, 2023	2,339
Due in the year ended December 31, 2024	2,342
Thereafter	1,805
Gross long-term borrowings	26,490
Fair value adjustments	41
Deferred financing costs	_
Discount	(19)
Total long-term borrowings, net	₩26,512

⁽¹⁾ Average balances are based on daily balances.

Short-Term Borrowings

The following table presents information regarding the Issuer's short-term borrowings (borrowings with an original maturity of one year or less) for the periods indicated:

	As of and for the year ended December 31,			
	2017	2018	2019	
	(in billions o	of Won, except pe	ercentages)	
Call money:				
Year-end balance	₩ 986	₩ 362	₩ 268	
Average balance ⁽¹⁾	3,050	1,780	1,419	
Maximum balance ⁽²⁾	3,447	3,096	3,541	
Average interest rate ⁽³⁾	1.30%	1.85%	1.84%	
Year-end interest rate	1.20-2.20%	2.42-4.70%	2.91-4.30%	
Borrowings from the BOK:(4)				
Year-end balance	1,889	1,673	2,650	
Average balance(1)	1,805	1,766	2,002	
Maximum balance ⁽²⁾	1,935	1,868	2,650	
Average interest rate ⁽³⁾	0.69%	0.70%	0.66%	
Year-end interest rate	0.50-0.75%	0.50-0.75%	0.50-0.75%	
Other short-term borrowings: ⁽⁵⁾				
Year-end balance	₩ 6,791	₩ 10,149	₩ 27,461	
Average balance(1)	7,036	9,267	25,962	
Maximum balance ⁽²⁾	8,840	12,341	29,133	
Average interest rate ⁽³⁾	0.89%	1.58%	1.80%	
Year-end interest rate	0.00-5.12%	0.00-3.94%	0.00-5.55%	

Notes:

- (1) Average balances are based on daily balances.
- (2) Maximum balances are based on month-end balances.
- (3) Average interest rates for the year are calculated by dividing the total interest expense by the average amount borrowed.
- (4) Borrowings from the BOK generally mature within one month for borrowings in Won and six months for borrowings in foreign currencies. These short-term borrowings were secured by securities totaling **\text{W2}**,980 billion as of December 31, 2019.
- (5) Other short-term borrowings include securities sold under repurchase agreements, bills sold, borrowings and debentures. Other short-term borrowings have maturities of one year or less. Securities sold under repurchase agreements were secured by securities totaling \(\forall \)861 billion as of December 31, 2019.

RISK MANAGEMENT

Overview

As a financial services provider, the Issuer is exposed to various risks related to its lending and trading businesses, its funding activities and its operating environment. The Issuer's goal in risk management is to ensure that it identifies, measures, monitors and controls the various risks that arise, and that its organization adheres strictly to the policies and procedures which it has established to address these risks. Under the Issuer's internal regulations pertaining to its capital adequacy ratio and internal standards for risk appetite and internal capital under Basel III, the Issuer identifies the following eight separate categories of risk inherent in its business activities: credit risk, market risk, operational risk, interest rate risk, liquidity risk, credit concentration risk, reputation risk and strategic risk. Of these, the principal risks to which the Issuer is exposed are credit risk, market risk, liquidity risk and operational risk, and it strives to manage these and other risks within acceptable limits.

Organization

The Issuer delegates risk management authority to its Risk Management Committee. The Risk Management Committee measures and monitors the various risks faced by the Issuer and reports to the Issuer's board of directors regarding decisions that it makes on risk management issues. The Risk Management Committee also makes certain strategic risk-related decisions regarding the operations of the Issuer, such as allocating credit risk limits, setting total exposure limits and market risk-related limits and determining which market risk derivatives instruments the Issuer can trade. The major activities of the Risk Management Committee include:

- determining and monitoring risk policies, guidelines, limits and tolerance levels and the level of risk in accordance with group policy established by KB Financial Group;
- reviewing and analyzing the Issuer's risk profile;
- setting limits for and adjusting the risk capital allocation plan and risk levels for each business unit within the Issuer; and
- monitoring compliance with the group-wide risk management policies and practices at the business unit and entity level.

The Risk Management Committee is supported by the Risk Management Council, which serves as the executive decision making body for the Issuer's risk management operations. At the operational level, the Issuer's Risk Management Department and the Credit Group work closely with its business groups to implement risk management strategies, policies and procedures in accordance with the policies set forth by KB Financial Group's Group Risk Management Committee and the risk management strategies determined by the Issuer's Risk Management Committee.

Credit Risk Management

Credit risk is the risk of expected and unexpected losses in the event of borrower or counterparty defaults. Credit risk management aims to improve asset quality and generate stable profits while reducing risk through diversified and balanced loan portfolios. The Issuer determines the creditworthiness of each type of borrower or counterparty through reviews conducted by its credit experts and through its credit rating systems, and the Issuer sets a credit limit for each borrower or counterparty.

The Issuer assesses and manages all credit exposures. The Issuer measures expected losses and economic capital on assets (whether on- or off-balance sheet) that are subject to credit risk management and uses expected losses and economic capital as management indicators. The Issuer manages credit risk by allocating credit risk economic capital limits. In addition, the Issuer controls credit concentration risk exposure by applying and managing total exposure limits to prevent excessive risk concentration to particular industries or borrowers. Credit exposures that the Issuer assesses and manages include loans to borrowers and counterparties, investments in securities, letters of credit, bankers' acceptances, derivatives and commitments. The Issuer's risk appetite, which is the ratio of its required economic capital to its estimated available book capital, is approved by KB Financial Group's Group Risk Management

Committee once a year. Thereafter, the Issuer calculates economic capital every month for each business group and bank-wide based on attributed economic capital in accordance with the risk appetite as approved by the Group Risk Management Committee. The Issuer measures and reports profiles of credit risk on a bank-wide level and by business group regularly to relevant business groups and senior management, including the Risk Management Council and the Risk Management Committee.

The Issuer uses expected default rates and recovery rates to determine the expected loss rate of a borrower or counterparty. The Issuer uses the expected loss rate to make credit related decisions, including pricing, loan approval and establishment of standards to be followed at each level of decision making. These rates are calculated using information gathered from its internal database. With respect to large corporate borrowers, the Issuer also uses information provided by external credit rating services to calculate default rates and recovery rates.

The Issuer's credit risk management processes include:

- establishing credit policy;
- credit evaluation and approval;
- industry assessment;
- total exposure management;
- collateral evaluation and monitoring;
- credit risk assessment;
- early warning and credit review; and
- post-credit extension monitoring.

Credit Evaluation

The Issuer evaluates the ability of all loan applicants to repay their debts before it approves any loans, except for loans fully guaranteed by letters of guarantee issued by the Credit Guarantee Fund and the Korea Technology Credit Guarantee Fund, for loans fully secured by deposits and for other loans similarly guaranteed or secured. The Issuer assigns each borrower or guarantor a credit rating based on the judgment of its experts or scores calculated using the appropriate credit rating system. Factors that the Issuer considers in assigning credit ratings include both financial factors and non-financial factors, such as its perception of a borrower's reliability, management and operational risk and risk relating to the borrower's industry. The credit rating process differs according to the type, size and characteristics of a borrower.

The Issuer uses its internally developed credit rating systems to rate potential borrowers. As the characteristics of each customer segment differ, the Issuer uses several credit rating systems for its customers. The nature of the credit rating system used for a particular borrower depends on whether the borrower is an individual, SOHO, SME or large company. For large companies and SMEs, the Issuer has 17 credit ratings ranging from AAA to D. For retail customers, the Issuer has 13 credit ratings ranging from grade 1 to grade 13.

Based on the credit rating of a borrower, the Issuer applies different credit policies, which affect factors such as credit limit, loan period, loan pricing, loan classification and provisioning. The Issuer also uses these credit ratings in evaluating its bank-wide risk management strategy. Factors the Issuer considers in making this evaluation include the profitability of each company or transaction, performance of each business unit and portfolio management. The Issuer monitors the credit status of borrowers and collects information to adjust its ratings appropriately. If the Issuer changes a borrower's credit rating, the Issuer will also change the credit policies relating to that borrower and it may also change the policies underlying its loan portfolio.

Retail Loan Approval Process

Mortgage Loans and Secured Retail Loans

The Issuer's processing center staff reviews mortgage loans and retail loans secured by real estate or guarantees. Branch staff employees forward loan applications to processing centers. However, in the case of loans secured by deposits with the Issuer, its branch staff approves such loans. The Issuer makes lending decisions based on its assessment of the value of the collateral, debt service capability and the borrower's score generated from its credit scoring systems.

For mortgage loans and loans secured by real estate, the Issuer evaluates the value of the real estate offered as collateral using a database the Issuer has developed that contains information about real estate values throughout Korea. The Issuer also uses information from a third party provider about the real estate market in Korea, which gives the Issuer up-to-date market value information for Korean real estate. In addition, the Issuer's processing center staff employees review the value of real estate provided by the evaluation system to ensure there are no significant discrepancies. The Issuer bases decisions regarding the approval of such loans primarily on the results of its credit scoring systems.

For loans secured by deposits, the Issuer will generally grant loans up to 95% of the deposit amount if the Issuer holds the deposit.

With respect to mortgage loans and secured retail loans, the Issuer screens customers based on various items on its checklist that indicate whether the customer may have deteriorating credit using internal information and rating information from credit bureaus. The Issuer also evaluates debt service capability for eligible customers pursuant to certain checklist items, such as profession, annual income, credit card overdue information, transaction history (with both the Issuer and other financial institutions) and other relevant credit information.

The Issuer generally decides whether to evaluate a loan application within three to five days after recording the relevant information in its credit scoring systems.

Unsecured Retail Loans

The Issuer reviews applications for unsecured retail loans in accordance with its credit scoring systems. These automated systems evaluate loan applications and determine an appropriate pricing for the loan. The major benefits of using a credit scoring system are that it yields uniform results regardless of the user, that it can be used effectively by employees who do not necessarily have extensive experience in credit evaluation and that it can be updated easily to reflect changing market conditions by adjusting how each factor is weighted. The staff at the Issuer's processing centers reviews the results of the credit scoring system based on information input by its branch staff and, if approved, issues the loan.

The Issuer's credit scoring systems take into account factors including borrower's income, assets, profession, age, transaction history (with both the Issuer and other financial institutions) and other relevant credit information. The systems rank each borrower in an appropriate grade and that grade is used as a factor in deciding whether to approve loans as well as to determine loan amounts.

The Issuer generally bases its decisions on the results of its credit scoring systems to evaluate applications. However, a credit officer may overturn the results of the Issuer's credit scoring systems in certain circumstances.

Corporate Loan Approval Process

The Issuer approves corporate loans at different levels of its organization depending on the size and type of the loan, the credit risk level assessed by the credit rating system, whether the loan is secured by collateral and, if secured, the value of the collateral. The lowest level of authority is the branch staff employee, who can approve small loans and loans that have the lowest range of credit risk. Larger loans and loans with higher credit risk are approved by higher levels of authority depending on where they fall in a matrix of loan size and credit risk. Depending on the size and terms of any particular loan or the

credit risk relating to a particular borrower, more than one entity may review the application, although generally loan applications are reviewed only by the entity having corresponding authority to approve the loan.

The Issuer evaluates all of its corporate borrowers by using credit rating systems, except for applicants whose borrowings are fully secured by deposits or applicants who have obtained third-party guarantees from the Government or certain other very highly rated guarantors. See "—*Credit Evaluation*" above.

For owner-operated enterprises (which the Issuer refers to as SOHOs), the Issuer has put in place a credit rating system known as Small Office Home Office Corporate Rating System ("SOHO CRS"). For other small- and medium-sized enterprises, the Issuer has put in place a similar credit rating system known as Corporate Rating System ("CRS"). For large corporations, the Issuer has put in place a similar credit rating system known as Large Corporate Rating System ("LCRS"). For financial institutions, certain non-profit organizations and public institutions, the Issuer has put in place a credit rating system known as Financial Institute, Non-profit, Public Corporate Rating System ("FNP CRS"). The SOHO CRS, the CRS, the LCRS and the FNP CRS models consist of the following four parts:

- *Financial Model*. The financial model uses financial ratios such as stability ratio, profitability ratio and cash flow ratio to make credit determinations.
- Non-financial Model. The non-financial model uses various qualitative and quantitative factors, such as future repayment capability, industry-related risks, management-related risks and operation-related risks, to evaluate borrowers.
- CEO Evaluation Model. The CEO evolution model is relevant for the SOHO CRS in particular, and evaluates the credit information of the individual owner of SOHOs by reviewing such owner's personal information, bank transaction records and external credit ratings.
- *Default Signal Check Model*. The default signal check model checks factors that have low frequency of occurrence but are highly likely to lead to a default in the event of an occurrence. The results of the default signal check model may be used to cap a borrower's credit grade.

Total Exposure Management

The Issuer establishes and manages total exposure limits for industries, chaebols and corporations, as well as certain SMEs, in order to efficiently manage financial assets and to optimize the Issuer's credit portfolio. The Issuer establishes total exposure limits for (i) main debtor groups designated by the FSS, (ii) groups to which the Issuer has total exposure of \text{\club 50} billion or more, (iii) enterprises that belong to a main debtor group or large enterprises, in both cases to which the Issuer has total exposure of \text{\club 40} billion or more, (iv) SMEs to which the Issuer has total exposure of \text{\club 30} billion or more and (v) other groups or individual enterprises designated by the head of the Issuer's Risk Management Group as necessary. The Issuer establishes total exposure limits by reviewing factors such as industry, size, cash flows, financial ratios and credit ratings, while establishing exposure limits for industries by reviewing the sales growth rate and risk concentration for each industry. These total exposure limits are set following approval by the Issuer's Risk Management Council after review by the Credit Risk Management Subcommittee.

The Issuer's maximum exposure limit is within 25% of its Tier I and Tier II capital for a single chaebol, and within 10% of its Tier I and Tier II capital for an individual large corporation.

The Issuer manages and controls exposure limits on a daily basis. The principal system that the Issuer uses for this purpose is the Total Exposure Management System. This system allows the Issuer to monitor and control its total exposure to large corporations, chaebols and industries. The Issuer monitors its exposure to large corporations to which the Issuer has an exposure of \(\formallow\)40 billion or more, individual corporations to which the Issuer has an exposure of \(\formallow\)30 billion or more, and also its exposure to the 128 business groups, which comprise the 30 largest highly-indebted business groups among chaebols in Korea designated as such by the FSS based on their outstanding exposures as well as 98 business groups to which it has exposures (in the form of securities or loans) of \(\formallow\)50 billion or more. The Issuer also monitors its exposure to 37 industries. The Issuer's Total Exposure Management System integrates all of its credit-related risk including credit extended by its overseas branches and affiliates.

The assets subject to the system include all Won-denominated and foreign currency-denominated loans, all assets in trust accounts except specified money trusts, guarantees, trade-related credits, commercial paper, corporate bonds and other securities and derivatives.

Collateral Evaluation and Monitoring System

The Issuer uses the Collateral Evaluation and Monitoring System to manage the liquidation value of collateral it holds. The Collateral Evaluation and Monitoring System is a computerized collateral management system that can be accessed from its headquarters and its branches. Using this system, the Issuer can more accurately assess the actual liquidation value of collateral, determine the recovery rate on its loans and use this information in setting the Issuer's credit risk management and loan policies. The Issuer can monitor the value of all the collateral a borrower provides and the value of that collateral based on its liquidation value. When appraising the value of real estate collateral, which makes up the largest part of the Issuer's collateral, the Issuer consults a regularly updated database provided by a third party that tracks the prices at which various types of real estate in various regions of Korea are sold. The Issuer appraises the value of collateral when it makes a loan, when the loan is due for renewal and when events occur that may change the value of the collateral.

Credit Risk Management and Monitoring

The Issuer's Credit Risk Department manages and regulates the Issuer's loan portfolio policies. The Credit Risk Department also analyzes and monitors the Issuer's loan portfolios and monitors the Issuer's compliance with the applicable limits for credit risk. Moreover, the Credit Risk Department separately manages high-risk products, such as real estate project financing loans and over-the-counter derivative products, by setting appropriate limits.

Credit Review

The Issuer's credit review function is independent of the business groups which manage its assets. The Issuer's Credit Review Department:

- reviews the Issuer's internal credit regulations, policies and systems;
- analyzes the credit status of selected loan assets and verifies the appropriateness of the credit evaluations/approvals made by branches and headquarters; and
- evaluates the corporate credit risk of potentially insolvent companies.

More specifically, the Credit Review Department continuously reviews the financial condition of selected borrowers with respect to their current debt, collateral, business, transactions with related parties and debt service capability. Based on its review, the Issuer may adjust the borrower's credit rating, its lending policy or asset quality classification of the loan provided to the borrower, depending on the applicable circumstances. The Issuer also regularly reviews other aspects of the lending process, including industries and regions in which its borrowers operate and the quality of its domestic and overseas assets. The Issuer's industry reviews focus on growth, stability, competition and ability to adapt to a changing environment. Based on the results of a particular industry review, the Issuer may revise the total exposure limit assigned to that industry and the lending policy for each company within that industry. When a review takes place, the Issuer may adjust not only credit ratings of its borrowers based on a variety of factors, but also asset quality classification, credit limits and applied interest rates or its credit policies. Credit review results are reported to the Issuer's chief risk officer and the Risk Management Committee on a quarterly basis.

The Credit Review Department also conducts on-site reviews of selected branches and related credit analysis centers which are experiencing increasing delinquency ratios and bad debts. During these visits, the loan processes are examined and improvement plans and appropriate follow-up measures are recommended.

Also, based on guidelines provided by the FSS to all Korean banks, the Issuer operates a corporate credit risk assessment program to facilitate the identification of weak companies and possible commencement

of corporate restructuring. Through this program, the Issuer, together with other banks, is able to detect symptoms of financially troubled companies at an early stage, assess related credit risk and support the normalization of companies that are likely to turnaround through a workout process, or seek to liquidate those companies that are not likely to recover.

The Credit Review Department also analyzes issues related to credit risk and provides information necessary for the formulation of effective credit policies and strategies and for effective credit risk management.

Market Risk Management

The major risk to which the Issuer is exposed is interest rate risk on debt instruments and interest-bearing securities and, to a lesser extent, stock price risk and foreign exchange risk. The financial instruments that expose the Issuer to these risks are securities and financial derivatives. The Issuer is also exposed to interest rate risk and liquidity risk in its banking book. The Issuer divides market risk into risks arising from trading activities and risks arising from non-trading activities.

The Issuer's Risk Management Council establishes overall market risk management principles. It has delegated the responsibility for the market risk management for trading activities to the Market Risk Management Subcommittee, which is chaired by its chief risk officer. This subcommittee meets on a regular basis each month and as required to respond to developments in the market and the economy. Based on the policies approved by the Risk Management Council, the Market Risk Management Subcommittee reviews and approves reports as required that include trading profits and losses, position reports, limit utilization, sensitivity analysis and value at risk ("VaR") analysis results for the Issuer's trading activities.

The Risk Management Council is responsible for interest rate and liquidity risk management of non-trading activities. It meets on a regular basis and as required to respond to developments in the market and the economy. Members of the Risk Management Council, acting through the Issuer's Risk Management Department, review the Issuer's interest rate and liquidity gap position monthly, as well as the business profile and its impact on asset and liability management.

To ensure adequate interest rate and liquidity risk management, the Issuer has assigned the responsibilities for its asset and liability risk management to its Risk Management Department in its Risk Management Group, which monitors and reviews the asset and liability operating procedures and activities of its Financial Planning Department and Asset and Liability Risk Management Department, and independently reports to the management on the related issues.

Market Risk Management for Trading Activities

The Issuer's trading activities consist of:

- trading activities for its own account to realize short-term trading profits in Won-denominated debt and equities markets and foreign exchange markets based on the Issuer's short-term forecast of changes in the market situation; and
- trading activities involving derivatives, such as swaps, forwards, futures and option transactions, to realize profits primarily from selling derivative products to the Issuer's customers and to hedge market risk incurred from those activities.

The Issuer uses derivative instruments to hedge its market risk and, to a limited extent, to make profits by trading derivative products within acceptable risk limits. The principal objective of its hedging strategy is to manage the Issuer's market risk within established limits. The Issuer uses the following hedging instruments to manage relevant risks:

- to hedge interest rate risk arising from its trading activities, the Trading/Capital Markets Department occasionally uses interest rate futures (Korea Treasury Bond Futures) and interest rate swaps;
- to hedge stock price risk arising from its trading activities, the Trading/Capital Markets Department selectively uses stock index futures;

- to hedge interest rate risk and foreign exchange risk arising from its foreign currency-denominated asset and liability positions as well as its trading activities, the Treasury Unit within the Capital Markets Department use interest rate swaps, cross-currency interest rate swaps, foreign exchange forwards and futures, Euro-dollar futures and currency options; and
- to change the interest rate characteristics of certain assets and liabilities after the original investment or funding, the Issuer uses swaps. For example, depending on the market situation, the Issuer may choose to obtain fixed rate funding instead of floating rate funding if it believes that the terms are more favorable, which the Issuer can achieve by entering into interest rate swaps.

The Issuer generally manages its market risk at the portfolio level. To control its exposure to market risk, the Issuer uses internal capital limits set by its Risk Management Council for itself and its groups and departments, VaR, position and stop loss limits set by the Risk Management Council for itself and its groups, and VaR, position, stop loss and sensitivity limits (PVBP, Delta, Gamma, Vega) set by the Issuer's Market Risk Management Subcommittee for its departments. The Issuer prepared its risk control and management guidelines for derivative trading based on the regulations and guidelines promulgated by the FSS.

In addition, the Issuer has implemented internal processes which include a number of key controls designed to ensure that fair value is measured appropriately, particularly where a fair value model is internally developed and used to price a significant product. See Notes 3.3 and 6 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular. For example, each year the Risk Management Department reviews the existing pricing and valuation models, with a focus on their underlying modelling assumptions and restrictions, to assess the appropriateness of their continued use. In consultation with the Trading Department, the Risk Management Department recommends potential valuation models to the Fair Value Evaluation Committee. Upon approval by the Fair Value Evaluation Committee, the selected valuation models are reported to the Market Risk Management Subcommittee.

The Issuer monitors market risk arising from trading activities of its business groups and departments. The market risk measurement model the Issuer uses for both its Won-denominated trading operations and foreign currency-denominated trading operations is implemented through its integrated market risk management system, called Adaptiv, which enables the Issuer to generate consistent VaR numbers for all trading activities.

VaR analysis. The Issuer uses VaR to measure market risk. VaR is a statistically estimated maximum amount of loss that could occur over a given period of time at a given level of confidence. VaR is a commonly used market risk management technique. However, this approach does have some shortcomings. VaR estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movement, however, is not necessarily a good indicator of future events, as there may be conditions and circumstances in the future that the model does not anticipate. As a result, the timing and magnitude of the actual losses can be different depending on the assumptions made at the time of calculation. In addition, the time periods used for the model, generally one or ten days, are assumed to be a sufficient holding period before liquidating the relevant underlying positions. If these holding periods are not sufficient, or are too long, the VaR results may understate or overstate the potential loss. Different VaR methodologies and distributional assumptions could produce a materially different VaR. VaR is most appropriate as a risk measure for trading positions in liquid capital markets and will understate the risk associated with severe events, such as a period of extreme illiquidity.

The Issuer uses a 99% single tail confidence level to measure VaR, which means the actual amount of loss may exceed the VaR, on average, once out of 100 business days. Until 2011, the Issuer used the "variance-covariance method" or parametric VaR ("PVaR") methodology to measure its daily VaR, which took into account the diversification effects among different risk categories as well as within the same risk category. In 2012, the Issuer received authorization from the FSC to use a historical simulation VaR ("HSVaR") methodology, which the Issuer believes to be more accurate and responsive in reflecting market volatilities, to measure market risk. The Issuer's ten-day HSVaR method, which is computed using a full valuation and is computationally intensive, uses an archive of historical price data and the

VaR for a portfolio is estimated by creating a hypothetical time series of returns on that portfolio, obtained by running the portfolio through actual ten-day historical data and computing the changes that would have occurred in each ten-day period.

The following table shows the volume and types of positions held by the Issuer for which the VaR method is used to measure market risk as of the dates indicated.

	As of December 31,			
	2017	2018	2019	
	(in millions of Won)			
Securities – Bond ⁽¹⁾	₩8,179,481	₩9,167,080	₩10,615,199	
Securities – Equity ⁽¹⁾	43,214	42,943	106,321	
Spot exchanges ⁽²⁾		3,496,671	3,963,814	
Derivatives ⁽³⁾	5,438,917	3,364,318	4,564,306	
Total	₩17,691,288	₩16,071,012	₩19,249,640	

Notes:

- (1) Represents amounts marked to market and as shown on the balance sheet information that is prepared and submitted to the FSS for risk management purposes.
- (2) Represents the overall net open currency position in each currency, which is the greater of (i) the sum of the absolute value of all short positions and (ii) the sum of the absolute value of all long positions.
- (3) For over the counter derivatives, represents the absolute value of over the counter derivatives measured at fair value at year end. For exchange traded derivatives, includes the amount of deposits and the collateral posted for such derivatives.

The following table shows the Issuer's ten-day HSVaRs (at a 99% confidence level for a ten-day holding period) as of the dates indicated for interest risk, stock price risk and foreign exchange risk relating to the Issuer's trading activities.

	As of December 31,			
	2017	2018	2019	
	(in l	oillions of W	/on)	
Risk Categories:				
Interest risk	₩ 23.8	₩ 7.1		
Stock price risk	1.2	3.3	3.9	
Foreign exchange risk	24.3	16.4	13.1	
Less: diversification	(29.7)	(11.9)	(13.2)	
Diversified VaR for overall trading activities	₩ 19.6	₩ 14.9	₩ 20.4	

In 2019, the average, high, low and ending amounts of ten-day HSVaR (at a 99% confidence level for a ten-day holding period) for the Issuer relating to its trading activities were as follows:

	Trading activities VaR for 2019					
	Average	Minimum	Maximum	As of December 31, 2019		
	(in billions of Won)					
Interest risk	₩11.2	₩ 1.7	₩20.5	₩ 16.6		
Stock price risk	3.4	2.4	4.3	3.9		
Foreign exchange risk	15.8	11.4	20.7	13.1		
Less: diversification				(13.2)		
Diversified VaR for overall trading activities	₩17.5	₩13.6	₩24.8	₩ 20.4		

In 2018, the average, high, low and ending amounts of ten-day HSVaR (at a 99% confidence level for a ten-day holding period) for the Issuer relating to its trading activities were as follows:

	Trading activities VaR for 2018				
	Average	Minimum	Maximum	As of December 31, 2018	
	(in billions of Won)				
Interest risk	₩12.5	₩ 6.0	₩18.7	₩ 7.1	
Stock price risk	3.0	1.3	4.8	3.3	
Foreign exchange risk	9.4	5.0	16.5	16.4	
Less: diversification				_(11.9)	
Diversified VaR for overall trading activities	₩16.2	₩11.7	₩23.1	₩ 14.9	

In 2017, the average, high, low and ending amounts of ten-day HSVaR (at a 99% confidence level for a ten-day holding period) for the Issuer relating to its trading activities were as follows:

	Trading activities VaR for 2017					
	Average	Minimum	Maximum	As of December 31, 2017		
	(in billions of Won)					
Interest risk	₩22.7	₩14.3	₩42.2	₩ 23.8		
Stock price risk	1.0	0.8	1.3	1.3		
Foreign exchange risk	32.7	12.4	44.3	24.3		
Less: diversification				(29.7)		
Diversified VaR for overall trading activities	₩23.3	₩16.5	₩30.2	₩ 19.6		

Standardized Method. Market risk for positions not measured by VaR are measured using the standardized method for measuring market risk-based required equity capital specified by the FSS, which takes into account certain risk factors. Under the standardized method, the required equity capital is measured using the risk-weighted values for each risk factor. The method used to measure the market risk-based required equity capital for each risk factor is as follows:

Interest rate risk:

- General market risk: General market risk relates to the risk of losses from macroscopic events which could have an impact on interest rates, stock prices, exchange rates, and market prices of general commodities. General market interest rate risk of a debt security is calculated on its net position, taking into consideration the remaining maturity and coupon rate.
- Specific risk: Specific risk relates to the risk of loss from changes in credit risk of issuers of debt securities or equities, excluding changes in general market prices. Specific interest rate risk of a debt security is measured by multiplying the interest rate position appraised, based on the market price of such security, by the risk-weighted value applicable to the type of debt security, credit rating and the remaining maturity.
- Equity risk: General and specific equity risks are calculated by multiplying the bought or sold position by the relevant risk-weighted values.
- Foreign exchange risk: Foreign exchange risk is measured by multiplying the larger of the absolute values among the net bought or sold positions of each currency by the relevant risk-weighted values.
- Option risk: Option risk is measured using the delta, gamma and vega of the option.

The standardized method is used to measure the market risk of the positions for which the FSS has not approved the use of the VaR method. In addition, the Issuer uses the standardized method for positions which are held by certain subsidiaries or for which measuring VaR is difficult due to the lack of daily position data.

The following table shows the volume and types of instruments held by the Issuer for which the standardized method is used to measure its required equity capital as of the dates indicated.

	As of December 31,			
	2017 2018		2019	
	(i	n millions of Wo	n)	
Swaps and foreign exchange positions ⁽¹⁾	₩ 14,742	₩ 24,366	₩ 30,864	
Derivative-linked securities ⁽²⁾	95,357	126,416	160,576	
Options embedded in convertible bonds ⁽³⁾	17,303	0	0	
Total	₩127,402	₩150,783	₩191,440	

Notes:

- (1) The overall net open currency position is the greater of (i) the sum of the absolute value of all short positions and (ii) the sum of the absolute value of all long positions. The amounts represent the value of interest rate swaps held by a special purpose vehicle of the Issuer and the foreign exchange positions held by KB Microfinance Myanmar Co., Ltd., for which the standardized method is used to measure the Issuer's required equity capital.
- (2) Amounts as of December 31, 2017, 2018 and 2019 represent the value of derivative-linked securities held by the trust accounts of the Issuer subject to consolidation, for which the standardized method is used to measure the Issuer's required equity capital.
- (3) Represents the absolute value of over the counter derivatives measured at fair value at year end for monitoring purposes.

The following table shows the Issuer's required equity capital measured using the standardized method as of the dates indicated.

	As of December 31,			
	2017 ⁽¹⁾ 2018 ⁽¹⁾		2019(1)	
	(in millions of Won)			
Risk categories:				
Interest risk	₩ 98,235	₩112,153	₩83,731	
Stock price risk	1,646	19,756	1,953	
Foreign exchange risk	810	1,338	1,850	
Total	₩100,691	₩133,248	₩87,535	

Note:

Back Testing. The Issuer conducts back testing on a daily basis to validate the adequacy of its market risk model. In back testing, the Issuer compares both the actual and hypothetical profit and loss with the VaR calculations and analyzes any results that fall outside its predetermined confidence interval of 99%.

Stress testing. In addition to VaR, which assumes normal market situations, the Issuer uses stress testing to assess its market risk exposure to abnormal market fluctuations. Abnormal market fluctuations include significant declines in the stock market and significant increases in the general level of interest rates. This is an important way to supplement VaR, as VaR is a statistical expression of possible loss under a given confidence level and holding period. It does not cover potential loss if the market moves in a manner that is outside the Issuer's normal expectations. Stress testing projects the anticipated change in value of holding positions under certain scenarios assuming that no action is taken during a stress event to change the risk profile of a portfolio. According to its stress testing, the Issuer estimates that as of December 31, 2019, its trading portfolio could have lost \(\formallow{327}\) billion for an assumed short-term extreme decline of approximately 33% in the equity market and an approximate 54 basis point increase in the Korean treasury bond rates under an abnormal stress environment.

The Issuer monitors the impact of market turmoil or any abnormality by conducting stress tests and confirming that the results are within the Issuer's market risk limits. If the impact is large, the Issuer's chief risk officer may request that the Issuer's portfolio be restructured or other appropriate action be taken.

⁽¹⁾ The Issuer has received approval from the FSS to use its internal VaR model, in lieu of the standardized method, to measure the market risk of certain instruments held by the Issuer, including 30-year government bonds held by the Issuer, as well as positions held by certain subsidiaries of the Issuer, including Kookmin Bank (China) Ltd.

Interest Risk

Interest risk from trading activities arises mainly from the Issuer's trading of Won-denominated debt securities. Its trading strategy is to benefit from short-term movements in the prices of debt securities arising from changes in interest rates. As its trading accounts are marked-to-market daily, the Issuer manages the interest risk related to its trading accounts using market value-based tools such as VaR and sensitivity analysis. As of December 31, 2019, the VaR of the Issuer's interest risk from trading was \textbf{W}16.6 billion and the weighted average duration, or weighted average maturity, of its Won-denominated debt securities at fair value through profit or loss was approximately 1.9 years.

Foreign Exchange Risk

Foreign exchange risk arises because the Issuer has assets and liabilities that are denominated in currencies other than Won, as well as off-balance sheet items such as foreign exchange forwards and currency swaps. Assets and liabilities denominated in U.S. dollars, Japanese Yen, Euro and Chinese Renminbi typically account for the majority of the Issuer's foreign currency assets and liabilities.

The difference between the Issuer's foreign currency assets and liabilities is offset against forward foreign exchange positions, currency options and currency swaps to obtain its net foreign currency open position. The Risk Management Council and Market Risk Management Subcommittee oversee the Issuer's foreign exchange exposure for both trading and non-trading purposes by establishing a limit for this net foreign currency open position, together with stop loss limits. VaR limits are established on a combined basis for its domestic operations and foreign branches.

The following table shows the Issuer's separate net open positions as of the dates indicated. Positive amounts represent long positions and negative amounts represent short positions.

	As of December 31,				
	2017	2017 2018			
	(ir	(in millions of US\$)			
Currency:					
US\$	US\$(714.4)	US\$(495.2)	US\$(592.9)		
Japanese Yen	(0.7)	(1.6)	(0.2)		
Euro	(1.3)	(0.2)	(1.9)		
Kazakhstan Tenge	_	_	_		
Chinese Renminbi	47.21	21.9	12.8		
Others	7.4	146.9	189.2		
Total	<u>US\$(661.8)</u>	US\$(328.2)	<u>US\$(393.0)</u>		

Equity Price Risk

Equity price risk results from the Issuer's equity derivatives trading portfolio in Won since the Issuer does not have any trading exposure to shares denominated in foreign currencies other than foreign equity index futures.

The equity derivatives trading portfolio in Won consists of exchange-traded stocks and equity derivatives under strict limits on diversification as well as position limits and stop loss limits.

The Risk Management Council and Market Risk Management Subcommittee sets annual and monthly stop loss limits that are monitored by the Risk Management Department. In order to ensure timely action, the stop loss limit of individual securities is monitored by the Issuer's middle office.

As of December 31, 2019, the Issuer's carrying amount of equity securities was \text{\text{\$\psi}}152 billion.

Derivative Market Risk

The Issuer's derivative trading includes interest rate and cross-currency swaps, foreign exchange forwards, stock index and interest rate futures and currency options. These activities consist primarily of the following:

- sales of tailor-made derivative products that meet various needs of the Issuer's corporate customers and related transactions to reduce the Issuer's exposure resulting from those sales;
- taking positions in limited cases when the Issuer expects short-swing profits based on its market forecasts; and
- trading to hedge the Issuer's interest rate and foreign currency risk exposure as described above.

Market risk from trading derivatives is not significant since the Issuer's derivative trading activities are primarily driven by customer deals with very limited open trading positions.

Market Risk Management for Non-Trading Activities

Interest Rate Risk

The Issuer's principal market risk from non-trading activities is interest rate risk. Interest rate risk arises due to mismatches in the maturities or re-pricing periods of these rate-sensitive assets and liabilities. The Issuer measures interest rate risk for Won and foreign currency assets and liabilities in its bank accounts (including derivatives) and its principal guaranteed trust accounts. Most of the Issuer's interest-earning assets and interest-bearing liabilities are denominated in Won and its foreign currency-denominated assets and liabilities are mostly denominated in U.S. dollars.

The Issuer's principal interest rate risk management objectives are to generate stable net interest revenues and to protect its asset value against interest rate fluctuations. The Issuer principally manages this risk for its non-trading activities by analyzing and managing maturity and duration gaps between its interest-earning assets and interest-bearing liabilities. In addition, the Issuer uses hedging instruments for interest rate risk management for its non-trading assets and liabilities.

Interest rate gap analysis measures expected changes in net interest revenues by calculating the difference in the amounts of interest-earning assets and interest-bearing liabilities at each maturity and interest resetting date. The Issuer performs interest rate gap analysis for Won-denominated and foreign currency-denominated assets and trust assets on a monthly basis or more frequently when deemed necessary.

Interest Rate Gap Analysis. The Issuer performs interest rate gap analysis based on interest rate re-pricing maturities of assets and liabilities. However, for some of the Issuer's assets and liabilities with either no maturities or unique characteristics, the Issuer uses or assumes certain maturities, including the following examples:

With respect to asset maturities, the Issuer assumes remaining maturities of prime rate-linked loans with remaining maturities of over one year to be one year and uses the actual maturities for prime rate-linked loans with remaining maturities of less than one year.

With respect to liability maturities, the Issuer differentiates "noncore" and "core" demand deposits using the last 36 months' average balance of demand deposits. The Issuer assumes "non-core" demand deposits to have remaining maturities of one month or less and "core" demand deposits to have remaining maturities between one month and five years.

The following table shows the Issuer's consolidated interest rate gap for Won-denominated accounts and foreign currency-denominated accounts as of December 31, 2019:

			As of Decem	ber 31, 2019		
	0-3 Months	3-6 Months	6-12 Months	1-3 Years	Over 3 Years	Total
		(in bil	lions of Won,	except percen	tages)	
Won-denominated Interest- earning assets:						
Loans	₩ 89,554	₩68,300	₩ 57,621	₩30,835	₩22,437	₩268,747
Securities	4,281	3,796	5,564	25,537	7,463	46,641
Others	6,871	175	80	127	9	7,262
Total	₩100,706	₩72,271	₩ 63,265	₩56,499	₩29,909	₩322,650
Interest-bearing liabilities:						
Deposits	₩100 , 410	₩44,557	₩ 77,652	₩33,633	₩25,851	₩282,103
Borrowings	8,790	0	0	120	152	9,062
Others	7,658	1,380	3,060	3,960	3,710	19,768
Total	₩116,858	₩45,937	₩ 80,712	₩37,713	₩29,713	₩310,933
Sensitivity gap	(16,152)	26,334	(17,447)	18,786	196	11,717
Cumulative gap	(16, 152)	10,182	(7,265)	11,521	11,171	
% of total assets	(5.0)	% 3.2%	% (2.3)	% 3.69	6 3.69	%
Foreign currency-denominated						
Interest-earning assets:						
Due from banks	₩ 3,316	₩ 260	₩ 128	₩ 0	₩ 0	₩ 3,704
Loans	13,165	2,066	889	260	433	16,813
Securities	1,283	261	329	2,172	1,611	5,656
Total	₩ 17,763	₩ 2,588	₩ 1,346	₩ 2,432	₩ 2,044	₩ 26,173
Interest-bearing liabilities:						
Deposits	₩ 7 , 498	₩ 6,513	₩ 1,403	₩ 84	₩ 0	₩ 15 , 499
Borrowings	6,738	1,893	428	3	2	9,063
Others	380	238	804	1,511	1,993	4,925
Total	₩ 14,615	₩ 8,645	₩ 2,634	₩ 1,598	₩ 1,995	₩ 29,487
Sensitivity gap	3,147	(6,057)	(1,288)	834	49	(3,314)
Cumulative gap	3,147	(2,909)			(3,314)	, - ,
% of total assets	12.09	% (11.1)	% (16.0)	% (12.8)	% (12.7)	%

Duration Gap Analysis. The Issuer also performs duration gap analysis to measure and manage interest rate risk. Duration gap analysis is a more long-term risk indicator than interest rate gap analysis, as interest rate gap analysis focuses more on accounting income as opposed to the market value of the assets and liabilities. The Issuer emphasizes duration gap analysis because, in the long run, its principal concern with respect to interest rate fluctuations is the net asset value rather than net interest revenue changes. For duration gap analysis the Issuer uses or assumes the same maturities for different assets and liabilities that it uses or assumes for the Issuer's interest rate gap analysis.

The following table shows, on a separate basis, duration gaps and net asset value changes when interest rates decrease by one percentage point as of the specified dates.

Won-denominated	Asset Duration	Liability Duration	Duration Gap	Net Asset Value Change
Date	(in years)	(in years)	(in years)	(in billions of Won)
June 30, 2019	0.924	0.858	0.113	₩352
December 31, 2019	1.126	0.907	0.273	890
				Net Asset
	Asset	Liability	Duration	Value
Foreign currency-denominated	Duration	Duration	Gap	Change
Date	(in years)	(in years)	(in years)	(in billions of Won)
June 30, 2019	0.507	0.425	0.032	₩8
December 31, 2019	0.547	0.474	0.020	5

The Issuer sets interest rate risk limits using historical interest rate volatility of financial bonds and duration gaps with respect to expected asset and liability positions based on its annual business plans. The Risk Management Department submits interest rate gap analysis, duration gap analysis and interest rate risk limit compliance reports monthly to the Issuer's Risk Management Council and quarterly to the Issuer's Risk Management Committee.

The following table summarizes the Issuer's interest rate risk, taking into account asset and liability durations as of December 31, 2019.

	As of December 31, 2019						
	3 Months or Less	3-6 Months	6-12 Months	1-3 Years	Over 3 Years	Total	
	(in billions of Won, except percentages and maturities in years)						
Won-denominated:							
Asset position	₩100,706	₩72,271	₩ 63,265	₩56,499	₩29,909	₩322,650	
Liability position	116,858	45,937	80,712	37,713	29,713	310,933	
Gap	(16,152)	26,334	(17,447)	18,786	196	11,717	
Average maturity	0.245	0.488	0.965	2.773	5.156		
Interest rate volatility	0.03%	0.189	6 0.43%	6 0.73%	6 1.029	/o	
Amount at risk	1	21	(73)	246	98	293	
Foreign currency-denominated:							
Asset position	₩ 17,763	₩ 2,588	₩ 1,346	₩ 2,432	₩ 2,044	₩ 26,173	
Liability position	14,615	8,645	2,634	1,598	1,995	29,487	
Gap	3,148	(6,057)	(1,288)	834	49	(3,314)	
Average maturity	0.246	0.489	0.966	2.761	5.107		
Interest rate volatility	$(1.37)^{\circ}$	% (1.30)	% (0.98)	% (0.64)	% (0.47)	%	
Amount at risk	(6)	37	10	(9)	(4)	28	

IRRBB Analysis. Prior to January 2020, the Issuer estimated the maximum possible loss on net non-trading assets due to unfavorable changes in interest rates by calculating interest rate VaR using a historical simulation method with actual historical price, volatility and yield changes in comparison with the current position to generate hypothetical portfolios and calculate a distribution of position and portfolio market value changes. Using this method, the Issuer's interest rate VaR was \\ \mathbf{W}350\) billion as of December 31, 2017, \\ \mathbf{W}167\) billion as of December 31, 2018 and \\ \mathbf{W}320\) billion as of December 31, 2019.

Recent amendments to the Detailed Regulation on the Supervision of the Banking Business, which became effective in November 2019, require banks, including the Issuer, to adopt the standards of the Interest Rate Risk in the Banking Book, or IRRBB, issued by the Basel Committee on Banking Supervision for calculating interest rate risk exposure. Such amendments were adopted in order to promote more financial stability for banks by requiring them to maintain a sufficient level of capital

For additional information, see Note 4.4 of the notes to the Issuer's consolidated financial statements for 2018 and 2019 included elsewhere in this Offering Circular.

Foreign Exchange Risk

The Issuer manages foreign exchange rate risk arising from its non-trading operations together with such risks arising from its trading operations. See "—Market Risk Management for Trading Activities—Foreign Exchange Risk."

Liquidity Risk Management

Liquidity risk is the risk of insolvency or loss due to a disparity between the inflow and outflow of funds resulting from, for example, maturity mismatches, obtaining funds at a high price or disposing of securities at an unfavorable price due to lack of available funds. The Issuer manages its liquidity in order to meet its financial liabilities from withdrawals of deposits, redemption of matured debentures and repayments at maturity of borrowed funds. The Issuer also requires sufficient liquidity to fund loans, to extend other credits and to invest in securities. The Issuer's liquidity management goal is to meet all its liability repayments on time and fund all investment opportunities even under adverse conditions. To date, the Issuer has not experienced significant liquidity risk.

The Issuer maintains liquidity by holding sufficient quantities of assets that can be liquidated to meet actual or potential demands for funds from depositors and others. The Issuer also manages liquidity by ensuring that the excess of maturing liabilities over maturing assets in any period is kept to manageable levels relative to the amount of funds the Issuer believes it could raise by issuing securities. The Issuer seeks to minimize its liquidity costs by managing its liquidity position on a daily basis and by limiting the amount of cash at any time that is not invested in interest-earning assets or securities.

The Issuer maintains diverse sources of liquidity to facilitate flexibility in meeting its funding requirements. The Issuer funds its operations principally by accepting deposits from retail and corporate depositors, accessing the call loan market (a short-term market for loans with maturities of less than 90 days), issuing debentures and borrowing from the BOK and others. The Issuer uses the majority of funds it raises to extend loans or purchase securities. Generally, deposits are of shorter average maturity than loans or investments.

For Won-denominated assets and liabilities, the Issuer manages liquidity using a cash flow structure based on holding short-term liabilities and long-term assets. Generally, the average initial contract maturity of the Issuer's new Won-denominated time deposits was less than one year, while during the same period most of its new loans and securities had maturities over one year.

The Issuer manages liquidity risk within the limits set on Won and foreign currency accounts in accordance with the regulations of the FSC. The FSC requires Korean banks, including the Issuer, to maintain a liquidity coverage ratio of not less than 100%. The FSC defines the liquidity coverage ratio as the ratio of highly liquid assets to total net cash outflows over a 30-day period. The highly liquid assets and total net cash outflows included in the calculation of the liquid coverage ratio are determined in accordance with the "Standards for Calculation of Liquidity Coverage Ratio" under the Detailed Regulation on the Supervision of the Banking Business. In addition, the FSC requires Korean banks, including the Issuer, to maintain a foreign currency liquidity coverage ratio of not less than 80%.

The Issuer's Asset Liability Management Department is responsible for daily liquidity management of the Issuer's Won and foreign currency exposure. It reports monthly plans for funding and operations to the Asset Liability Management Committee, which discusses factors such as interest rate movements and maturity structures of the Issuer's deposits, loans and securities and establishes strategies with respect to deposit and lending rates.

The following tables show the Issuer's liquidity coverage ratio and foreign currency liquidity coverage ratio on an average balance basis for the month of December 2019 in accordance with FSC regulations:

Liquidity coverage ratio:	30 Days or Less
	(in billions of Won, except percentages)
Highly liquid assets (A)	₩57 , 587
Cash outflows (B)	68,155
Cash inflows (C)	13,731
Total net cash outflows (D = B-C)	54,424
Liquidity coverage ratio (A/D)	105.81%
Minimum limit	100%
Foreign currency liquidity coverage ratio:	30 Days or Less
	(in millions of US\$, except percentages)
Highly liquid assets (A)	US\$ 2,702
Cash outflows (B)	7,617
Cash inflows (C)	5,118
Total net cash outflows (D = B-C)	2,499
Liquidity coverage ratio (A/D)	108.15%
Minimum limit	80%

The Risk Management Department in the Issuer's Risk Management Group reports whether the Issuer is complying with these limits monthly to the Risk Management Council and quarterly to the Risk Management Committee.

Operational Risk Management

Overall Status

There is no complete consensus on the definition of operational risk in the banking industry. The Issuer defines operational risk broadly to include all financial and non-financial risks, other than credit risk, market risk, interest rate risk and liquidity risk, that may arise from its operations that could negatively impact its capital, including the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events as defined under Basel II. The Issuer's operational risk management objectives include not only satisfying regulatory requirements, but also providing internal support through the growth of a strong risk management culture, reinforcement of internal controls, improvement of work processes and provision of timely feedback to management members and staff throughout the Issuer.

The Issuer uses an operational risk management framework meeting the Basel II Advanced Measurement Approach, or AMA, under which the Issuer:

- calculates its operational risk VaR on a quarterly basis using the "loss distribution approach VaR" and "scenario based VaR" methodology, and monitors operational risk in terms of Key Risk Indicators ("KRI") using tolerance levels for each indicator;
- executes integrated compliance and operational risk Control Self Assessments ("CSAs"), that enhance the effect on internal controls, which the Issuer's employees are able to access and use for process improvement;
- collects and analyzes internal and external loss data;
- conducts scenario analyzes to evaluate exposure to high-severity events;
- manages certain insurance-related activities relating to insurance strategies established to mitigate operational risk;
- examines operational risks arising in connection with the development of, changes in or discontinuance of products, policies or systems;

- uses a detailed business continuity plan covering all of its operations and locations to prepare against unexpected events, including an alternate back-up site for use in disaster events as well as annual full-scale testing of such site;
- refines bank-wide operational risk policies and procedures;
- provides appropriate training and support to business line operational risk managers; and
- reports overall operational risk status to the Issuer's senior management.

While the Issuer's Risk Management Department advises relevant business units with respect to the review of and suggested improvements on related operational processes and procedures, each of the Issuer's relevant business units has primary responsibility for the management of its own operational risk. In addition, the Operational Risk Unit, which is part of the Issuer's Risk Management Department, monitors bank-wide operational risk. The Issuer also has business line operational risk managers in all of its subsidiaries, departments and branches who periodically conduct CSAs and monitor KRIs. For example, the Issuer has developed KRIs relating to customer data protection, which are applied and monitored at all domestic branches and offices. In addition, in order to strengthen risk management of its overseas operations, the Issuer designates expert auditors for overseas branches and conducts internal audits designed especially to check key risks identified for each overseas branch. The Issuer has also established a risk CSA system for overseas branches, pursuant to which all employees (including locally hired staff) of such branches are required to perform a risk CSA on a quarterly basis. Furthermore, the Issuer regularly monitors operational risks related to new businesses as well as existing operating processes and seeks to develop appropriate new KRIs and risk CSA measures on an ongoing basis. Through such method, the Issuer is able to ensure proper monitoring and measurement of operational risk in each of its business groups and overseas operations.

Internal Control

To monitor and control operational risks, the Issuer maintains a system of comprehensive policies and has put in place a control framework designed to provide a stable and well-managed operational environment throughout its organization. The Issuer has in place regular staff rotation and a prescribed leave policy for employees in certain high-risk categories to safeguard against fraud and to check for weaknesses in internal controls. In addition, the Issuer maintains an external whistleblower "ombudsman" channel to encourage whistleblowing and voluntary reporting of fraudulent behavior.

The Issuer establishes its internal control system in accordance with the group-level internal control principles established by KB Financial Group. The Issuer reviews its operations and its level of compliance with internal control systems and business processes on a periodic basis and, as part of this process, the Issuer is required to report any problems discovered and any remedial actions taken to KB Financial Group's chief compliance officer.

The Issuer's Audit Department is the execution body for the Issuer's Audit Committee and supports the Issuer's management objectives by auditing the operations of its branches using a risk analysis system and reviewing the operations of its headquarters and subsidiaries through the use of "risk-based audit" in accordance with the "business measurement process" audit methodology, which requires that the Issuer's Audit Department evaluate the risk and process of its business units and concentrate their audit capacity with respect to high risk areas. As a result of recent regulatory trends, the Issuer's Audit Department is continuing its efforts to establish an advanced audit system and value-added internal audit by introducing risk-based audit techniques.

The FSS periodically conducts a general examination of the Issuer's operations. The FSS also performs specific audits on particular aspects of the Issuer's operations, such as risk management, credit monitoring and liquidity, as the need arises. In June 2019, the FSS conducted a comprehensive annual inspection of overall operations at the Issuer, the results of which are currently pending.

Legal Risk

The Issuer considers legal risk as a part of its operational risk. The uncertainty of the enforceability of the obligations of its customers and counterparties creates legal risk. Changes in laws and regulations

could also adversely affect the Issuer. Legal risk is higher in new areas of business where the law is often untested in the courts, although legal risk can also increase in the Issuer's traditional business to the extent that the legal and regulatory landscape in Korea is changing and many new laws and regulations governing the banking industry remain untested. The Issuer's Compliance Supporting Department seeks to minimize legal risk by using stringent legal documentation, employing procedures designed to ensure that transactions are properly authorized and consulting legal advisers.

IT System Operational Risk

The integrity of the Issuer's IT systems, and its ability to withstand potential catastrophic events, is crucial to the Issuer's continuing operations. Accordingly, the Issuer is continuing to strengthen its disaster recovery capabilities. In order to minimize operational risks relating to its IT systems, the Issuer has implemented a multi-CPU system that runs multiple CPUs simultaneously on-site and ensures system continuity in case any of the CPUs fail. This system backs up the Issuer's data systems at an off-site location on a real-time basis to ensure that its operations can be carried out normally and without material interruption in the event of CPU failure. Also, in order to protect the Issuer's Internet banking services from system failures and cyber attacks, the Issuer processes its Internet transactions through three separate data processing centers.

The Issuer currently tests its disaster recovery systems on a quarterly basis, with the comprehensive testing including branches and the main IT center's disaster recovery system. The Issuer's disaster recovery capabilities involve a number of other operations, including call center transactions. Internally, the Issuer's IT Operations Department monitors all of its computerized network processes and its IT systems. This department monitors and reports on any unusual delays or irregularities reported by the Issuer's branches. In addition, the Issuer's Information Security Department is responsible for the daily monitoring of the Issuer's entire information security system.

The Issuer has taken steps to establish a comprehensive security system aimed at detecting and responding to internal and external threats to its IT system and has implemented network segregation on the computers of all employees so that Intranet and Extranet functions are segregated. The Issuer has endeavored to enhance protection of customer data by using personal identification numbers internally generated and managed by the Issuer in all customer financial transaction, in lieu of the resident registration numbers of its customers, and by amending forms and templates to minimize collection of potentially sensitive customer data. The Issuer's chief information security officer is responsible for ensuring protection of information assets and technologies and reducing IT risks.

In 2009, the Issuer obtained ISO 27001 certification, which relates to information security. In 2011, the Issuer also obtained ISO 20000 certification, which relates to IT service management, and BS 25999 certification, which relates to business continuity management. The Issuer is the first Korean bank to have obtained all three such international certifications. In addition, in 2013, the Issuer obtained ISMS certification, which relates to information security management.

The Issuer implements various year-round education programs and training sessions designed to raise the information security awareness of both management and employees.

MANAGEMENT

Directors and Senior Management

The Issuer's board of directors has ultimate responsibility for the management of the Issuer's affairs. The Issuer's Articles of Incorporation provide for a board of no more than 30 directors, of which three or more must be non-executive directors and non-executive directors must comprise more than half of the board of directors. The Issuer currently has three executive directors and five non-executive directors. The Issuer elects its directors at a general meeting of shareholders by a majority vote of those present or represented at such meeting as long as the affirmative votes represent at least a quarter of the Issuer's total issued and outstanding shares with voting rights.

The term of office for each of the Issuer's executive directors is three years and for each of the Issuer's non-executive directors is two years for the initial term and one year for any subsequent term, provided that, if a director's term of office expires after the end of a fiscal year but before the convening of the general shareholders' meeting concerning the said fiscal year, his/her term of office shall be extended until the end of the general shareholders' meeting. The Issuer's directors may serve consecutive terms (with the term of office for non-executive directors limited to five consecutive years) and are subject to the Korean Commercial Code, the Bank Act and related regulations.

In respect of the members of the Issuer's board of directors and senior management, there are no potential conflicts between their duties to the Issuer and their other duties or private interests. The business address of all of the directors is the Issuer's registered office at 26, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul 07331, Korea.

Executive Directors

The table below sets forth the names, years of birth and positions of the Issuer's executive directors as of the date of this Offering Circular.

Name	Year of Birth	Position	Start of Term	End of Term
Yin Hur	1961	President and CEO	November 21, 2017	November 20, 2020
Jae Seong Joo	1956	Chief Audit Executive	January 1, 2019	December 31, 2020
Jae Keun Lee	1966	Senior Executive Vice	January 1, 2020	December 31, 2020
		President; Sales Group		

Non-executive Directors

The non-executive directors are outside directors elected from among those persons who do not have a special relationship with the Issuer that would interfere with the exercise of their independent judgment. The Issuer's non-executive directors are selected based on the candidates' talents and skills in diverse areas, such as law, finance, economics, management and accounting. The table below sets forth the names, years of birth and positions of the Issuer's non-executive directors as of the date of this Offering Circular.

Name	Year of Birth	Position	Start of Term	End of Term
Seung Tae Lim	1955	Non-executive Director	March 22, 2018	March 18, 2021
Sook Kyo Kwon	1957	Non-executive Director	October 26, 2017	March 18, 2021
Gang Hyeon An	1960	Non-executive Director	March 21, 2019	March 20, 2021
Sung Hun Seog	1964	Non-executive Director	March 21, 2019	March 20, 2021
Yong Keun Yoo	1969	Non-executive Director	March 19, 2020	March 18, 2022

Executive Officers

The table below sets forth the names, years of birth and positions of the Issuer's executive officers (other than its executive directors) as of the date of this Offering Circular.

Name	Year of Birth	Position
Hwan Ju Lee	1964	Senior Executive Vice President; Strategy & Finance Planning Group
Chai Hyun Sung	1965	Senior Executive Vice President; Retail Customer Group
Young Gil Kim	1963	Senior Executive Vice President; Wealth Management Customer Group
Dong Whan Han	1965	Senior Executive Vice President; Digital Financial Group
Woo Yeul Lee	1964	Senior Executive Vice President; Information Technology Group
Woon Tae Kim	1963	Senior Managing Director; SME/SOHO Customer Group
Sang Hyeon Woo	1964	Senior Managing Director; Corporate Investment Banking Customer Group
Sang Gyeon Han	1964	Senior Managing Director; Public Institution Customer Group
Sang Cheol Heo	1965	Senior Managing Director; Smart Customer Group
Chang Su Choi	1966	Senior Managing Director; Global Business Group
Jeong Ha	1967	Senior Managing Director; Capital Markets Group
Tae Gu Kim	1966	Senior Managing Director; Credit Management/ Analysis Group
Cheal Soo Choi	1966	Senior Managing Director; Risk Management Group
Suk Gon Kang	1963	Senior Managing Director; Shared Service Group
Jin Soo Yoon	1964	Senior Managing Director; Data Strategy Group
Mun Cheol Jeong	1968	Managing Director; Brand & ESG Group
Young Eun Moon	1965	Managing Director; Information Security Division
Chong Ran Kim	1964	Managing Director; Investment Product Division
Hyun Sik Myung	1965	Managing Director; Consumer Protection Division
Soon Ok Cho	1965	Managing Director; Chief Compliance Officer

Compensation

Committees of the Board of Directors

The Issuer currently has the following committees that serve under the board:

- (a) the Audit Committee;
- (b) the Risk Management Committee;
- (c) the Evaluation & Compensation Committee;
- (d) the Non-executive Director Nominating Committee;
- (e) the Audit Committee Members Nominating Committee; and
- (f) the President Nominating Committee

Each committee member is appointed by the board of directors, except for members of the Audit Committee, who are elected at the general meeting of shareholders.

Audit Committee

The Audit Committee currently consists of two non-executive directors, Gang Hyeon An and Yong Keun Yoo, and one executive director, Jae Seong Joo. The chairperson of the Audit Committee is Gang Hyeon An. The Audit Committee oversees the Issuer's financial reporting and approves the appointment of the Issuer's independent accountants. The committee also reviews the Issuer's financial information, auditor's examinations, key financial statement issues, the plans and evaluation of internal control and the administration of the Issuer's financial affairs by the board of directors. In connection with the general meetings of shareholders, the committee examines the agenda for, and financial statements and other reports to be submitted by, the board of directors to each general meeting of shareholders. The committee holds regular meetings every quarter.

Risk Management Committee

The Risk Management Committee currently consists of three non-executive directors, Sung Hun Seog, Seung Tae Lim and Sook Kyo Kwon. The chairperson of the Risk Management Committee is Sung Hun Seog. The Risk Management Committee oversees and makes determinations on all issues relating to the Issuer's comprehensive risk management function. In order to ensure the Issuer's stable financial condition and to maximize the Issuer's profits, the committee monitors the Issuer's overall risk exposure and reviews the Issuer's compliance with risk policies and risk limits. In addition, the committee reviews risk and control strategies and policies, evaluates whether each risk is at an adequate level, establishes or abolishes risk management divisions and reviews risk-based capital allocations. The committee holds regular meetings every quarter. See "Risk Management."

Evaluation & Compensation Committee

The Evaluation & Compensation Committee currently consists of three non-executive directors, Sook Kyo Kwon, Gang Hyeon An and Yong Keun Yoo. The chairperson of the Evaluation & Compensation Committee is Sook Kyo Kwon. The Evaluation & Compensation Committee reviews compensation schemes and compensation levels and is also responsible for evaluating management's performance.

Non-executive Director Nominating Committee

The committee currently consists of five non-executive directors, Seung Tae Lim, Sook Kyo Kwon, Gang Hyeon An, Sung Hun Seog and Yong Keun Yoo. The committee oversees the selection of non-executive director candidates and recommends them annually sometime prior to the general stockholders meeting. The term of office of its members is from the first meeting of the committee held to nominate the non-executive directors until the nominated non-executive directors are appointed.

Audit Committee Members Nominating Committee

The committee currently consists of five non-executive directors, Seung Tae Lim, Sook Kyo Kwon, Gang Hyeon An, Sung Hun Seog and Yong Keun Yoo. The committee oversees the selection of Audit Committee member candidates and recommends them annually sometime prior to the general stockholders meeting. The term of office of its members is from the first meeting of the committee held to nominate the Audit Committee members until the Audit Committee members are appointed.

President Nominating Committee

The committee currently consists of five non-executive directors, Seung Tae Lim, Sook Kyo Kwon, Gang Hyeon An, Sung Hun Seog and Yong Keun Yoo. The committee oversees the selection of candidates for the Issuer's President and recommends them sometime prior to a general stockholders meeting at which the President is to be elected. The term of office of its members is from the first meeting of the committee held to nominate the President until the President is appointed.

REGULATION AND SUPERVISION

Legal and Regulatory Framework in Korea

Overview

The banking system in Korea is governed by the Bank Act and the Bank of Korea Act of 1950, as amended (the "Bank of Korea Act"). In addition, Korean banks are subject to the regulations and supervision of the BOK, the MPB, the FSC and its executive body, the FSS.

The BOK, established in June 1950 under the Bank of Korea Act, performs the customary functions of a central bank. It seeks to contribute to the sound development of the national economy by price stabilization through establishing and implementing efficient monetary and credit policies with a focus on financial stability. The BOK acts under instructions of the MPB, the supreme policy-making body of the BOK.

Under the Bank of Korea Act, the MPB's primary responsibilities are to formulate monetary and credit policies and to determine the operations, management and administration of the BOK.

The FSC, established in April 1998, regulates commercial banks pursuant to the Bank Act, including establishing guidelines on capital adequacy of commercial banks, and promulgates regulations relating to supervision of banks. Furthermore, the FSC regulates market entry into the banking business.

The FSS, established in January 1999, is subject to the instructions and directives of the FSC and carries out supervision and examination of commercial banks. In particular, the FSS sets requirements both for the prudent control of liquidity and for capital adequacy and establishes reporting requirements pursuant to the authority delegated to it under the FSC regulations, pursuant to which banks are required to submit annual reports on financial performance and shareholdings, regular reports on management strategy and non-performing loans, including write-offs, and management of problem companies and plans for the settlement of bad loans.

Under the Bank Act, approval to commence a commercial banking business or a long-term financing business must be obtained from the FSC. Commercial banking business is defined as the lending of funds acquired predominantly from the acceptance of demand deposits for a period not exceeding one year or subject to the limitation established by the FSC, for a period between one year and three years. Long-term financing business is defined as the lending, for periods in excess of one year, of funds acquired predominantly from paid-in capital, reserves or other retained earnings, the acceptance of time deposits with maturities of at least one year, or the issuance of debentures or other bonds. A bank wishing to enter into any business other than commercial banking and long-term financing businesses must file a report to the FSC. For businesses that are subject to a license or approval requirement under applicable laws, such as approval to commence a trust business under the FSCMA, such report must be filed concurrently with a relevant license or approval application to the FSC. In addition, approval to merge with any other banking institution, to liquidate, spin off or close a banking business or to transfer all or a part of a business must be obtained from the FSC.

If the FSC deems a bank's financial condition to be unsound or if a bank fails to meet the applicable capital adequacy ratio set forth under Korean law, the FSC may order:

- admonitions or warnings with respect to the bank or its officers;
- capital increases or reductions;
- assignments of contractual rights and obligations relating to financial transactions;
- a suspension of performance by its officers of their duties and the appointment of receivers;
- disposals of property holdings or closures of subsidiaries or branch offices or downsizing;
- stock cancelations or consolidations;
- mergers with other financial institutions;

- acquisition of such bank by a third party; and
- suspensions of a part or all of its business operations for not more than six months.

Capital Adequacy

The Bank Act requires nationwide banks, such as the Issuer, to maintain a minimum paid-in capital of \text{\psi}100 billion and regional banks to maintain a minimum paid-in capital of \text{\psi}25 billion. All banks, including foreign bank branches in Korea, are also required to maintain a prescribed solvency position. A bank must also set aside in its legal reserve an amount equal to at least 10% of the net income after tax each time it pays dividends on net profits earned until its legal reserve reaches at least the aggregate amount of its paid-in capital.

Under the Detailed Regulation on the Supervision of the Banking Business, the capital of a bank is divided into two categories, Tier I and Tier II capital. Tier I capital (core capital) consists of (i) common equity Tier I capital, including paid-in capital, capital surplus and retained earnings related to common equity and accumulated other comprehensive gains and losses, and (ii) additional Tier I capital, including paid-in capital and capital surplus related to hybrid Tier I capital instruments that, among other things, qualify as contingent capital and are subordinated to subordinated debt. Tier II capital (supplementary capital) consists of, among other things, capital and capital surplus from the issuance of Tier II capital, allowances for loan losses on loans classified as "normal" or "precautionary," subordinated debt and other capital securities which meet the standards prescribed by the governor of the FSS under Article 26(2) of the Regulation on Supervision of the Banking Business.

All banks must meet minimum ratios of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets, determined in accordance with FSC requirements that have been formulated based on Bank for International Settlements standards. These requirements were adopted and became effective in 1996, and were amended effective January 1, 2008 upon the implementation by the FSS of Basel II. Under such requirements, all domestic banks and foreign bank branches are required to meet a minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8.0%. Commencing in July 2013, the FSC promulgated a series of amended regulations implementing Basel III, pursuant to which Korean banks and bank holding companies were required to maintain a minimum ratio of common equity Tier I capital to risk-weighted assets of 3.5% and Tier I capital to risk-weighted assets of 4.5% from December 1, 2013, which minimum ratios were increased to 4.0% and 5.5%, respectively, from January 1, 2014 and increased further to 4.5% and 6.0%, respectively, from January 1, 2015. Such requirements are in addition to the pre-existing requirement for a minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8.0%, which remains unchanged. The amended regulations also require an additional capital conservation buffer of 2.5% in 2019 and 2020, as well as a potential counter-cyclical capital buffer of up to 2.5%, which is determined on a quarterly basis by the FSC. Furthermore, the Issuer was designated as one of five domestic systemically important banks for 2019 by the FSC and was subject to an additional capital requirement of 1.0% in 2019. In June 2019, the Issuer was again designated as a domestic systemically important bank for 2020, which would again subject the Issuer to an additional capital requirement of 1.0% in 2020.

Under the Detailed Regulation on the Supervision of the Banking Business, the following risk-weight ratios must be applied by Korean banks in respect of home mortgage loans:

- for those banks which adopted a standardized approach for calculating credit risk capital requirements, a risk-weight ratio of 35% (only in the case where the loan is fully secured by a first ranking mortgage) and, with respect to high-risk home mortgage loans, 50% or 70%; and
- for those banks which adopted an internal ratings-based approach for calculating credit risk capital requirements, a risk-weight ratio calculated with reference to the probability of default, loss given default and exposure at default, each as defined under the Detailed Regulation on the Supervision of the Banking Business.

Liquidity

All banks are required to ensure adequate liquidity by matching the maturities of their assets and liabilities in accordance with the Regulation on Supervision of the Banking Business. Banks may not

invest an amount exceeding 100% of their Tier I and Tier II capital (less any capital deductions) in equity securities and certain other securities with a redemption period of over three years. This stipulation does not apply to Government bonds, Monetary Stabilization Bonds issued by the BOK or debentures and stocks referred to in items 1 and 2, respectively, of paragraph (6) of Article 11 of the Act on the Structural Improvement of the Financial Industry. The FSC uses the liquidity coverage ratio (described below) as the principal liquidity risk management measure, and currently requires each Korean bank to:

- maintain a liquidity coverage ratio (defined as the ratio of highly liquid assets to total net cash outflows over a 30-day period) of not less than 100%;
- maintain a foreign currency liquidity coverage ratio of not less than 80%; and
- submit monthly reports with respect to the maintenance of these ratios.

The MPB of the BOK is empowered to fix and alter minimum reserve requirements that banks must maintain against their deposit liabilities. The current minimum reserve ratios are:

- 7% of average balances for Won currency demand deposits outstanding;
- 0% of average balances for Won currency employee asset establishment savings deposits, employee
 long-term savings deposits, employee house purchase savings deposits, long-term house purchase savings
 deposits, household long-term savings deposits and employee preferential savings deposits outstanding
 (with respect to employee-related deposits and household long-term savings deposits and household long-term savings deposits, only if such deposits were made prior to February 28, 2013); and
- 2% of average balances for Won currency time deposits, instalment savings deposits, mutual instalments, housing instalments and certificates of deposit outstanding.

For foreign currency deposit liabilities, a 2% minimum reserve ratio is applied to time deposits with a maturity of one month or longer, certificates of deposit with a maturity of 30 days or longer and savings deposits with a maturity of six months or longer and a 7% minimum reserve ratio is applied to other deposits. A 1% minimum reserve ratio applies to deposits in offshore accounts, immigrant accounts and resident accounts opened by foreign exchange banks as well as foreign currency certificates of deposit held by account holders of such offshore accounts, immigrant accounts and resident accounts opened by foreign exchange banks.

Furthermore, under the Regulation on Supervision of the Banking Business, the Issuer is required to maintain a minimum "mid- to long-term foreign exchange funding ratio" of 100% "Mid- to long- term foreign exchange funding ratio" refers to the ratio of (1) the total outstanding amount of foreign exchange borrowing with a maturity of more than one year to (2) the total outstanding amount of foreign exchange lending with a maturity of one year or more.

Amendments Relating to Net Stable Funding Ratio and Leverage Ratio Requirements

Effective January 31, 2018, the FSC implemented amendments to the Regulation on Supervision of the Banking Business that impose certain liquidity- and leverage-related ratio requirements on banks in Korea, in accordance with Basel III. Pursuant to these amendments, each Korean bank is required to:

- maintain a net stable funding ratio (defined as the ratio of the available amount of stable funding to the required amount of stable funding) of not less than 100%, where (i) the available amount of stable funding generally refers to the portion of liabilities and capital expected to be reliable over a one-year time horizon and (ii) the required amount of stable funding generally refers to the amount of stable funding that is required to be maintained based on the liquidity characteristics, residual maturities and off-balance sheet exposures of the bank's assets, each as calculated in accordance with the Detailed Regulation on the Supervision of the Banking Business;
- maintain a leverage ratio (defined as the ratio of core capital to total exposures) of not less than 3%, where (i) the core capital includes paid-in capital, capital surplus, retained earnings and hybrid Tier I capital instruments and (ii) total exposures include on-balance sheet exposures, derivative exposures, securities financing transaction exposures and off-balance sheet exposures, each as calculated in accordance with the Detailed Regulation on the Supervision of the Banking Business; and
- submit monthly reports with respect to the maintenance of these ratios.

Financial Exposure to Any Individual Customer or Major Shareholder

Under the Bank Act, subject to certain exceptions, the sum of large exposures by a bank—in other words, the total sum of its credits to single individuals, juridical persons or business groups that exceed 10% of the sum of Tier I and Tier II capital (less any capital deductions)—generally must not exceed five times the sum of Tier I and Tier II capital (less any capital deductions). In addition, subject to certain exceptions, banks generally may not extend credit (including loans, guarantees, purchases of securities (extended for financial support) and any other transactions that directly or indirectly create credit risk) in excess of 20% of the sum of Tier I and Tier II capital (less any capital deductions) to a single individual or juridical person, or grant credit in excess of 25% of the sum of Tier I and Tier II capital (less any capital deductions) to a single group of companies as defined in the Monopoly Regulations and Fair Trade Act.

The Bank Act also provides for certain restrictions on extending credits to a major shareholder. A "major shareholder" is defined as:

- a shareholder holding (together with persons who have a special relationship with that shareholder) in excess of 10%; (or 15% in the case of regional banks) in the aggregate of the bank's total issued and outstanding voting shares; or
- a shareholder holding (together with persons who have a special relationship with such shareholder) in excess of 4% in the aggregate of the bank's (excluding regional banks) total issued and outstanding voting shares of a bank (excluding shares subject to the shareholding restrictions on "non-financial business group companies" as described below), where such shareholder is the largest shareholder or has actual control over the major business affairs of the bank through, for example, appointment and dismissal of the officers as prescribed by the Enforcement Decree of the Bank Act. Non-financial business group companies primarily consist of: (i) any single shareholding group whose non-financial company assets comprise no less than 25% of its aggregate net assets; (ii) any single shareholding group whose non-financial company assets comprise no less than \text{\text{\$\text{\$\text{\$W\$}}\$}}2 trillion in aggregate; or (iii) any investment company under the FSCMA of which any single shareholding group identified in (i) or (ii) above, owns more than 4% of the total issued and outstanding shares.

Under these restrictions, banks may not extend credits to a major shareholder (together with persons who have a special relationship with that shareholder) in an amount greater than the lesser of (x) 25% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) and (y) the relevant major shareholder's shareholding ratio multiplied by the sum of the bank's Tier I and Tier II capital (less any capital deductions). In addition, the total sum of credits granted to all major shareholders must not exceed 25% of the bank's Tier I and Tier II capital (less any capital deductions).

Interest Rates

Korean banks generally depend on deposits as their primary funding source. Under the Act on Registration of Credit Business, Etc. and Protection of Finance Users and the regulations thereunder, interest rates on loans made by registered banks in Korea may not exceed 24% per annum. Historically, interest rates on deposits and lending were regulated by the MPB. There are no controls on deposit interest rates in Korea, except for the prohibition on interest payments on current account deposits.

Lending to SMEs

In order to obtain funding from the BOK at concessionary rates for their SME loans, banks are required to allocate a certain minimum percentage of any quarterly increase in their Won currency lending to SMEs. Currently, this minimum percentage is 45% in the case of nationwide banks and 60% in the case of regional banks. If a bank does not comply with this requirement, the BOK may:

- require the bank to prepay all or a portion of funds provided to that bank in support of loans to SMEs; or
- lower the bank's credit limit.

Disclosure of Management Performance

For the purpose of protecting depositors and investors in commercial banks, the FSC requires commercial banks to publicly disclose certain material matters, including:

- the financial condition and profit and loss of the bank and its subsidiaries;
- fundraising by the bank and the appropriation of such funds;
- any sanctions levied on the bank under the Bank Act or any corrective measures or sanctions under the Act on the Structural Improvement of the Financial Industry; and
- the occurrence of any of the following events, or any other event as prescribed by the applicable regulations, that have damaged or are likely to damage the soundness of the bank's management, except as may otherwise have been disclosed by a bank or its financial holding company listed on the KRX KOSPI Market in accordance with the FSCMA:
 - (i) loans bearing no profit made to a single business group in an amount exceeding 10% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) as of the end of the previous month (where the loan exposure to that borrower is calculated pursuant to the criteria under the Detailed Regulation on the Supervision of the Banking Business), unless the loan exposure to that group is not more than \(\forall \)4 billion; and
 - (ii) any loss due to court judgments or similar decisions in civil proceedings in an amount exceeding 1% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) as of the end of the previous month, unless the loss is not more than \text{\text{\$\text{\$W}\$}}1 billion.

Restrictions on Lending

Pursuant to the Bank Act and its sub-regulations, a commercial bank may not provide:

- loans secured by a pledge of the bank's own shares, whether direct or indirect;
- loans to enable a natural or juridical person to buy the shares issued by the bank, whether direct or indirect;
- loans to any of the bank's officers or employees, other than *de minimis* loans of up to
 (i) \(\formall 20\) million in the case of a general loan, (ii) \(\formall 50\) million in the case of a general loan plus a housing loan or (iii) \(\formall 60\) million in the aggregate for general loans, housing loans and loans to pay damages arising from wrongful acts of employees in financial transactions;
- credit (including loans) secured by a pledge of the equity securities of its subsidiary corporation or to enable a natural or juridical person to buy shares of its subsidiary corporation; or
- loans to any officers or employees of its subsidiary corporation, other than general loans of up to \mathbb{W}20 million or general and housing loans of up to \mathbb{W}50 million in the aggregate.

Regulations Relating to Retail Household Loans

The FSC has implemented a number of changes in recent years to the regulations relating to retail household lending by banks. Under the currently applicable regulations:

- as to loans secured by housing (including apartments) located nationwide, the loan-to-value ratio (the aggregate principal amount of loans secured by such collateral over the appraised value of the collateral) should not exceed 70%;
- as to loans secured by housing (including apartments) located in areas of excessive investment or high speculation, in each case, as designated by the Government, the loan-to-value ratio should not exceed 40%, except that such maximum loan-to-value ratio is 50% for low-income households that (i) have an annual income of less than \text{\text{W}}70 million (or \text{\text{W}}80 million for first-home buyers), (ii) do not currently own any housing and (iii) are using the loan to purchase low-price housing valued at less than \text{\text{\text{W}}}600 million;
- as to any new loans secured by housing (including apartments) located nationwide to be extended to a household that already owns one or more houses, the maximum loan-to-value ratio may be adjusted to 10% lower than the applicable loan-to-value ratio described above;

- as to any new loans secured by housing (including apartments) located in areas of excessive investment or high speculation to a household that already owns one or more houses, the extension of such loans is not permitted unless otherwise specified by the applicable regulations;
- any new loans secured by high-priced housing (including apartments) located in areas of excessive investment or high speculation, for which a price exceeding \(\fomage 900\) million has been officially announced pursuant to the Act on the Public Announcement of Real Estate Values, are generally prohibited;
- as to loans secured by housing (including apartments) located in areas of excessive investment or high speculation, in each case, as designated by the Government, the borrower's debt-to-income ratio (calculated as (1) the aggregate annual total payment amount of (x) the principal of and interest on loans secured by such housing and (y) the interest on other debts of the borrower over (2) the borrower's annual income) should not exceed 40%, except that such maximum debt-to-income ratio is 50% for low-income households that (i) have an annual income of less than \textbf{\psi}70 million (or \textbf{\psi}80 million for first-home buyers), (ii) do not currently own any housing and (iii) are using the loan to purchase low-price housing valued at less than \textbf{\psi}600 million; and
- as to any new loans secured by apartments located in an unregulated metropolitan area in or near Seoul to be extended to a household that already owns one or more houses, the maximum debt-to-income ratio may be adjusted to 10% lower than the applicable debt-to-income ratio described above.

Restrictions on Investment in Property

A bank may not invest in the following securities in excess of 100% of the sum of the bank's Tier I and Tier II capital (less any capital deductions):

- debt securities (within the meaning of paragraph (3) of Article 4 of the FSCMA) the maturity of which exceeds three years, but excluding Government bonds, monetary stabilization bonds issued by the BOK and bonds within the meaning of item 2, paragraph (6) of Article 11 of the Act on the Structural Improvement of the Financial Industry;
- equity securities, but excluding securities within the meaning of item 1, paragraph (6) of Article 11 of the Act on the Structural Improvement of the Financial Industry;
- derivatives-linked securities (within the meaning of paragraph (7) of Article 4 of the FSCMA) the maturity of which exceeds three years; and
- beneficiary certificates, investment contracts and depositary receipts (within the meaning of paragraph (2) of Article 4 of the FSCMA) the maturity of which exceeds three years.

A bank may possess real estate property only to the extent necessary to conduct its business. The aggregate value of such property may not exceed 60% of the sum of the bank's Tier I and Tier II capital (less any capital deductions). Any property that a bank acquires by exercising its rights as a secured party, or which a bank is prohibited from acquiring under the Bank Act, must be disposed of within three years, unless otherwise specified by the regulations thereunder.

Restrictions on Shareholdings in Other Companies

Under the Bank Act, a bank may not own more than 15% of the shares outstanding with voting rights of another corporation, except where, among other reasons:

- that corporation engages in a category of financial businesses set forth by the FSC; or
- the acquisition of such shares by the bank is necessary for the corporate restructuring of such corporation and is approved by the FSC.

In the above exceptional cases, the total investment in corporations in which the bank owns more than 15% of the outstanding shares with voting rights may not exceed (i) 20% of the sum of Tier I and Tier II capital (less any capital deductions) or (ii) 30% of the sum of Tier I and Tier II capital (less any capital deductions) where the acquisition satisfies the requirements determined by the FSC.

The Bank Act provides that a bank using its bank accounts and its trust accounts is not permitted to acquire the equity securities issued by the major shareholder of such bank in excess of an amount equal to 1% of the sum of Tier I and Tier II capital (less any capital deductions).

Restrictions on Bank Ownership

Under the Bank Act, a single shareholder and persons who have a special relationship with that shareholder generally may acquire beneficial ownership of no more than 10% of a nationwide bank's total issued and outstanding shares with voting rights and no more than 15% of a regional bank's total issued and outstanding shares with voting rights. The Government, the KDIC and bank holding companies qualifying under the Financial Holding Company Act are not subject to this limit. However, pursuant to an amendment to the Bank Act which became effective on February 14, 2014, non-financial business group companies may not acquire beneficial ownership of shares of a nationwide bank in excess of 4% (or 15% in the case of a regional bank) of that bank's outstanding voting shares, unless they satisfy certain requirements set forth by the Enforcement Decree of the Bank Act, obtain the approval of the FSC and agree not to exercise voting rights in respect of shares in excess of the 4% limit (or the 15% limit in the case of a regional bank), in which case they may acquire beneficial ownership of up to 10% of a nationwide bank's outstanding voting shares. Such amendment grants an exception for non-financial business group companies which, at the time of the enactment of the amended provisions, held more than 4% of the shares of a bank.

In addition, if a foreign investor, as defined in the Foreign Investment Promotion Act, owns in excess of 4% of a nationwide bank's outstanding voting shares, non-financial business group companies may acquire beneficial ownership of up to 10% (or 15% in the case of a regional bank) of that bank's outstanding voting shares, and in excess of 10% (or 15% in the case of a regional bank), 25% or 33% of that bank's outstanding voting shares with the approval of the FSC in each instance, up to the number of shares owned by the foreign investor. Any other person (whether a Korean national or a foreign investor), with the exception of non-financial business group companies described above, may acquire no more than 10% of a nationwide bank's total voting shares issued and outstanding, unless they obtain approval from the FSC in each instance where the total holding will exceed 10% (or 15% in the case of regional banks), 25% or 33% of the bank's total voting shares issued and outstanding provided that, in addition to the foregoing threshold shareholding ratios, the FSC may, at its discretion, designate a separate and additional threshold shareholding ratios.

Deposit Insurance System

The Depositor Protection Act provides insurance for certain deposits of banks in Korea through a deposit insurance system. Under the Depositor Protection Act, all banks governed by the Bank Act are required to pay an insurance premium to the KDIC on a quarterly basis and the rate is determined under the Enforcement Decree to the Depositor Protection Act. If the KDIC makes a payment on an insured amount, it will acquire the depositors' claims with respect to that payment amount. The KDIC insures a maximum of \$\pi\$50 million per individual for deposits and interest in a single financial institution, regardless of when the deposits were made and the size of the deposits.

Restrictions on Foreign Exchange Position

Under the Foreign Exchange Transaction Act of Korea, each of a bank's net overpurchased and oversold positions may not exceed 50% of its shareholders' equity as of the end of the prior month.

Laws and Regulations Governing Other Business Activities

A bank must register with the Ministry of Economy and Finance to enter the foreign exchange business, which is governed by the Foreign Exchange Transaction Act of Korea. A bank must obtain the permission of the FSC to enter the securities business, which is governed by regulations under the FSCMA. Under these laws, a bank may engage in the foreign exchange business, securities repurchase business, governmental/public bond underwriting business and governmental bond dealing business, among others.

Trust Business

A bank must obtain approval from the FSC to engage in trust businesses. The Trust Act and the FSCMA govern the trust activities of banks, and they are subject to various legal and accounting procedures and requirements, including the following:

- under the Trust Act, assets accepted in trust by a bank in Korea must be segregated from other assets in the accounts of that bank; and
- depositors and other general creditors cannot obtain or assert claims against the assets comprising the trust accounts in the event the bank is liquidated or wound-up.

The bank must make a special reserve of 25% or more of fees from each unspecified money trust account for which a bank guarantees the principal amount and a fixed rate of interest until the total reserve for that account equals 5% of the trust amount.

Under the FSCMA, a bank with a trust business license (such as the Issuer) is permitted to offer both specified money trust account products and unspecified money trust account products. However, pursuant to guidelines from regulatory authorities that discourage the sale of unspecified money trust account products, sales of such products have generally been suspended.

SUSTAINABLE FINANCING FRAMEWORK

1 Introduction

Headquartered in Seoul, the Issuer is one of the largest commercial banks in Korea and the principal subsidiary of KB Financial Group Inc., one of Korea's leading financial groups. With over 6,500 ATMs and 1,000 domestic and overseas branches as of 2019 year-end, the Issuer offers a wide range of banking products and financial services to individuals and corporate customers, including SMEs and SOHOs.

With the objective of becoming a global financial institution leading the Asian financial market, the Issuer has set strategic goals to ultimately position itself as an Asia top 10 and global top 50 player. The Issuer continually seeks to retain its leading position in Korea through enhanced profitability, stable asset growth and improved portfolio management. The Issuer also aims to further develop its financial strength and expertise to become a world-class financial institution that plays a leading role in Asia.

1.1 The Issuer's Commitment to Sustainability

In line with the Issuer's vision to be an active player in preserving the environment and promoting balanced social development through its sustainability initiatives, the Issuer is at the forefront of efforts to support environmental and social causes.

Since 2007, the Issuer has provided financing solutions for a wide range of renewable energy projects, including solar power, wind power and solid refuse fuel. The Issuer offers green loan products that provide preferential interest rates for businesses that support projects with environmental benefits. The Issuer also offers deposit and savings products that promote use of public transportation, as well as automobile loans at preferential interest rates for customers who purchase electric vehicles or hybrid vehicles.

The Issuer is also devoted to combatting climate change by reducing carbon emission generated from its business activities and enhancing energy efficiency by implementing environmental management systems (for which it obtained ISO 14001 certification) at six of its buildings, including the Yeouido headquarters. The systems help track and manage the environmental impact of the Issuer's operations, including waste generation and greenhouse gas emission.

In addition to its environmental efforts, the Issuer is committed to supporting local communities and has embraced its social responsibility as a global financial player by providing easily accessible financial services to retail customers with low income, start-up companies, SMEs and SOHOs. The Issuer offers microfinance products such as affordable loans to low income individuals and household stabilization loans to persons with disabilities.

The Kookmin Bank Sustainable Financing Framework (the "Framework") has been developed to demonstrate how the Issuer and its entities (the "Group") intend to enter into Sustainable Financing Transactions ("SFT") to finance or refinance projects and expenditures that will have a positive environmental and social impact while supporting the Group's strategy and vision. Financing may include instruments such as bonds and loans that contribute to sustainable development by earmarking the proceeds for projects and expenditures that fall within the Eligible Categories (as described below).

Bonds issued under the Framework will follow, depending on the type of bonds, the Green Bond Principles¹ ("GBP"), 2018, Social Bond Principles² ("SBP"), 2018 and Sustainability Bond Guideline³ ("SBG"), 2018, as they may be subsequently amended.

Loans made under the Framework will follow the Green Loan Principles⁴ ("GLP"), 2018, as they may be subsequently amended.

https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Green-Bond-Principles-June-2018-140618-WEB.pdf

https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Social-Bond-Principles-June-2018-140618-WEB.pdf

³ https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Sustainability-Bond-Guidelines-June-2018-140618-WEB.pdf

⁴ https://www.lma.eu.com/application/files/9115/4452/5458/741_LM_Green_Loan_Principles_Booklet_V8.pdf

The Framework may be subsequently revised or updated as the sustainable finance market continues to evolve.

Each SFT will align with the following four core components, as described in Section 2 below;

- 1. Use of Proceeds;
- 2. Project Evaluation and Selection;
- 3. Management of Proceeds; and
- 4. Reporting.

2 Kookmin Bank Sustainable Financing Framework

2.1 Use of Proceeds

An amount equal to the net proceeds of each SFT (or its equivalent in other currencies) will be allocated to direct lending to the Issuer's corporate customers and individual customers. This includes all lending products that the Issuer currently offers as well as any future lending products it may develop, except lending to Exclusions as defined in Section 2.1.3 below. Eligible lending products include new loans, and refinancing of existing loans that have been issued within 24 months prior to the date of issuance of the SFT.

The proceeds of a Green Bond/Loan and/or a Social Bond/Loan issued under the Framework will be allocated to projects that fall under the Green Eligible Categories set forth in Section 2.1.1 below or the Social Eligible Categories set forth in Section 2.1.2 below, respectively, while the proceeds of a Sustainability Bond/Loan will be allocated to a combination of Green and Social Eligible Categories (the "Eligible Use of Proceeds").

2.1.1 Green Eligible Categories

Eligible Categories	Explanation		Eligible Projects (including, but not limited to)
Renewable energy	Technology and related infrastructure supporting the production of renewable energy such as solar energy, hydropower, wind power, geothermal energy and bioenergy	-	Solar cell production Solar energy generation (including building-integrated photovoltaics) Biomass energy generation (including marine, agriculture, forest) Ocean energy generation (ocean thermal energy, tidal power generation) Hydro-power projects Wind power generation Solar thermal energy generation
Energy efficiency	Industries that promote energy savings and increase efficiency of energy use by effectively distributing, utilizing, and managing the energy generated through the application of IT technology and new materials	-	Hydrogen fuel cell technology Household energy management (smart meters) Thermal grids to recycle heat emissions (e.g. power plant hot water heat, LNG cold heat) from power plants and other industrial applications as useful energy for other industries (e.g. heat pumps, heat exchangers)

Eligible Categories	Explanation	Eligible Projects (including, but not limited to)
Pollution prevention and control	Technology and related services to create sustainable environment through reduction of environmental pollution, by eliminating or significantly mitigating environmental pollutants in water, air, and soil using biological, physical and chemical methods	 Nitrogen emissions reduction (technology to reduce nitrogen oxides emissions from industrial sources) Environment-friendly refrigerants Micro-air pollution management Soil remediation Electronic/electric waste recycling Waste-recycled energy
Environmentally sustainable management of natural resources and land use	Sustainable utilization of major natural resources such as land, water, air, minerals, forests, wild flora and fauna	 Environmentally sustainable agriculture, (smart farming, microirrigation, agricultural microorganism and vertical farming) Environmentally sustainable animal husbandry Climate smart farm inputs such as biological crop protection or drip-irrigation
Conservation of terrestrial and aquatic biodiversity	Protection of coastal, marine or watershed environments	 Projects for allocation and protection of the environment, the local community, and biodiversity
Clean transportation	Transportation systems that have little or no carbon emissions and related equipment, technology and infrastructure	Magnetic levitation (advanced transit system)Electric vehicles
Sustainable water and wastewater management	Solutions that promote the sustainable management of water resources	 Sustainable infrastructure for clean water Wastewater treatment Flooding mitigation (sustainable urban drainage systems, river training) Membrane filtration waste water disposal (sewage and waste water recycling, hydro ecological restoration)
Climate change adaptation	Responses to reduce the vulnerability of social and biological systems to climate change and the impact of global warming	
Green buildings	Construction of buildings and application of processes that are environmentally responsible and resource-efficient throughout the building's life-cycle	- Construction and renovation of green buildings that meet recognized Green Building Standards: LEED Gold and above, BREEAM Excellent and above, and national equivalents with minimum standards such as G-SEED (Green Standard for Energy and Environmental Design) based on the Act on Development and Support of Green Buildings

2.1.2 Social Eligible Categories

Eligibility Categories	Eligible Projects (including, but not limited to)
Affordable basic infrastructure	Projects that provide, or promote, the following to target populations specified in Appendix I: - Clean drinking water - Sewerage - Sanitation - Transportation - Energy
Access to essential services	Projects that provide, or promote, the following to target populations specified in Appendix I: - Health - Education - Vocational training - Healthcare - Financing - Financial services
Affordable housing	- Lending to tenants of public housing provided by 1) public housing providers under the Special Act of Public Housing or 2) public housing providers approved by Korea Housing Finance Corporation
Employment generation	Loans to companies which qualify under "Job Creation Criteria" specified in Appendix II SME financing and microfinance Loans to companies which meet the following requirements: - Categorized as an SME under the Enforcement Decree of The Framework Act on Small and Medium Enterprises (see Appendix III for more information) - Less than 10 employees
Socioeconomic advancement and empowerment	Loans to financially-alienated communities or underserved populations, including: - Low income individuals ⁵ - Single parents with dependents aged below 18 - Families or individuals with financial - dependent(s) aged over 60

2.1.3 Exclusions

The following industries are excluded from consideration for eligibility ("Exclusions"):

- Luxury sectors (precious metals wholesale or brokerage, precious minerals wholesale or brokerage, artworks and antiques wholesale or brokerage, golf course services);
- Child labor;
- Adult entertainment;
- Weapon;
- Alcohol;
- Tobacco;
- Fossil fuel;
- Nuclear;

Low income individuals are determined by the Korean Ministry of Health and Welfare ("MOHW") and Ministry of Education ("MOE")'s classification, which is based on household income.

- Large-scale hydro-power projects with a generating capacity of over 25 megawatts; and
- Biomass suitable for food production

2.2 Project Evaluation and Selection

The project evaluation and selection process is a key process in ensuring that net proceeds from the Group's SFTs are allocated to projects and assets that meet the criteria set forth in the Framework.

Potentially eligible projects for the use of proceeds of each SFT issued under the Framework will first be identified and proposed by the Issuer's business units. These projects will need to meet all lending criteria established by the Issuer for lending in the ordinary course of its business.

The Issuer will establish a Sustainable Financing Steering Committee ("SFSC"), which will consist of representatives from the below departments:

- Trading/Capital Markets Department
- Retail Credit Product Department
- SME/SOHO Customer Department
- Investment Banking Department
- Infrastructure Finance Department
- General Affairs Department
- Head Office Integration Department
- Corporate Social Responsibility Department
- Global Business Department
- CSR & Culture Management Department, KB Financial Group Inc.

The projects proposed will be reviewed by the SFSC, which will assess the environmental and social impact of such projects by screening customer information against the Eligible Use of Proceeds set forth in Section 2.1 above, and will make recommendations for inclusion as Eligible Use of Proceeds.

The SFSC will review and approve all proposed Eligible Use of Proceeds to determine their compliance with the Framework.

The SFSC will annually review the allocation of proceeds to the Eligible Categories and determine whether any changes are necessary (for example, if lending has been repaid, sold or otherwise become ineligible), and will decide whether any update to the allocations (such as replacement, deletion, or addition) would be necessary.

The SFSC will also facilitate reporting as described in Section 2.4 below.

2.3 Management of Proceeds

The Group will establish a Sustainable Financing Register to record the allocations and track the use of SFT proceeds. The proceeds of each SFT will be deposited in the general funding accounts and earmarked for allocation to eligible assets.

The Sustainable Financing Register will be reviewed annually by the SFSC to account for any reallocation, repayments or drawings on the eligible projects and expenditures within the pool. The Sustainable Financing Register will contain, among others, the following information:

- (1) Details of the SFT(s): key information, including issuer/borrower entity, transaction date, principal amount of proceeds, settlement date, maturity date, interest rate or coupon, ISIN number etc.;
- (2) Details of the use of proceeds, including:
 - Summary of eligible projects and expenditures to which the SFT proceeds have been earmarked in accordance with the Framework;

- Amount of SFT proceeds earmarked for each eligible project and/or eligible category;
- Confirmation by SFSC that the project constitutes an Eligible Use of Proceeds under the Framework;
- Aggregate amount of SFT proceeds earmarked for eligible projects and expenditures;
- Any unallocated SFT proceeds yet to be earmarked for eligible projects and expenditures;
- Estimated environmental and social impact; and
- Other necessary information.

Any balance of proceeds from an issuance not allocated to Eligible Use of Proceeds will be held in accordance with the Group's general liquidity management policies. The unallocated proceeds can be invested domestically and internationally in money market instruments with satisfactory credit ratings and market liquidity until they are allocated to Eligible Use of Proceeds.

2.4 Reporting

The Group is committed to a high level of reporting. The Issuer will disclose its use of proceeds from SFT(s) on an annual basis on its website at https://omoney.kbstar.com/quics?page=C060053 or in its annual reports or sustainability reports. The disclosure will contain, among others, the following information:

(a) Summary

List of all SFT(s) executed in the reporting period and outstanding as of the reporting date and summary terms of each transaction, including issuer/borrower entity, transaction date, principal amount of proceeds, maturity date, interest rate or coupon, ISIN number, etc.

(b) Allocation Reporting

- Confirmation that the use of proceeds of each SFT complies with the Framework;
- List of Eligible Use of Proceeds made from the proceeds of each SFT and its net amount;
- Breakdown of the Eligible Use of Proceeds, by geographic location, sector and others; and
- The balance of unallocated net proceeds.

(c) Impact Reporting

• Where possible, the Group will report on the environmental and social impacts (where relevant) resulting from eligible projects. Subject to the nature of eligible projects/expenditures and availability of information, the Group will look to utilize the impact reporting guidelines (as detailed within the ICMA Green Bond Principles Resource Centre and summarized in Appendix IV).

3 External Review

The Group has engaged Sustainalytics to provide an external review in the form of a Second Party Opinion on the Framework, and to confirm alignment with the GBP, SBP, SBG and/or the GLP, as applicable.

Such Second Party Opinion will be made publicly available on the Issuer's website at https://omoney.kbstar.com/quics?page=C060053.

Appendix I: Examples of Target Populations from SBP 2018

- Low income individuals⁶
- Vulnerable groups, including victims of natural disasters
- People with disabilities

⁶ Low income individuals are determined by the MOHW and MOE's classification, which is based on household income.

- Migrants and/or displaced persons
- Under-educated
- Underserved, from a lack of quality access to essential goods and services
- Unemployed

Appendix II: Job Creation Criteria

- Employment growth since January 1, 2016
- Certified as "Good employment company" by the central or local government
- Designated as "Job creation supporting company for part-time workers" by the Ministry of Employment and Labor
- Received tax benefit in consequence of employment expansion for the recent 1 year as per the Special Tax Treatment Control Act
- Company engaged in supporting business area of Ministry of SMEs and Startups
- Company engaged in "Young generation employment campaign" hosted by the Ministry of Employment and Labor, and Ministry of SMEs and Startups
- Designated as "Small giants company friendly to young generation" by the Ministry of Employment and Labor
- Company provided with "Employment stability subsidy" or "Employment generation subsidy" by the government
- Company that transferred its headquarters or factories from overseas to Korea during the past two years
- Companies which qualify under the above may be offered a preferred lending rate from the Issuer.

Appendix III: Definition of Small and Medium Enterprises

Under the Enforcement Decree of The Framework Act on Small and Medium Enterprises,⁷ a small and medium enterprise shall be a business entity that meets all the standards set forth in the following subparagraphs:

- The main type of business in which the business entity is engaged and its average sales or annual sales (hereinafter "average sales, etc.") shall meet the standards set forth in attached Table 1
- A corporation whose total assets are less than 500 billion won
- A business entity whose actual separation of its management and ownership does not fall under any of the following:
- A company that belongs to a conglomerate subject to restrictions on mutual investment, etc. under Article 14(1) of the Monopoly Regulation and Fair Trade Act (hereafter "conglomerate subject to restrictions on mutual investment, etc." in this subparagraph) or a company notified as a company incorporated as an affiliate into a conglomerate subject to restrictions on mutual investment, etc. pursuant to Article 14-3 of the same Act
- A corporation whose total assets are at least 500 billion won (including a foreign corporation, with the exception of a non-profit corporation and the one falling under any of the subparagraphs in Article 3-2(3)) which is the largest shareholder, directly or indirectly owning 30% or more of the total outstanding stocks, etc. The largest shareholder referred to in such cases means a corporation or an individual owning the largest share of the relevant company independently or jointly with any of the following, and Article 2(2) of the Enforcement Decree of the Adjustment of International Taxes Act shall apply mutatis mutandis to the calculation of the ratio of indirectly owned outstanding stocks, etc.:
 - If the shareholder is a corporation: Executive officers of the corporation; or

https://elaw.klri.re.kr/eng_service/lawView.do?lang=ENG&hseq=32407

- If the shareholder is an individual who does not fall under (i): Relatives by blood of such individual
- In the case of a corporation belonging to a related company, a corporation whose average sales, etc. calculated according to Article 7-4 does not satisfy the standards under attached Table 1
- A company which is excluded from the scope of a conglomerate under the control of the same person pursuant to Article 3-2(2)-4 of the Enforcement Decree of the Monopoly Regulation and Fair Trade Act and no more belongs to a conglomerate subject to restrictions on mutual investment, etc., and for which three years have passed from the date it meets the requirements under Article 3 of the same Enforcement Decree

Appendix IV:

The Group will look to utilize potential environmental and social impact reporting indicators as summarized below and further detailed within the ICMA Green Bond Principles Resource Centre. https://www.icmagroup.org/green-social-and-sustainability-bonds/resource-centre/#

Categories	Impact Indicators
Environmental Impact	 kWh of power generated from renewable energy Tonnes of GHG avoided Energy saved per year (kWh/year) Energy reduction (%)
Social Impact	 Number of corporations financed by Eligible Use of Proceeds Number of jobs created Number and type of disadvantageous communities helped Amount of credit distributed

TAXATION

Korean Taxation

The information provided below does not purport to be a complete summary of Korean tax law and practice currently applicable. Prospective investors who are in any doubt as to their tax position should consult with their own professional advisers.

The taxation of non-resident individuals and non-Korean corporations ("Non-Residents") generally depends on whether they have a "Permanent Establishment" (as defined under Korean law and applicable tax treaty) in Korea to which the relevant Korean source income is attributable or with which such relevant Korean source income is effectively connected. Non-Residents without such a Permanent Establishment in Korea are taxed in the manner described below. Non-Residents with such Permanent Establishment are taxed in accordance with different rules.

Income Tax and Corporation Tax on Interest

Interest on the Notes paid to Non-Residents (excluding payments to their Permanent Establishment in Korea) is exempt from income tax and corporation tax (whether payable by withholding or otherwise) pursuant to the Special Tax Treatment Control Law (the "STTCL"), subject to the tax consequences with respect to Index Linked Notes set out in the applicable Pricing Supplement, so far as the Notes are "foreign currency denominated bonds" under the STTCL and the issuance of the Notes is deemed to be an overseas issuance under the STTCL. The term "foreign currency denominated bonds" in this context is not defined under the STTCL. In this regard, the Korean tax authority issued a ruling on September 1, 1990 to the effect that "Notes Issuance Facility, USCP, Euro CP and Banker's Acceptance, etc." are not treated as the "foreign currency denominated bonds."

If not exempt under STTCL, the rate of income tax or corporation tax applicable to interest or any premium on the Notes, for a Non-Resident without a Permanent Establishment in Korea, is currently 14.0%. In addition, a tax surcharge, called a local income tax is imposed at the rate of 10.0% of the income tax or corporation tax (raising the total tax rate to 15.4%).

The tax is withheld by the payer of the interest.

The tax rates may be reduced by applicable tax treaty, convention or agreement between Korea and the country of the recipient of the interest. The relevant tax treaties are discussed below.

Index Linked Notes

A detailed description of the tax considerations relevant to Index Linked Notes will be provided in the applicable Pricing Supplement.

Capital Gains Tax

The Korean tax laws currently exclude from Korean taxation gains made by a Non-Resident without a Permanent Establishment in Korea from the sale of the Notes to a Non-Resident (other than to its Permanent Establishment in Korea). In addition, capital gains earned by a Non-Resident with or without a Permanent Establishment from the transfer outside Korea of the Notes are currently exempt from taxation by virtue of STTCL, provided that the Notes are "foreign currency denominated bonds" under the STTCL and the issuance of the Notes is deemed to be an overseas issuance under the STTCL.

In the absence of an applicable tax treaty or any other special tax laws reducing or eliminating the capital gains tax, the applicable rate of tax is the lower of 11.0% (including local income tax) of the gross realization proceeds (the "Gross Realization Proceeds") and (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Notes) 22.0% (including local income tax) of the realized gain made. The realized gain is calculated as the Gross Realization Proceeds less the acquisition cost and certain direct transaction costs. If such evidence shows that no gain (or a loss) was made on the sale no Korean tax is payable. There is no provision under the relevant Korean law for offsetting gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of securities of Korean companies.

The purchaser or any other designated withholding agent of Notes is obliged under Korean law to withhold the applicable amount of Korean tax and make payment thereof to the relevant Korean tax authority. Unless the seller can claim the benefit of an exemption from the tax under an applicable tax treaty or in the absence of the seller producing satisfactory evidence of his acquisition cost and certain direct transaction costs in relation to the Notes being sold, the purchaser or such withholding agent must withhold an amount equal to 11.0% (including local income tax) of the Gross Realization Proceeds. Any amounts withheld by the purchaser or such withholding agent must be paid to the relevant Korean tax authority no later than the 10th day of the month following the month in which the payment for the purchase of the relevant Notes occurred. Failure to transmit the withheld tax to the Korean tax authorities in time technically subjects the purchaser or the withholding agent to penalties under Korean tax laws and a Non-Resident who is liable for payment of any Korean tax on gains, either as a seller of Notes or as a purchaser or the withholding agent who is obliged to withhold such tax, is subject to the Korean tax authorities seeking enforcement through attachment of, or other legal proceedings against, payments due to it from its Korean investments and to enforcement against the assets or revenues of any of the Non-Resident's branch or representative offices in Korea.

Inheritance Tax and Gift Tax

Korean inheritance tax is imposed upon (a) all assets (wherever located) of the deceased if at the time of his death he was domiciled in Korea or resided in Korea for at least 183 days immediately prior to his death and (b) all property located in Korea which passes on death (irrespective of the domicile or residence of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and vary according to the identity of the parties involved.

Under the Korean inheritance and gift tax laws, notes issued by Korean corporations are deemed located in Korea irrespective of where they are physically located or by whom they are owned.

Stamp Duty and Securities Transaction Tax

No stamp, issue or registration duties will be payable in Korea by the Noteholders in connection with the issue of the Notes. A securities transaction tax will not be imposed on the transfer of the Notes.

Tax Treaties

At the date of this Offering Circular, Korea has tax treaties with *inter alia* Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America where under the rate of withholding tax on interest is reduced, generally to between 5% and 16.5% (including local income tax), and the tax on capital gains is often eliminated.

Each Noteholder should enquire for himself whether he is entitled to the benefit of a tax treaty with respect to this transaction. It is the responsibility of the party claiming the benefits of a tax treaty in respect of interest payments to file with the Issuer a certificate as to his residence. In the absence of sufficient proof, the Issuer must undertake to withhold taxes in accordance with the above discussion.

In order to claim the benefit of a tax rate reduction or tax exemption available under the applicable tax treaties, a Non-Resident holder must submit to the payer of such Korean-sourced income an application (for reduced withholding tax rate, "application for entitlement to reduced tax rate" and in the case of exemption from withholding tax, "application for exemption" under a tax treaty along with a certificate of the non-resident holder's tax residence issued by a competent authority of the Non-Resident holder's residence country) as the beneficial owner ("BO Application"). Such application should be submitted to the withholding agent prior to the payment date of the relevant income. Subject to certain exceptions, where the relevant income is paid to an overseas investment vehicle (which is not the beneficial owner of such income) ("OIV"), a beneficial owner claiming the benefit of an applicable tax treaty with respect to such income must submit its BO Application to such OIV, which must submit an OIV report and a schedule of beneficial owners (together with the applicable BO Application and certificate of the non-resident holder's tax residence in case of exemption from withholding tax), to the withholding agent prior to the payment date of such income. In the case of a tax exemption application, the withholding

agent is required to submit such application (together with the applicable OIV report in the case of income paid to an OIV) to the relevant district tax office by the ninth day of the month following the date of the payment of such income.

At present, Korea has not entered into any tax treaties regarding its inheritance or gift tax.

U.S. Taxation

The following is a summary of certain U.S. federal income tax considerations that may be relevant to a holder or a beneficial owner of a Registered Note that is a citizen or resident of the United States or a domestic corporation or that otherwise is subject to U.S. federal income taxation on a net income basis in respect of such Note (a "U.S. Holder"). This summary is based on laws, regulations, rulings and decisions now in effect, all of which are subject to change. This summary deals only with U.S. Holders that will hold or beneficially own Registered Notes as capital assets, and does not address tax considerations applicable to investors that may be subject to special tax rules, such as banks, tax-exempt entities, insurance companies, regulated investment companies, dealers in securities or currencies, traders in securities electing to mark to market, entities or arrangements taxed as partnerships for U.S. federal income tax purposes or partners therein, persons that will hold such Notes as a position in a "straddle" or conversion transaction, or as part of a "synthetic security" or other integrated financial transaction, U.S. expatriates, nonresident alien individuals present in the United States for more than 182 days in a taxable year, persons that actually or constructively own 10% or more of the Issuer's stock, measured by vote or by value, or persons that have a "functional currency" other than the U.S. dollar. Any special U.S. federal income tax considerations relevant to a particular issue of Registered Notes, including any Index Linked Notes or Dual Currency Notes, will be provided in the applicable Pricing Supplement.

This summary addresses only U.S. federal income tax consequences, and does not address consequences arising under state, local, or foreign tax laws, the alternative minimum tax, the Medicare tax on net investment income or special rules for the taxable year of inclusion for accrual basis taxpayers under Section 451(b) of the Internal Revenue Code of 1986, as amended (the "Code"). Investors should consult their own tax advisers in determining the tax consequences to them of holding Registered Notes under such tax laws, as well as the application to their particular situation of the U.S. federal income tax considerations discussed below.

Payments of Interest

Payments of "qualified stated interest" (as defined under "-Original Issue Discount" below) on a Registered Note will be taxable to a U.S. Holder as ordinary interest income at the time that such payments are accrued or are received (in accordance with the U.S. Holder's method of tax accounting). If such payments of interest are made with respect to a Registered Note that is denominated in a single currency other than the U.S. dollar (a "Foreign Currency Note"), the amount of interest income realized by a U.S. Holder that uses the cash method of tax accounting will be the U.S. dollar value of the Specified Currency payment based on the exchange rate in effect on the date of receipt regardless of whether the payment is in fact converted into U.S. dollars. A U.S. Holder that uses the accrual method of accounting for tax purposes will accrue interest income on such Note in the Specified Currency and translate the amount accrued into U.S. dollars based on the average exchange rate in effect during the interest accrual period (or portion thereof within the U.S. Holder's taxable year), or, at the accrual basis U.S. Holder's election, at the spot rate of exchange on the last day of the accrual period (or the last day of the taxable year within such accrual period if the accrual period spans more than one taxable year), or at the spot rate of exchange on the date of receipt, if such date is within five business days of the last day of the accrual period. A U.S. Holder that makes such election must apply it consistently to all debt instruments from year to year and cannot change the election without the consent of the U.S. Internal Revenue Service ("IRS"). A U.S. Holder that uses the accrual method of accounting for tax purposes will recognize foreign currency gain or loss, as the case may be, on the receipt of an interest payment made with respect to a Foreign Currency Note if the exchange rate in effect on the date the payment is received differs from the rate applicable to a previous accrual of that interest income. Amounts attributable to pre-issuance accrued interest will generally not be includable in income, except to the extent of foreign currency gain or loss attributable to any changes in exchange rates during the period between the date the U.S. Holder acquired the Note and the first Interest Payment Date. This foreign currency gain or loss will be treated as ordinary income or loss but generally will not be treated as an adjustment to interest income received on such Note.

Effect of Korean Withholding Taxes

As discussed in "—Korean Taxation" above, under current law payments of interest and original issue discount ("OID") on the Registered Notes to non-Korean investors may be subject to Korean withholding taxes. As discussed under "Terms and Conditions of the Notes—Taxation," the Issuer may be liable for the payment of additional amounts to U.S. Holders so that U.S. Holders receive the same amounts they would have received had no Korean withholding taxes been imposed. For U.S. federal income tax purposes, U.S. Holders would be treated as having actually received the amount of Korean taxes withheld by the Issuer with respect to a Registered Note (including any amounts withheld in respect of additional amounts paid to offset such withholding), and as then having actually paid over the withheld taxes to the Korean taxing authorities. As a result, the amount of interest income included in gross income for U.S. federal income tax purposes by a U.S. Holder with respect to a payment of interest or OID may be greater than the amount of cash actually received (or receivable) by the U.S. Holder from the Issuer with respect to the payment.

Subject to certain limitations, a U.S. Holder generally will be entitled to a credit against its U.S. federal income tax liability, or a deduction in computing its U.S. federal taxable income, for Korean income taxes withheld by the Issuer. Interest generally will constitute "passive category income" for purposes of the foreign tax credit. The rules governing foreign tax credits are complex. Prospective purchasers should consult their tax advisers concerning the foreign tax credit implications of Korean withholding taxes.

Purchase, Sale and Retirement of Registered Notes

A U.S. Holder's adjusted tax basis in a Registered Note generally will equal the cost of such Note to such holder, increased by any amounts included in income by the holder as OID and market discount and reduced by any amortized premium (each as described below) and any payments other than payments of qualified stated interest made on such Note. In the case of a Foreign Currency Note, the cost of such Note to a U.S. Holder will be the U.S. dollar value of the Specified Currency purchase price on the date of purchase. In the case of a Foreign Currency Note that is traded on an established securities market, a cash basis U.S. Holder (and, if it so elects, an accrual basis U.S. Holder) will determine the U.S. dollar value of the cost of such Note by translating the amount paid at the spot rate of exchange on the settlement date of the purchase. The amount of any subsequent adjustments to a U.S. Holder's adjusted tax basis in a Registered Note in respect of OID, market discount and premium denominated in a Specified Currency will be determined in the manner described under "—Original Issue Discount" and "—Premium and Market Discount" below. The conversion of U.S. dollars to a Specified Currency and the immediate use of the Specified Currency to purchase a Foreign Currency Note generally will not result in taxable gain or loss for a U.S. Holder.

Upon the sale, exchange or retirement of a Registered Note, a U.S. Holder generally will recognize gain or loss equal to the difference between the amount realized on the sale, exchange or retirement (less any amount attributable to accrued qualified stated interest, which will be taxable as such) and the U.S. Holder's adjusted tax basis in such Note. If a U.S. Holder receives a currency other than the U.S. dollar in respect of the sale, exchange or retirement of a Registered Note, the amount realized will be the U.S. dollar value of the Specified Currency received calculated at the exchange rate in effect on the date of such sale, exchange or retirement. In the case of a Foreign Currency Note that is traded on an established securities market, a cash basis U.S. Holder (and if it so elects, an accrual basis U.S. Holder), will determine the U.S. dollar value of the amount realized by translating such amount at the spot rate on the settlement date of the sale. The election available to accrual basis U.S. Holders in respect of the purchase and sale of Foreign Currency Notes traded on an established securities market, discussed above, must be applied consistently to all debt instruments from year to year and cannot be changed without the consent of the IRS.

Except as discussed below with respect to market discount, Short-Term Notes (as defined below) and foreign currency gain or loss, gain or loss recognized by a U.S. Holder generally will be capital gain or loss and will be long—term capital gain or loss if the U.S. Holder has held such Note for more than one year at the time of disposition. Long-term capital gains recognized by an individual U.S. Holder generally are subject to tax at a lower rate than short-term capital gains or ordinary income. The deductibility of capital losses is subject to limitations.

Gain or loss recognized by a U.S. Holder on the sale, exchange or retirement of a Foreign Currency Note generally will be treated as ordinary income or loss to the extent that the gain or loss is attributable to changes in exchange rates during the period in which the U.S. Holder held such Note. This foreign currency gain or loss will not be treated as an adjustment to interest income received on such Notes.

Original Issue Discount

If the Issuer issues Registered Notes at a discount from their stated redemption price at maturity (as defined below), and the discount is equal to or more than 0.25% of the stated redemption price at maturity of such Notes, multiplied by the number of full years to their maturity from the issue date, such Notes will be "Original Issue Discount Notes." The difference between the issue price and the stated redemption price at maturity of such Notes will be the OID. The "issue price" of such Notes will be the first price at which a substantial amount of such Notes are sold to the public (i.e., excluding sales of such Notes to underwriters, placement agents, wholesalers, or similar persons). The "stated redemption price at maturity" of such Notes will include all payments under such Notes other than payments of qualified stated interest. The term "qualified stated interest" generally means stated interest that is unconditionally payable in cash or property (other than debt instruments issued by the Issuer) at least annually during the entire term of such Note at a single fixed interest rate or, subject to certain conditions, based on one or more floating interest rates.

U.S. Holders of Original Issue Discount Notes generally will be subject to the special tax accounting rules for obligations issued with OID provided by the Code, and certain regulations promulgated thereunder (the "OID Regulations"). U.S. Holders of such Notes should be aware that, as described in greater detail below, they generally must include OID in ordinary gross income for U.S. federal income tax purposes as it accrues, in advance of the receipt of cash attributable to that income.

In general, each U.S. Holder of an Original Issue Discount Note, whether such U.S. Holder uses the cash or the accrual method of tax accounting, will be required to include in gross income as ordinary income the sum of the "daily portions" of OID on such Note for all days during the taxable year that the U.S. Holder owns such Note. The daily portions of OID on an Original Issue Discount Note are determined by allocating to each day in any accrual period a ratable portion of the OID allocable to that accrual period. Accrual periods may be any length and may vary in length over the term of an Original Issue Discount Note, provided that no accrual period is longer than one year and each scheduled payment of principal or interest occurs on either the final day or the first day of an accrual period. In the case of an initial holder, the amount of OID on an Original Issue Discount Note allocable to each accrual period is determined by (a) multiplying the "adjusted issue price" (as defined below) of the Original Issue Discount Note at the beginning of the accrual period by the yield to maturity of such Original Issue Discount Note (appropriately adjusted to reflect the length of the accrual period) and (b) subtracting from that the sum of the amount (if any) of qualified stated interest allocable to that accrual period. The yield to maturity of such Note is the discount rate that causes the present value of all payments on such Note as of its original issue date to equal the issue price of such Note. The "adjusted issue price" of an Original Issue Discount Note at the beginning of any accrual period will generally be the sum of its issue price (generally including accrued interest, if any) and the amount of OID allocable to all prior accrual periods, reduced by the amount of all payments other than payments of qualified stated interest (if any) made with respect to such Note in all prior accrual periods. In the case of an Original Issue Discount Note that is a Floating Rate Note, both the "yield to maturity" and "qualified stated interest" will generally be determined for these purposes as though the Original Issue Discount Note will bear interest in all periods at a fixed rate generally equal to the rate that would be applicable to the interest payments on such Note on its date of issue or, in the case of certain Floating Rate Notes, the rate that reflects the yield that is reasonably expected for such Note. (Additional rules may apply if interest on a Floating Rate Note is based on more than one interest index.) As a result of this "constant yield" method of including OID in income, the amounts includible in income by a U.S. Holder in respect of an Original Issue Discount Note denominated in U.S. dollars generally are lesser in the early years and greater in the later years than the amounts that would be includible on a straight-line basis.

A U.S. Holder generally may make an irrevocable election to include in its income its entire return on a Registered Note (i.e., the excess of all remaining payments to be received on such Note, including payments of qualified stated interest, over the amount paid by such U.S. Holder for such Note) under the

constant-yield method described above. For Registered Notes purchased at a premium or bearing market discount in the hands of the U.S. Holder, the U.S. Holder making such election will also be deemed to have made the election (discussed in "—*Premium and Market Discount*" below) to amortize premium or to accrue market discount in income currently on a constant-yield basis.

In the case of an Original Issue Discount Note that is also a Foreign Currency Note, a U.S. Holder should determine the U.S. dollar amount includible in income as OID for each accrual period by (a) calculating the amount of OID allocable to each accrual period in the Specified Currency using the constant-yield method described above, and (b) translating the amount of the Specified Currency so derived at the average exchange rate in effect during that accrual period (or portion thereof within a U.S. Holder's taxable year) or, at the U.S. Holder's election (as described under "-Payments of Interest" above), at the spot rate of exchange on the last day of the accrual period (or, if the accrual period spans more than one taxable year, at the spot rate on the last day of the first taxable year for the OID accruing in the portion of the accrual period ending on such date and at the spot rate on the last date of the accrual period for the remaining OID accruing during such accrual period), or at the spot rate of exchange on the date of receipt, if such date is within five business days of the last day of the accrual period. Because exchange rates may fluctuate, a U.S. Holder of an Original Issue Discount Note that is also a Foreign Currency Note may recognize a different amount of OID income in each accrual period than would the holder of an otherwise similar Original Issue Discount Note denominated in U.S. dollars. All payments on an Original Issue Discount Note (other than payments of qualified stated interest) will generally be viewed first as payments of previously-accrued OID (to the extent thereof), with payments attributed first to the earliest-accrued OID, and then as payments of principal. Upon the receipt of an amount attributable to OID (whether in connection with a payment of an amount that is not qualified stated interest or the sale or retirement of the Original Issue Discount Note), a U.S. Holder will recognize ordinary income or loss measured by the difference between the amount received (translated into U.S. dollars at the exchange rate in effect on the date of receipt or on the date of disposition of the Original Issue Discount Note, as the case may be) and the amount accrued (using the exchange rate applicable to such previous accrual).

A subsequent U.S. Holder of an Original Issue Discount Note that purchases such Note at a cost less than its remaining redemption amount (as defined below), or an initial U.S. Holder that purchases an Original Issue Discount Note at a price other than such Note's issue price, also generally will be required to include in gross income the daily portions of OID, calculated as described above. However, if the U.S. Holder acquires the Original Issue Discount Note at a price greater than its adjusted issue price, such U.S. Holder may reduce its periodic inclusions of OID income to reflect the premium paid over the adjusted issue price. The "remaining redemption amount" for such Note is the total of all future payments to be made on such Note other than payments of qualified stated interest.

Floating Rate Notes generally will be treated as "variable rate debt instruments" under the OID Regulations. Accordingly, the stated interest on a Floating Rate Note generally will be treated as "qualified stated interest" and such Note will not have OID solely as a result of the fact that it provides for interest at a variable rate. If a Floating Rate Note does not qualify as a "variable rate debt instrument," such Note will be subject to special rules (the "Contingent Payment Regulations") that govern the tax treatment of debt obligations that provide for contingent payments ("Contingent Debt Obligations"). A detailed description of the tax considerations relevant to U.S. Holders of any such Notes will be provided in the applicable Pricing Supplement.

Certain of the Registered Notes may be subject to special redemption, repayment or interest rate reset features, as indicated in the applicable Pricing Supplement. Registered Notes containing such features, in particular Original Issue Discount Notes, may be subject to special rules that differ from the general rules discussed above. Purchasers of Registered Notes with such features should carefully examine the applicable Pricing Supplement and should consult their own tax advisers with respect to such Notes since the tax consequences with respect to such features, and especially with respect to OID, will depend, in part, on the particular terms of such purchased Notes.

If a Note provides for a scheduled Accrual Period that is longer than one year (for example, as a result of a long initial period on a Note with interest that is generally paid on an annual basis), then stated interest on the Note will not qualify as "qualified stated interest" under the applicable Treasury Regulations. As

a result, the Note would be an Original Issue Discount Note. In that event, among other things, cashmethod U.S. Holders will be required to accrue stated interest on the Note under the rules for OID described above, and all U.S. Holders will be required to accrue OID that would otherwise fall under the de minimis threshold.

Premium and Market Discount

A U.S. Holder of a Registered Note that purchases such Note at a cost greater than its remaining redemption amount (as defined under "-Original Issue Discount" above) will be considered to have purchased the Registered Note at a premium, and may elect to amortize such premium (as an offset to interest income), using a constant-yield method, over the remaining term of such Note. Such election, once made, generally applies to all bonds held or subsequently acquired by the U.S. Holder on or after the first taxable year to which the election applies and may not be revoked without the consent of the IRS. A U.S. Holder that elects to amortize such premium must reduce its tax basis in a Registered Note by the amount of the premium amortized during its holding period. Original Issue Discount Notes purchased at a premium over the redemption amount will not be subject to the OID rules described above. In the case of premium in respect of a Foreign Currency Note, a U.S. Holder should calculate the amortization of such premium in the Specified Currency. Amortization deductions attributable to a period reduce interest payments in respect of that period and therefore are translated into U.S. dollars at the exchange rate used by the U.S. Holder for such interest payments. Exchange gain or loss will be realized with respect to amortized bond premium on such Note based on the difference between the exchange rate on the date or dates such premium is recovered through interest payments on such Note and the exchange rate on the date on which the U.S. Holder acquired such Note. With respect to a U.S. Holder that does not elect to amortize bond premium, the amount of bond premium will be included in the U.S. Holder's tax basis when such Note matures or is disposed of by the U.S. Holder.

Therefore, a U.S. Holder that does not elect to amortize such premium and that holds such Note to maturity generally will be required to treat the premium as capital loss when such Note matures.

If a U.S. Holder of a Registered Note purchases such Note at a price that is lower than its remaining redemption amount, or in the case of an Original Issue Discount Note, a price that is lower than its adjusted issue price, by at least 0.25% of its remaining redemption amount or adjusted issue price, respectively, multiplied by the number of remaining whole years to maturity, such Note will be considered to have "market discount" in the hands of such U.S. Holder. In such case, gain realized by the U.S. Holder on the disposition of such Note generally will be treated as ordinary income to the extent of the market discount that accrued on such Note while held by such U.S. Holder. In addition, the U.S. Holder could be required to defer the deduction of a portion of the interest paid on any indebtedness incurred or maintained to purchase or carry such Note. In general terms, market discount on a Registered Note will be treated as accruing ratably over the term of such Note, or, at the election of the U.S. Holder, under a constant yield method. Market discount on a Foreign Currency Note will be accrued by a U.S. Holder in the Specified Currency. The amount includible in income by a U.S. Holder in respect of such accrued market discount will be the U.S. dollar value of the amount accrued, generally calculated at the exchange rate in effect on the date that such Note is disposed of by the U.S. Holder.

A U.S. Holder may elect to include market discount in income on a current basis as it accrues (on either a ratable or constant-yield basis), in lieu of treating a portion of any gain realized on a sale of a Registered Note as ordinary income. If a U.S. Holder elects to include market discount on a current basis, the interest deduction deferral rule described above will not apply. Any accrued market discount on a Foreign Currency Note that is currently includible in income will be translated into U.S. dollars at the average exchange rate for the accrual period (or portion thereof within the U.S. Holder's taxable year). Any such election, if made, applies to all market discount bonds acquired by the taxpayer on or after the first day of the first taxable year to which such election applies and is revocable only with the consent of the IRS.

Short-Term Notes

The rules set forth above will also generally apply to Registered Notes having maturities of not more than one year ("Short-Term Notes"), but with certain modifications.

First, the OID Regulations treat none of the interest on a Short-Term Note as qualified stated interest. Thus, all Short-Term Notes will be Original Issue Discount Notes. OID will be treated as accruing on a Short-Term Note ratably or, at the election of a U.S. Holder, under a constant yield method.

Second, a U.S. Holder of a Short-Term Note that uses the cash method of tax accounting and is not a bank, securities dealer, regulated investment company or common trust fund, and does not identify the Short-Term Note as part of a hedging transaction, will generally not be required to include OID in income on a current basis. Such a U.S. Holder may not be allowed to deduct all of the interest paid or accrued on any indebtedness incurred or maintained to purchase or carry such Note until the maturity of such Note or its earlier disposition in a taxable transaction. In addition, such a U.S. Holder will be required to treat any gain realized on a sale, exchange or retirement of such Note as ordinary income to the extent such gain does not exceed the OID accrued with respect to such Note during the period the U.S. Holder held such Note. Notwithstanding the foregoing, a cash-basis U.S. Holder of a Short-Term Note may elect to accrue OID into income on a current basis or to accrue the "acquisition discount" on the Note under the rules described below. If the U.S. Holder elects to accrue OID or acquisition discount, the limitation on the deductibility of interest described above will not apply.

A U.S. Holder using the accrual method of tax accounting and certain cash-basis U.S. Holders (including banks, securities dealers, regulated investment companies and common trust funds) generally will be required to include OID on a Short-Term Note in income on a current basis. Alternatively, a U.S. Holder of a Short-Term Note can elect to accrue the "acquisition discount," if any, with respect to such Note on a current basis. If such an election is made, the OID rules will not apply to the Note. Acquisition discount is the excess of the remaining redemption amount of the Notes at the time of acquisition over the purchase price. Acquisition discount will be treated as accruing ratably or, at the election of the U.S. Holder, under a constant-yield method based on daily compounding.

Finally, the market discount rules will not apply to a Short-Term Note.

Subordinated Notes

Characterization of the Subordinated Notes

No statutory, judicial or administrative authority directly addresses the characterization of the Subordinated Notes or instruments with a similar write-off feature. As a result, significant aspects of the U.S. federal income tax consequences of an investment in the Subordinated Notes are uncertain. Notwithstanding their legal form as debt, the Issuer may treat certain Subordinated Notes as equity for U.S. federal income tax purposes (and not as debt). In general, under the U.S. Internal Revenue Code, the characterization of an instrument for U.S. federal income tax purposes as debt or equity of a corporation by its issuer as of the time of issuance is binding on a holder unless the holder discloses on its tax return that it is taking an inconsistent position. The issuer's characterization, however, is not binding on the IRS. We will describe the Issuer's belief as to the appropriate characterization of the Subordinated Notes in the applicable Pricing Supplement. Even if the Issuer believes that the Subordinated Notes should be treated as equity, the IRS may disagree and treat such Subordinated Notes as debt for U.S. federal income tax purposes. If the Subordinated Notes were so treated, the Subordinated Notes may be treated as a Contingent Debt Obligation, with the consequences, among others, that (i) a U.S. Holder would be required to accrue interest on the Subordinated Notes even if it otherwise uses the cash method of accounting for U.S. federal income tax purposes, (ii) the amount of interest that must be accrued in any period may differ from the amount of stated interest accruing in that period, and (iii) gain from the sale, exchange or redemption of the Subordinated Notes would be ordinary income. Prospective investors should consult their tax advisors as to the tax consequences to them if the Subordinated Notes were characterized as debt for U.S. federal income tax purposes.

Equity Treatment

The general discussion below applies to Subordinated Notes that are equity for U.S. federal income tax purposes.

Payments of Interest. Subject to the discussion below under "—PFIC Rules," payments of stated interest on Subordinated Notes (including any tax withheld and additional amounts paid in respect thereof) will

be treated as distributions on stock of the Issuer and as dividends to the extent paid out of current or accumulated earnings and profits of the Issuer, as determined under U.S. federal income tax principles. Because the Issuer does not expect to be able to determine its earnings and profits under U.S. federal income tax principles, it is expected that distributions paid to U.S. Holders generally will be reported as dividends. Payments received by a U.S. Holder that are treated as dividends generally will not be eligible for the dividends received deduction. Accrual method holders generally will take such dividends into account when paid.

Subject to certain exceptions for short-term and hedged positions and the discussion below under "—PFIC Rules," the U.S. dollar amount of dividends received by an individual generally will be subject to taxation at reduced rates if the dividends are "qualified dividends." Dividends on the Subordinated Notes may be eligible to be a qualified dividend, although there is uncertainty as to whether a sufficient holding period will apply for the application of the qualified dividend rules to instruments such as Subordinated Notes that are treated as equity for U.S. federal income tax purposes but have the legal form of debt including creditor remedies for lack of payment. If dividends on the Subordinated Notes are treated as eligible for qualified dividend treatment, it is possible that short-term capital loss realized by a U.S. Holder on the Subordinated Notes will be converted into long-term capital loss to the extent of any qualified dividend payments that exceed 5% of its basis in the Subordinated Notes (taking into account certain aggregation rules). U.S. Holders should consult their own tax advisors as to the treatment of such dividends.

Sale, Exchange, Redemption or Write-off. Subject to the discussion below under "—PFIC Rules," a U.S. Holder will recognize capital gain or loss upon the sale, exchange, redemption or write-off of Subordinated Notes in an amount equal to the difference between the amount realized on such disposition (or zero in the case of a write-off) and the U.S. Holder's adjusted tax basis in the Subordinated Notes. A U.S. Holder's tax basis in a Subordinated Note generally will be the price it paid for the Note. Any capital gain or loss will be long term if the Subordinated Notes have been held for more than one year. The deductibility of capital losses is subject to limitations.

PFIC Rules. Special U.S. federal income tax rules apply to U.S. Holders owning shares of a "passive foreign investment company" (a "PFIC"). If the Issuer is treated as a PFIC for any year, U.S. Holders may be subject to adverse tax consequences upon a sale, exchange or other disposition of the Subordinated Notes, or upon the receipt of certain "excess distributions" in respect of the Subordinated Notes. Dividends paid by a PFIC are not qualified dividends eligible to be taxed at preferential rates. A detailed description of the Issuer's PFIC status will be provided in the applicable Pricing Supplement.

Index Linked Notes and Other Notes Providing for Contingent Payments

The Contingent Payment Regulations, which govern the tax treatment of Contingent Debt Obligations, generally require accrual of interest income on a constant-yield basis in respect of such obligations at a yield determined at the time of their issuance, and may require adjustments to such accruals when any contingent payments are made. A detailed description of the tax considerations relevant to U.S. Holder of any Contingent Debt Obligations will be provided in the applicable Pricing Supplement.

Occurrence of a Benchmark Transition Event for Floating Rate Notes Linked to or Referencing a Benchmark

If a Benchmark Transition Event occurs, a U.S. Holder holding Floating Rate Notes linked to or referencing a Benchmark, including LIBOR, EURIBOR and any other IBOR, may be deemed to exchange such Floating Rate Notes for new notes under Section 1001 of the Code, which may be taxable to such U.S. Holder. Recently released proposed U.S. Treasury Regulations, which are not yet in effect but upon which taxpayers may rely, provide that in certain circumstances, the replacement of a Benchmark with a qualifying reference rate would not result in a deemed exchange under Section 1001 of the Code. U.S. Holders should consult with their own tax advisers regarding the potential consequences of a Benchmark Transition Event.

Information Reporting and Backup Withholding

The Paying Agent will be required to file information returns with the IRS with respect to payments made to, and OID accrued in respect of, certain U.S. Holders of Registered Notes. In addition, certain

U.S. Holders may be subject to backup withholding in respect of such payments if they do not provide their taxpayer identification numbers or certification of their exempt status to the Paying Agent or fail to comply with applicable certification requirements. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

Information with Respect to Foreign Financial Assets

Individual U.S. Holders that own "specified foreign financial assets" with an aggregate value in excess of U.S.\$50,000 on the last day of the taxable year or U.S.\$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which would include the Registered Notes) that are not held in accounts maintained by financial institutions.

Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria.

U.S. Holders who fail to report the required information could be subject to substantial penalties. Prospective investors should consult their own tax advisers concerning the application of these rules to their investment in the Notes, including the application of the rules to their particular circumstances.

Foreign Currency Notes and Reportable Transactions

A U.S. Holder that participates in a "reportable transaction" will be required to disclose its participation to the IRS. The scope and application of these rules are not entirely clear. A U.S. Holder may be required to treat a foreign currency exchange loss relating to a Foreign Currency Note as a reportable transaction if the loss exceeds US\$50,000 in a single taxable year if the U.S. Holder is an individual or trust, or higher amounts for other U.S. Holders. In the event the acquisition, ownership or disposition of a Foreign Currency Note constitutes participation in a "reportable transaction" for purposes of these rules, a U.S. Holder will be required to disclose its investment to the IRS, currently on Form 8886. Prospective purchasers should consult their tax advisors regarding the application of these rules to the acquisition, ownership or disposition of Foreign Currency Notes.

Foreign Account Tax Compliance Act

Pursuant to certain provisions of U.S. law, commonly known as "FATCA," holders and beneficial owners of the Notes may be required to provide a financial institution in the chain of payments on the Notes information and tax documentation regarding their identities, and in the case of a holder that is an entity, the identities of their direct and indirect owners, and this information may be reported to relevant tax authorities, including the IRS. Moreover, the Issuer and other non-U.S. financial institutions through which payments are made, may be required to withhold U.S. tax at a 30% rate on foreign passthru payments (a term not vet defined) paid to an investor who does not provide information sufficient for the institution to determine whether the investor is a U.S. person or should otherwise be treated as holding a "United States account" of the institution, or to an investor that is, or holds the Notes directly or indirectly through, a non-U.S. financial institution that is not in compliance with FATCA. However, under proposed U.S. Treasury Regulations, such withholding would not apply to foreign passthru payments prior to the date that is two years after the date on which final regulations defining foreign passthru payments are published in the U.S. Federal Register. A number of jurisdictions (including Korea) have entered into, or have agreed in substance to, intergovernmental agreements with the United States to implement FATCA ("IGAs"), which modify the way in which FATCA applies in their jurisdictions. Certain aspects of the application of these rules to instruments such as the Notes, including whether withholding would ever be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, is not clear at this time. Even if withholding would be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, as noted above, under proposed U.S. Treasury Regulations, such withholding would not apply prior to the date that is two years after the date on which final regulations defining foreign passthru payments are published in the

U.S. Federal Register, and Notes that have a fixed term and are not treated as equity for U.S. federal income tax purposes issued on or prior to the date that is six months after the date on which final regulations defining "foreign passthru payments" are filed with the U.S. Federal Register generally would be "grandfathered" for purposes of FATCA withholding unless materially modified after such date. However, if additional Notes (as described under "Terms and Conditions of the Notes—Further Issues") that are not distinguishable from grandfathered Notes are issued after the expiration of the grandfathering period and are subject to withholding under FATCA, then withholding agents may treat all Notes, including grandfathered Notes, as subject to withholding under FATCA. In the event any withholding would be required pursuant to FATCA or an IGA with respect to payments on the Notes, neither the Issuer nor any Paying Agent nor any other person will be required to pay additional amounts as a result of the withholding. Holders should consult their own tax advisers regarding how these rules may apply to their investment in the Notes.

BOOK-ENTRY CLEARANCE SYSTEMS

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of the Clearing Systems currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuer believes to be reliable, but none of the Issuer nor any Dealer takes any responsibility for the accuracy thereof. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. None of the Issuer nor any other party to the Agency Agreement will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Notes held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Book-Entry Systems

DTC

DTC has advised the Issuer that it is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants ("Participants") deposit with DTC. DTC also facilitates the settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized bookentry changes in Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is owned by a number of its Direct Participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc. and the National Association of Securities Dealers, Inc. Access to the DTC System is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants").

Under the rules, regulations and procedures creating and affecting DTC and its operations (the "Rules"), DTC makes book-entry transfers of Registered Notes among Direct Participants on whose behalf it acts with respect to Notes accepted into DTC's book-entry settlement system ("DTC Notes") as described below and receives and transmits distributions of principal and interest on DTC Notes. The Rules are on file with the Securities and Exchange Commission. Direct Participants and Indirect Participants with which beneficial owners of DTC Notes ("Owners") have accounts with respect to the DTC Notes similarly are required to make book-entry transfers and receive and transmit such payments on behalf of their respective Owners. Accordingly, although Owners who hold DTC Notes through Direct Participants or Indirect Participants will not possess Registered Notes, the Rules, by virtue of the requirements described above, provide a mechanism by which Direct Participants will receive payments and will be able to transfer their interest in respect of the DTC Notes.

Purchases of DTC Notes under the DTC system must be made by or through Direct Participants, which will receive a credit for the DTC Notes on DTC's records. The ownership interest of each actual purchaser of each DTC Note ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participant's records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the DTC Notes are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in DTC Notes, except in the event that use of the book-entry system for the DTC Notes is discontinued.

To facilitate subsequent transfers, all DTC Notes deposited by Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of DTC Notes with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the DTC Notes; DTC's records reflect only the identity of the Direct

Participants to whose accounts such DTC Notes are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. If less than all of the DTC Notes within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to DTC Notes. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the DTC Notes are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the DTC Notes will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the due date for payment in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the due date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC or the Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the Issuer, disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of Direct and Indirect Participants.

Under certain circumstances, including if there is an Event of Default under the Notes, DTC will exchange the DTC Notes for Definitive Registered Notes, which it will distribute to its Participants in accordance with their proportionate entitlements and which, if representing interests in a Rule 144A Global Note, will be legended as set forth under "Subscription and Sale and Transfer and Selling Restrictions."

Since DTC may only act on behalf of Direct Participants, who in turn act on behalf of Indirect Participants, any Owner desiring to pledge DTC Notes to persons or entities that do not participate in DTC, or otherwise take actions with respect to such DTC Notes, will be required to withdraw its Registered Notes from DTC as described below.

CMU

The CMU is a central depositary service provided by the Central Moneymarkets Unit of the HKMA for the safe custody and electronic trading between the members of this service ("CMU Members") of capital markets instruments ("CMU Notes") which are specified in the CMU Reference Manual as capable of being held within the CMU.

The CMU is only available to CMU Notes issued by a CMU Member or by a person for whom a CMU Member acts as agent for the purposes of lodging instruments issued by such persons. Membership of the CMU is open to all members of the Hong Kong Capital Markets Association and "authorized institutions" under the Banking Ordinance (Cap. 155) of Hong Kong.

Compared to clearing services provided by Euroclear and Clearstream, Luxembourg, the standard custody and clearing service provided by the CMU is limited. In particular (and unlike Euroclear and Clearstream, Luxembourg), the HKMA does not as part of this service provide any facilities for the dissemination to the relevant CMU Members of payments (of interest or principal) under, or notices pursuant to the notice provisions of, the CMU Notes. Instead, the HKMA advises the lodging CMU Member (or a designated paying agent) of the identities of the CMU Members to whose accounts

payments in respect of the relevant CMU Notes are credited, whereupon the lodging CMU Member (or the designated paying agent) will make the necessary payments of interest or principal or send notices directly to the relevant CMU Members. Similarly, the HKMA will not obtain certificates of non-U.S. beneficial ownership from CMU Members or provide any such certificates on behalf of CMU Members. The CMU Lodging and Paying Agent will collect such certificates from the relevant CMU Members identified from an instrument position report obtained by request from the HKMA for this purpose.

An investor holding an interest through an account with either Euroclear or Clearstream, Luxembourg in any Notes held in the CMU will hold that interest through the respective accounts which Euroclear and Clearstream, Luxembourg each have with the CMU.

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each holds securities for its customers and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream, Luxembourg provide various services, including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream, Luxembourg customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

Book-Entry Ownership of and Payments in Respect of DTC Notes

The Issuer may apply to DTC in order to have any Tranche of Notes represented by a Registered Global Note accepted in its book-entry settlement system. Upon the issue of any such Registered Global Note, DTC or its custodian will credit, on its internal book-entry system, the respective nominal amounts of the individual beneficial interests represented by such Registered Global Note to the accounts of persons who have accounts with DTC. Such accounts initially will be designated by or on behalf of the relevant Dealer. Ownership of beneficial interests in such a Registered Global Note will be limited to Direct Participants or Indirect Participants, including, in the case of any Regulation S Global Note, the respective depositaries of Euroclear and Clearstream, Luxembourg. Ownership of beneficial interests in a Registered Global Note accepted by DTC will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee (with respect to the interests of Direct Participants) and the records of Direct Participants (with respect to interests of Indirect Participants).

Payments in U.S. dollars of principal and interest in respect of a Registered Global Note accepted by DTC will be made to the order of DTC or its nominee as the registered holder of such Note.

The Issuer expects DTC to credit accounts of Direct Participants on the applicable payment date in accordance with their respective holdings as shown in the records of DTC unless DTC has reason to believe that it will not receive payment on such payment date. The Issuer also expects that payments by Participants to beneficial owners of Notes will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers, and will be the responsibility of such Participant and not the responsibility of DTC, the Principal Paying Agent, the Registrar or the Issuer. Payment of principal, premium, if any, and interest, if any, on Notes to DTC is the responsibility of the Issuer.

Transfers of Notes Represented by Registered Global Notes

Transfers of any interests in Notes represented by a Registered Global Note within DTC, Euroclear and Clearstream, Luxembourg will be effected in accordance with the customary rules and operating procedures of the relevant clearing system. The laws in some States within the United States require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer Notes represented by a Registered Global Note to such persons may depend upon the ability to exchange such Notes for Notes in definitive form. Similarly, because DTC can only act on behalf of Direct

Participants in the DTC system who in turn act on behalf of Indirect Participants, the ability of a person having an interest in Notes represented by a Registered Global Note accepted by DTC to pledge such Notes to persons or entities that do not participate in the DTC system or otherwise to take action in respect of such Notes may depend upon the ability to exchange such Notes for Notes in definitive form. The ability of any holder of Notes represented by a Registered Global Note accepted by DTC to resell, pledge or otherwise transfer such Notes may be impaired if the proposed transferee of such Notes is not eligible to hold such Notes through a direct or indirect participant in the DTC system.

Subject to compliance with the transfer restrictions applicable to the Registered Notes described under "Subscription and Sale and Transfer and Selling Restrictions," cross-market transfers between DTC, on the one hand, and directly or indirectly through Clearstream, Luxembourg or Euroclear accountholders, on the other, will be effected by the relevant clearing system in accordance with its rules and through action taken by the Registrar, the Principal Paying Agent and any custodian ("Custodian") with whom the relevant Registered Global Notes have been deposited.

On or after the Issue Date for any Series, transfers of Notes of such Series between accountholders in Clearstream, Luxembourg and Euroclear and transfers of Notes of such Series between participants in DTC will generally have a settlement date three business days after the trade date ("T+3"). The customary arrangements for delivery versus payment will apply to such transfers.

Cross-market transfers between accountholders in Clearstream, Luxembourg or Euroclear and DTC participants will need to have an agreed settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Clearstream, Luxembourg and Euroclear, on the other, transfers of interests in the relevant Registered Global Notes will be effected through the Registrar, the Principal Paying Agent and the Custodian receiving instructions (and, where appropriate, certification) from the transferor and arranging for delivery of the interests being transferred to the credit of the designated account for the transferee. In the case of cross-market transfers, settlement between Euroclear or Clearstream, Luxembourg accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately.

DTC, Clearstream, Luxembourg and Euroclear have each published rules and operating procedures designed to facilitate transfers of beneficial interests in Registered Global Notes among participants and accountholders of DTC, Clearstream, Luxembourg and Euroclear. However, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or changed at any time. None of the Issuer, the Agents or any Dealer will be responsible for any performance by DTC, Clearstream, Luxembourg or Euroclear or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Notes represented by Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial interests.

SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS

The Dealers have in an amended and restated programme agreement dated May 10, 2019 (as amended, supplemented and/or restated from time to time, the "Programme Agreement") agreed with the Issuer a basis upon which they or any of them may from time to time agree to purchase Notes. Any such agreement will extend to those matters stated under "Form of the Notes" and "Terms and Conditions of the Notes" above. In the Programme Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment of the Programme and the issue of Notes under the Programme and to indemnify the Dealers against certain liabilities incurred by them in connection therewith.

In order to facilitate the offering of any Tranche of the Notes, certain persons participating in the offering of the Tranche may engage in transactions that stabilize, maintain or otherwise affect the market price of the relevant Notes during and after the offering of the Tranche. Specifically such persons may over-allot or create a short position in the Notes for their own account by selling more Notes than have been sold to them by the Issuer. Such persons may also elect to cover any such short position by purchasing Notes in the open market. In addition, such persons may stabilize or maintain the price of the Notes by bidding for or purchasing Notes in the open market and may impose penalty bids, under which selling concessions allowed to syndicate members or other broker-dealers participating in the offering of the Notes are reclaimed if Notes previously distributed in the offering are repurchased in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the Notes at a level above that which might otherwise prevail in the open market.

The imposition of a penalty bid may also affect the price of the Notes to the extent that it discourages resales thereof. No representation is made as to the magnitude or effect of any such stabilizing or other transactions. Such transactions, if commenced, may be discontinued at any time. Under U.K. laws and regulations stabilizing activities may only be carried on by the Stabilization Manager named in the applicable Pricing Supplement and must end no later than the earlier of 30 days following the Issue Date of the relevant Tranche of Notes and 60 days following the date of the allotment of the relevant Tranche of Notes.

Certain Relationships

The Dealers and certain of their affiliates may have performed certain investment banking and advisory services for the Issuer or its affiliates from time to time for which they have received customary fees and expenses and may, from time to time, engage in transactions with, and perform services for, the Issuer or its affiliates in the ordinary course of business. The Dealers and certain of their affiliates may purchase Notes and be allocated Notes for asset management and/or proprietary purposes but not with a view to distribution.

The Dealers and their respective affiliates may purchase Notes for their own accounts and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to Notes and/or other securities of the Issuer or its subsidiaries or associates, at the same time as the offer and sale of Notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of Notes).

Transfer Restrictions

As a result of the following restrictions, purchasers of Notes in the United States are advised to consult legal counsel prior to making any purchase, offer, sale, resale or other transfer of such Notes.

Each purchaser of Registered Notes (other than a person purchasing an interest in a Registered Global Note with a view to holding it in the form of an interest in the same Global Note) or person wishing to transfer an interest from one Registered Global Note to another or from global to definitive form or vice

versa, will be required to acknowledge, represent and agree as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S are used herein as defined therein):

- (i) that either: (a) it is a QIB, purchasing (or holding) the Notes for its own account or for the account of one or more QIBs and it is aware that any sale to it is being made in reliance on Rule 144A or Subscription and Sale and Transfer and Selling Restrictions; (b) it is an Institutional Accredited Investor which has delivered an IAI Investment Letter; or (c) it is outside the United States and is not a U.S. person;
- (ii) that the Notes are being offered and sold in a transaction not involving a public offering in the United States within the meaning of the Securities Act, and that the Notes have not been and will not be registered under the Securities Act or any other applicable U.S. state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth below;
- (iii) that, unless it holds an interest in a Regulation S Global Note and either is a person located outside the United States or is not a U.S. person, if in the future it decides to resell, pledge or otherwise transfer the Notes or any beneficial interests in the Notes, it will do so, prior to the date which is one year after the later of the last Issue Date for the Series and the last date on which the Issuer or an affiliate of the Issuer was the owner of such Notes, only (a) to the Issuer or any affiliate thereof, (b) inside the United States to a person whom the seller reasonably believes is a QIB purchasing for its own account or for the account of a QIB in a transaction meeting the requirements of Rule 144A, (c) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act, (d) pursuant to the exemption from registration provided by Rule 144 under the Securities Act, (if available), or (e) pursuant to an effective registration statement under the Securities Act, in each case in accordance with all applicable U.S. state securities laws;
- (iv) it will, and will require each subsequent holder to, notify any purchaser of the Notes from it of the resale restrictions referred to in paragraph (iii) above, if then applicable;
- (v) that Notes initially offered in the United States to QIBs will be represented by one or more Rule 144A Global Notes, that Notes offered to Institutional Accredited Investors will be in the form of Definitive IAI Registered Notes and that Notes offered outside the United States in reliance on Regulation S will be represented by one or more Regulation S Global Notes;
- (vi) that the Notes, other than the Regulation S Global Notes, will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, THE HOLDER (A) REPRESENTS THAT (1) IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) PURCHASING THE SECURITIES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ONE OR MORE QUALIFIED INSTITUTIONAL BUYERS OR (2) IT IS AN INSTITUTIONAL "ACCREDITED INVESTOR" (AS DEFINED IN RULE 501(A)(1), (2), (3) OR (7) UNDER THE SECURITIES ACT) (AN INSTITUTIONAL ACCREDITED INVESTOR); (B) AGREES THAT IT WILL NOT RESELL OR OTHERWISE TRANSFER THE SECURITIES EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND, PRIOR TO THE DATE WHICH IS ONE YEAR AFTER THE LATER OF THE LAST ISSUE DATE FOR THE SERIES AND THE LAST DATE ON WHICH THE ISSUER OR AN AFFILIATE OF THE ISSUER WAS THE OWNER OF SUCH SECURITIES OTHER THAN (1) TO THE ISSUER OR ANY AFFILIATE THEREOF, (2) INSIDE THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (3) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 903 OR RULE 904 UNDER THE SECURITIES ACT, (4) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (5) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE

IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE STATES OF THE UNITED STATES AND ANY OTHER JURISDICTION; AND (C) IT AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THIS SECURITY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND.

THIS SECURITY AND RELATED DOCUMENTATION (INCLUDING, WITHOUT LIMITATION, THE AGENCY AGREEMENT REFERRED TO HEREIN) MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME, WITHOUT THE CONSENT OF, BUT UPON NOTICE TO, THE HOLDERS OF SUCH SECURITIES SENT TO THEIR REGISTERED ADDRESSES, TO MODIFY THE RESTRICTIONS ON AND PROCEDURES FOR RESALES AND OTHER TRANSFERS OF THIS SECURITY TO REFLECT ANY CHANGE IN APPLICABLE LAW OR REGULATION (OR THE INTERPRETATION THEREOF) OR IN PRACTICES RELATING TO RESALES OR OTHER TRANSFERS OF RESTRICTED SECURITIES GENERALLY. THE HOLDER OF THIS SECURITY SHALL BE DEEMED, BY ITS ACCEPTANCE OR PURCHASE HEREOF, TO HAVE AGREED TO ANY SUCH AMENDMENT OR SUPPLEMENT (EACH OF WHICH SHALL BE CONCLUSIVE AND BINDING ON THE HOLDER HEREOF AND ALL FUTURE HOLDERS OF THIS SECURITY AND ANY SECURITIES ISSUED IN EXCHANGE OR SUBSTITUTION THEREFOR, WHETHER OR NOT ANY NOTATION THEREOF IS MADE HEREON).";

(vii) if it is outside the United States and is not a U.S. person, that if it should resell or otherwise transfer the Notes prior to the expiration of the distribution compliance period (defined as 40 days after the later of the commencement of the offering and the closing date with respect to the original issuance of the Notes), it will do so only (a)(i) outside the United States in compliance with Rule 903 or 904 under the Securities Act or (ii) to a QIB in compliance with Rule 144A and (b) in accordance with all applicable U.S. state securities laws; and it acknowledges that the Regulation S Global Notes will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OR PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT. THIS LEGEND SHALL CEASE TO APPLY UPON THE EXPIRY OF THE PERIOD OF 40 DAYS AFTER THE COMPLETION OF THE DISTRIBUTION OF ALL THE NOTES OF THE TRANCHE OF WHICH THIS NOTE FORMS PART."; and

(viii) that the Issuer and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that if any of such acknowledgements, representations or agreements made by it are no longer accurate, it shall promptly notify the Issuer; and if it is acquiring any Notes as a fiduciary or agent for one or more accounts it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

Institutional Accredited Investors who purchase Registered Notes in definitive form offered and sold in the United States in reliance upon the exemption from registration provided by Regulation D of the Securities Act are required to execute and deliver to the Registrar an IAI Investment Letter. Upon execution and delivery of an IAI Investment Letter by an Institutional Accredited Investor, Notes will be issued in definitive registered form. See "Form of the Notes."

The IAI Investment Letter will state, among other things, the following:

- (i) that the Institutional Accredited Investor has received a copy of the Offering Circular and such other information as it deems necessary in order to make its investment decision;
- (ii) that the Institutional Accredited Investor understands that any subsequent transfer of the Notes is subject to certain restrictions and conditions set forth in the Offering Circular and the Notes (including those set out above) and that it agrees to be bound by, and not to resell, pledge or

- otherwise transfer the Notes except in compliance with, such restrictions and conditions and the Securities Act;
- (iii) that, in the normal course of its business, the Institutional Accredited Investor invests in or purchases securities similar to the Notes;
- (iv) that the Institutional Accredited Investor is an Institutional Accredited Investor within the meaning of Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act and has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment in the Notes, and it and any accounts for which it is acting are each able to bear the economic risk of its or any such accounts' investment for an indefinite period of time;
- (v) that the Institutional Accredited Investor is acquiring the Notes purchased by it for its own account or for one or more accounts (each of which is an Institutional Accredited Investor) as to each of which it exercises sole investment discretion and not with a view to any distribution of the Notes, subject, nevertheless, to the understanding that the disposition of its property shall at all times be and remain within its control; and
- (vi) that, in the event that the Institutional Accredited Investor purchases Notes, it will acquire Notes having a minimum purchase price of at least U.S.\$500,000 (or the approximate equivalent in another Specified Currency).

No sale of Legended Notes in the United States to any one purchaser will be for less than U.S.\$100,000 (or its foreign currency equivalent) principal amount or, in the case of sales to Institutional Accredited Investors, U.S.\$500,000 (or its foreign currency equivalent) principal amount and no Legended Note will be issued in connection with such a sale in a smaller principal amount. If the purchaser is a non-bank fiduciary acting on behalf of others, each person for whom it is acting must purchase at least U.S.\$100,000 (or its foreign currency equivalent) or, in the case of sales to Institutional Accredited Investors, U.S.\$500,000 (or its foreign currency equivalent) principal amount of Registered Notes.

Selling Restrictions

United States

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons, except in certain transactions exempt from the registration requirements of the Securities Act. Terms used in this paragraph have the meanings given to them by Regulation S.

Bearer Notes are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended and regulations thereunder.

Each Dealer has agreed and each further Dealer appointed under the Programme will be required to agree that, except as permitted by the Programme Agreement, it will not offer, sell or, in the case of Bearer Notes, deliver Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution of an identifiable tranche of which such Notes are a part, as determined and certified to the Principal Paying Agent by such Dealer (or, in the case of an identifiable tranche of Notes sold to or through more than one Dealer, by each of such Dealers with respect to Notes of an identifiable tranche purchased by or through it, in which case the Principal Paying Agent shall notify such Dealer when all such Dealers have so certified), within the United States or to, or for the account or benefit of, U.S. persons, and it will have sent to each Dealer to which it sells Notes during the distribution compliance period (other than resales pursuant to Rule 144A) a confirmation or other notice setting out the restrictions on offers and sales of the Notes within the United States or to, or for the account or benefit of, U.S. persons. Terms used in the preceding sentence have the meanings given to them by Regulation S.

The Notes are being offered and sold outside the United States to non-U.S. persons in reliance on Regulation S. The Programme Agreement provides that the Dealers may directly or through their

respective U.S. broker-dealer affiliates arrange for the offer and resale of Notes within the United States only to qualified institutional buyers in reliance on Rule 144A.

In addition, until 40 days after the commencement of the offering of any identifiable tranche of Notes, an offer or sale of Notes within the United States by any dealer (whether or not participating in the offering of such tranche of Notes) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with Rule 144A.

This Offering Circular has been prepared by the Issuer for use in connection with the offer and sale of the Notes outside the United States and for the resale of the Notes in the United States. The Issuer and the Dealers reserve the right to reject any offer to purchase the Notes, in whole or in part, for any reason. This Offering Circular does not constitute an offer to any person in the United States or to any U.S. person, other than any qualified institutional buyer within the meaning of Rule 144A to whom an offer has been made directly by one of the Dealers or its U.S. broker-dealer affiliate. Distribution of this Offering Circular by any non-U.S. person outside the United States or by any qualified institutional buyer in the United States to any U.S. person or to any other person within the United States, other than any qualified institutional buyer and those persons, if any, retained to advise such non-U.S. person or qualified institutional buyer with respect thereto, is unauthorized and any disclosure without the prior written consent of the Issuer of any of its contents to any such U.S. person or other person within the United States, other than any qualified institutional buyer and those persons, if any, retained to advise such non-U.S. person or qualified institutional buyer, is prohibited.

Public Offer Selling Restriction under the Prospectus Regulation

If the Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to EEA and UK Retail Investors" as "Not Applicable," in relation to each Member State of the European Economic Area and the United Kingdom (each, a "Relevant State"), each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular as completed by the final terms in relation thereto to the public in that Relevant State except that it may make an offer of such Notes to the public in that Relevant State:

- (a) if the final terms in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 1(4) of the Prospectus Regulation in that Relevant State (a "Non-exempt Offer"), following the date of publication of a prospectus in relation to such Notes which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, provided that any such prospectus has subsequently been completed by the final terms contemplating such Non-exempt Offer, in accordance with the Prospectus Regulation, in the period beginning and ending on the dates specified in such prospectus or final terms, as applicable and the Issuer has consented in writing to its use for the purpose of that Non-exempt Offer;
- (b) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (c) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or
- (d) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Notes referred to in (b) to (d) above shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation, or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression "an offer of Notes to the public" in relation to any Notes in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

United Kingdom

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

- (a) in relation to any Notes having a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Section 19 of the Financial Services and Markets Act 2000 (the "FSMA") by the Issuer;
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended, the "Financial Instruments and Exchange Act"). Accordingly, each Dealer has represented and agreed that it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell any Notes in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and other relevant laws and regulations of Japan.

Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that this Offering Circular has not been and will not be registered as a prospectus with the Monetary Authority of Singapore under the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"). Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor under Section 274 of the SFA, (ii) to a relevant person pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 of Singapore, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the Notes are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

Notification under Section 309B(1)(c) of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"): Unless otherwise stated in the Pricing Supplement in respect of any Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Hong Kong

Each Dealer has represented and agreed that:

- (a) it has not offered or sold and will not offer or sell in Hong Kong, by means of any document, any Notes except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "SFO") other than (a) to "professional investors" as defined in the SFO and any rules made under the SFO; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "C(WUMP)O") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and
- (b) it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Korea

The Notes have not been and will not be registered under the Financial Investment Services and the Capital Markets Act of Korea.

Accordingly, each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that:

(i) in respect of the Notes relying on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3 of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea, during the first year after the issuance of the Notes, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as defined under the Foreign Exchange Transactions Law of Korea and the regulations thereunder) other than a "qualified institutional buyer" (a "Korean QIB," as defined in the Securities Issuance and Disclosure Regulations) who is registered with the Korea Financial Investment Association (the "KOFIA") as a Korean QIB, provided that (a) the Notes are denominated, and the principal and interest payments thereunder are made, in a currency other than Korean won, (b) the amount of the Notes acquired by such Korean QIBs in the primary market is

limited to no more than 20% of the aggregate issue amount of the Notes, (c) the Notes are listed on one of the major overseas securities markets designated by the Financial Supervisory Service of Korea, or certain procedures, such as registration or report with a foreign financial investment regulator, have been completed for offering of the Notes in a major overseas securities market, (d) the one-year restriction on offering, delivering or selling of Notes to a Korean resident other than a Korean QIB is expressly stated in the Notes, the relevant purchase agreement and offering circular and (e) the Issuer and the Dealers shall individually or collectively keep the evidence of fulfilment of conditions (a) through (d) above after having taken necessary actions therefor, except as otherwise permitted by applicable Korean laws and regulations; and

(ii) in respect of the Notes relying on the exemption as set out in Article 2-2-2, Paragraph 2 (other than Item 3), of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as defined under the Foreign Exchange Transactions Law of Korea and the regulations thereunder), except as otherwise permitted by applicable Korean laws and regulations.

Each Dealer has undertaken, and each further Dealer appointed under the Programme will be required to undertake, to ensure that any securities dealer to which it sells Notes confirms that it is purchasing such Notes as principal and agrees with such Dealer that it will comply with the restrictions described above.

Canada

Prospective Canadian investors are advised that the information contained within this Offering Circular, and additionally, the relevant final terms or any other offering material relating to the Notes has not been prepared with regard to matters that may be of particular concern to Canadian investors.

Accordingly, prospective Canadian investors should consult with their own legal, financial and tax advisers concerning the information contained within this Offering Circular, the relevant final terms or any other offering material relating to the Notes and as to the suitability of an investment in the Notes in their particular circumstances.

The offer and sale of the Notes in Canada will only be made under exemptions from the requirement to file a prospectus with the Canadian securities regulators and will be made only by authorized dealer representatives that are properly registered under the laws of the relevant Canadian jurisdictions or, alternatively, that are entitled to rely on exemptions from the dealer registration requirements in the relevant Canadian jurisdictions.

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in NI 45-106 or subsection 73.3(1) of the Securities Act (Ontario), and that are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Offering Circular, the relevant final terms or any other offering material constituting an "offering memorandum" under applicable Canadian securities laws (including any amendment to any such documents) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal adviser.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts ("NI 33-105"), the Dealers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with an offering of Notes.

The Issuer hereby notifies prospective Canadian purchasers that: (a) it may be required to provide personal information pertaining to the purchaser as required to be disclosed in Schedule I of

Form 45106F1 under NI 45-106 (including its name, address, telephone number and the aggregate purchase price of any Notes purchased) ("personal information"), which Form 45-106F1 may be required to be filed by the Issuer under NI 45-106, (b) such personal information may be delivered to the Ontario Securities Commission (the "OSC") in accordance with NI 45-106, (c) such personal information is collected indirectly by the OSC under the authority granted to it under the securities legislation of Ontario, (d) such personal information is collected for the purposes of the administration and enforcement of the securities legislation of Ontario, and (e) the public official in Ontario who can answer questions about the OSC's indirect collection of such personal information is the Administrative Support Clerk at the OSC, Suite 1903, Box 55, 20 Queen Street West, Toronto, Ontario M5H 3S8, Telephone: (416) 5933684. Prospective Canadian purchasers that purchase Notes in this offering will be deemed to have authorized the indirect collection of the personal information by the OSC, and to have acknowledged and consented to its name, address, telephone number and other specified information, including the aggregate purchase price paid by the purchaser, being disclosed to other Canadian securities regulatory authorities, and to have acknowledged that such information may become available to the public in accordance with requirements of applicable Canadian laws.

Upon receipt of this Offering Circular, each Canadian purchaser hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the Notes described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. Par la réception de cette prospectus de base, chaque acheteur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.

General

Each Dealer has agreed and each further Dealer appointed under the Programme will be required to agree that it will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in force in any jurisdiction in which it purchases, offers, sells or delivers Notes or possesses or distributes this Offering Circular and will obtain any consent, approval or permission required by it for the purchase, offer, sale or delivery by it of Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers, sales or deliveries and neither the Issuer nor any other Dealer shall have any responsibility therefor.

If a jurisdiction requires that any offering of Notes under the Programme be made by a licensed broker or dealer and any Dealer or any affiliate of a Dealer is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Dealer or such affiliate on behalf of the Issuer in such jurisdiction.

Neither the Issuer nor any of the Dealers represents that Notes may at any time lawfully be sold in compliance with any applicable registration or other requirements in any jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such sale.

With regard to each Tranche, the relevant Dealer will be required to comply with such other additional restrictions as the Issuer and the relevant Dealer shall agree and as shall be set out in the applicable Pricing Supplement.

GENERAL INFORMATION

Authorization

The establishment of the Programme was duly authorized by a resolution of the Board of Directors of the Issuer on December 28, 1995, and the most recent update to the Programme was authorized by the General Manager of the Capital Markets Department of the Issuer on February 24, 2020. Each issue of Notes under the Programme will be authorized by the Board of Directors of the Issuer at the time of issue or at a meeting held annually to approve the issue of Notes to be issued in the following fiscal year.

Listing of Notes on the Singapore Stock Exchange

Approval in-principle has been received from the Singapore Stock Exchange in connection with the Programme and application will be made for the listing and quotation of any Notes that may be issued pursuant to the Programme and which are agreed, at or prior to the time of issue thereof, to be so listed and quoted on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange.

For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that a Global Note is exchanged for Definitive Notes, the Issuer will appoint and maintain a Paying Agent in Singapore, where the Notes may be presented or surrendered for payment or redemption. In addition, in the event that a Global Note is exchanged for Definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange, and such announcement will include all material information with respect to the delivery of the Definitive Notes, including details of the Paying Agent in Singapore.

Documents Available

From the date hereof and so long as Notes are capable of being issued under the Programme, copies of the following documents will, when published, be available from the registered office of the Issuer and from the specified office of the Paying Agent for the time being in London:

- (i) the constitutional documents (together with English translations) of the Issuer;
- (ii) the audit reports and the audited consolidated and separate financial statements of the Issuer in respect of the financial years ended December 31, 2017, 2018 and 2019 (together with English translations);
- (iii) the most recently published (if available) audited consolidated annual financial statements of the Issuer and the most recently published interim financial statements of the Issuer (together with English translations);
- (iv) the Programme Agreement, the Agency Agreement, the Deed Poll, the Deed of Covenant, the forms of the Global Notes, the Notes in definitive form, the Receipts, the Coupons and the Talons;
- (v) a copy of this Offering Circular;
- (vi) any future offering circulars, prospectuses, information memoranda and supplements, including Pricing Supplements (save that a Pricing Supplement relating to an unlisted Note will only be available for inspection by a holder of such Note and such holder must produce evidence satisfactory to the Issuer and the Principal Paying Agent as to its holding of Notes and identity) to this Offering Circular and any other documents incorporated herein or therein by reference; and
- (vii) in the case of each issue of listed Notes subscribed pursuant to a subscription agreement, the subscription agreement (or equivalent document).

The Issuer's audited separate financial statements in respect of the financial years ended December 31, 2019 and 2018 are also available at https://www.sec.gov/Archives/edgar/data/ 1445930/000119312520063824/d850856d6k.htm#tx850856_3 while the Issuer's audited separate financial statements in respect of the financial years ended December 31, 2018 and 2017 are also available at https://www.sec.gov/Archives/edgar/data/ 1445930/000119312519071577/d652523d6k.htm#tx652523_99.2.

Clearing Systems

The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate Common Code and ISIN for each Tranche of Bearer Notes allocated by Euroclear and Clearstream, Luxembourg, along with the Issuer's LEI (549300XXMOJSIW8P4769), will be specified in the applicable Pricing Supplement. In addition, the Issuer may make an application for any Notes in registered form to be accepted for trading in book-entry form by DTC. The CUSIP and/or CINS numbers for each Tranche of Registered Notes, together with the relevant ISIN and common code, will be specified in the applicable Pricing Supplement. If the Notes are to clear through an additional or alternative clearing system the appropriate information will be specified in the applicable Pricing Supplement.

Significant or Material Change

Save as disclosed in this Offering Circular, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries since December 31, 2019 and there has been no material adverse change in the financial position or prospects of the Issuer and its subsidiaries since December 31, 2019.

Litigation

Save as disclosed in this Offering Circular, the Issuer nor any of its subsidiaries is or has been involved in any legal, arbitration, administrative or other proceedings, which might have or have had in the recent past (covering at least the previous 12 months preceding the date of this document) a significant effect on the financial position or the operations of the Issuer and its subsidiaries nor is the Issuer aware of any such proceedings pending or being threatened.

Independent Accountants

The Issuer's consolidated financial statements as of and for the years ended December 31, 2019 and 2018 and as of and for the years ended December 31, 2018 and 2017 have been audited by Samil PricewaterhouseCoopers, independent accountants, as stated in their reports included elsewhere in this Offering Circular.

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholder of Kookmin Bank

Opinion

We have audited the accompanying consolidated financial statements of Kookmin Bank and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2019 and 2018 and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2019 and 2018, and its consolidated financial performance and cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS)

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Korean IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- · Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- · Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we

conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

/s/ Samil PricewaterhouseCoopers Seoul, Korea

March 5, 2020

This report is effective as of March 5, 2020, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Kookmin Bank and Subsidiaries

Consolidated Statements of Financial Position

Years Ended December 31, 2019 and 2018

(In millions of Korean won)	Notes	2019	2018
Assets			
Cash and due from financial institutions	4,6,7,36	14,481,309	14,889,010
Financial assets at fair value through profit or loss	4,6,8,12	13,866,303	12,257,005
Derivative financial assets	4,6,9	2,317,425	1,613,970
Loans at amortized cost	4,6,8,10,11	293,531,433	276,944,202
Financial investments	4,6,8,12	52,419,293	42,723,480
Investments in associates	13	564,711	506,664
Property and equipment	14	3,784,374	3,127,666
Investment property	14	475,968	257,924
Intangible assets	15	268,731	224,208
Current income tax assets	32	13,904	4,638
Deferred income tax assets	16,32	2,263	3,131
Assets held for sale	18	6,941	16,952
Other assets	4,6,17	5,692,383	4,390,408
Total assets		387,425,038	356,959,258
Liabilities			
Financial liabilities at fair value through profit or loss	4,6	80,235	87,168
Derivative financial liabilities	4,6,9	2,168,982	1,642,409
Deposits	4,6,19	300,917,482	272,484,528
Debts	4,6,20	19,141,262	17,496,055
Debentures	4,6,21	18,739,992	23,163,585
Provisions	22	311,140	308,374
Net defined benefit liabilities	23	179,110	166,605
Current income tax liabilities	32	8,338	5,737
Deferred income tax liabilities	16,32	248,652	120,867
Other liabilities	4,6,24,30	16,625,612	14,816,064
		358,420,805	330,291,392
Total liabilities			
Equity Capital stock	25	2,021,896	2,021,896
Hybrid securities	25	574,523	2,021,030
Capital surplus	25	5,219,704	5,218,788
Accumulated other comprehensive income	25, 34	123,334	115,784
Retained earnings	25, 33	21,064,776	19,311,398
(Provision of regulatory reserve for credit losses	20, 00	21,001,170	10,011,000
December 31, 2019 : ₩ 2,291,019 million			
December 31, 2018 : ₩ 2,150,772 million) (Amounts estimated to be appropriated			
December 31, 2019 : ₩ 150,856 million			
December 31, 2018 : ₩ 140,247 million)			
Equity attributable to the shareholder of the Parent Company		29,004,233	26,667,866
Non-controlling interest equity		<u> </u>	
Total equity		29,004,233	26,667,866
Total liabilities and equity		387,425,038	356,959,258

^(*) The consolidated statement of financial position as at December 31, 2019 is prepared applying Korean IFRS 1116, and the comparative consolidated statement of financial position as at December 31, 2018 has not been restated retrospectively as permitted by the transitional provisions of Korean IFRS 1116.

The accompanying notes are an integral part of these consolidated financial statements.

Kookmin Bank and Subsidiaries Consolidated Statements of Comprehensive Income Years Ended December 31, 2019 and 2018

(In millions of Korean won)	Notes	2019	2018
Interest income		10,779,948	10,019,888
Interest income from financial instruments at fair value through other comprehensive income and amortized cost	t	10,568,018	9,797,583
Interest income from financial instruments at fair value through profit or loss		211,930	222,305
Interest expense		(4,416,161)	(3,919,166)
Net interest income	26	6,363,787	6,100,722
Fee and commission income		1,483,362	1,422,791
Fee and commission expense		(350,066)	(300,043)
Net fee and commission income	27	1,133,296	1,122,748
Net gains on financial instruments	28	422.624	226 205
at fair value through profit or loss	20	422,624	326,395
Net other operating expenses	29	(600,639)	(696,486)
General and administrative expenses	14,15,23,30,40	(3,887,419)	(3,766,995)
Operating profit before provision for credit losses		3,431,649	3,086,384
Provision for credit losses	7,11,12,17,22	(103,530)	(93,916)
Operating profit		3,328,119	2,992,468
Share of profit of associates	13	29,240	49,698
Net other non-operating income	31	(38,887)	44,172
Net non-operating profit		(9,647)	93,870
Profit before income tax expense		3,318,472	3,086,338
Income tax expense	32	(879,393)	(827,140)
Profit for the year		2,439,079	2,259,198
(Adjusted profit after provision of regulatory reserve for credit losses	25		
2019 : ₩ 2,288,223 million			
2018 : ₩ 2,011,991 million			
Items that will not be reclassified to profit or loss:			
Remeasurements of net defined benefit liabilities	23	(40,369)	(95,796)
Losses on equity instruments at fair value through other comprehensive income		(17,151)	(36,013)
Items that may be subsequently reclassified to profit or loss	s:		
Currency translation adjustments Gains(losses) on debt instruments at fair value		26,271	27,383
through other comprehensive income		34,275	57,188
Share of other comprehensive gains(losses) of associates	S	7,546	(3,383)
Losses on hedging instruments of net investments in foreign	gn operations	(6,267)	(25,386)
Gains(losses) on cash flow hedging instruments		(15,230)	3,788
Other comprehensive income for the year, net of tax	34	(10,925)	(72,219)
Total comprehensive income for the year		2,428,154	2,186,979
Profit attributable to:			
Shareholder of the Parent Company		2,439,079	2,259,198
Non-controlling interests		2,439,079	2,259,198
Total comprehensive income for the year attributable to	:		
Shareholder of the Parent Company Non-controlling interests		2,428,154	2,186,979
Ton controlling interests		2,428,154	2,186,979

^(*) The consolidated statements of comprehensive income for the year ended December 31, 2019 are prepared applying Korean IFRS 1116, and the comparative consolidated statements of comprehensive income for the year ended December 31, 2018 have not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1116.

The accompanying notes are an integral part of these consolidated financial statements.

Balance after reflecting the change of accounting policies 2,021,896 - 5,219,693 188,003 17,678,694 - 25,108,286 Comprehensive income for the year - - - - - 2,259,198 - 2,259,198 - 2,259,198 Remeasurements of net defined benefit liabilities - - - - (95,796) - - (95,796) Net gains on equity instruments -		А	ttributable to the s	hareholder of th	ne Parent Company			
Capital Stock Surplus Capital Stock Surplus Capital Stock Surplus Comprehensive Earnings Capital Equity					Accumulated			
Stock Securites Surplus Income Earnings Interests Equity					Other			
Balance at January 1, 2018 2,021,896 - 5,219,693 678,094 17,403,751 - 25,323,434 The effect of changes in accounting policies -	(In millions of Korean won)	Capital	Hybrid	Capital	Comprehensive	Retained	Non-controlling	Total
The effect of changes in accounting policies		Stock	securites	Surplus	Income	Earnings	interests	Equity
The effect of changes in accounting policies								
Balance after reflecting the change of accounting policies 2,021,896 - 5,219,693 188,003 17,678,694 25,108,286	Balance at January 1, 2018	2,021,896	-	5,219,693	678,094	17,403,751	_	25,323,434
Profit for the year Profit	The effect of changes in accounting policies				(490,091)	274,943		(215,148)
Profit for the year Profit		2,021,896	_	5,219,693	, ,	17,678,694	-	
Profit for the year Remeasurements of net defined benefit liabilities Remeasurements of net defined benefit liabilities Net gains on equity instruments at fair value through other comprehensive income Currency translation adjustments Net gains on debt instruments at fair value through other comprehensive income Other comprehensive income Share of other comprehensive loss of associates Losses on hedging instruments of net investments in foreign operations Gains on cash flow hedging instruments Total comprehensive income for the year Transactions with the shareholder Dividends Changes in ownership of subsidiaries 2,021,896 Changes in ownership of subsidiaries 2,021,896 Changes at December 31, 2018 Changes at December 31, 2018 Changes in Structure of the year of								
Remeasurements of net defined benefit liabilities (95,796) - (95,796) Net gains on equity instruments at fair value through other comprehensive income (36,013) 13,638 - (22,375) Currency translation adjustments 27,383 27,383 Net gains on debt instruments at fair value through other comprehensive loss of associates 57,188 57,188 Share of other comprehensive loss of associates (33,383) (3,383) Losses on hedging instruments of net investments in foreign operations (25,386) Gains on cash flow hedging instruments (25,386) Gains on cash flow hedging instruments (72,219) Transactions with the shareholder Dividends (905) Total transactions with the shareholder Dividends (905) Total transactions with the shareholder Dividends (905) Total transactions with the shareholder Balance at December 31, 2018 2,021,896 2,021,896 - 5,218,788 115,784 115,784 19,311,398 - 26,667,866	•	_	_	-	_	2.259.198	-	2,259,198
Net gains on equity instruments at fair value through other comprehensive income	•	_	_	_	(95.796)	-	_	
at fair value through other comprehensive income Currency translation adjustments Currency translation adjustments at fair value through other comprehensive income Net gains on debt instruments at fair value through other comprehensive income					(,)			(,)
Net gains on debt instruments at fair value through other comprehensive income 57,188 57,188 Share of other comprehensive loss of associates Losses on hedging instruments of net investments in foreign operations Gains on cash flow hedging instruments Total comprehensive income for the year		-	-	-	(36,013)	13,638	-	(22,375)
other comprehensive income - - 57,188 - 57,188 Share of other comprehensive loss of associates - - - (3,383) - - (3,383) Losses on hedging instruments of net investments in foreign operations - - - - (25,386) - - (25,386) Gains on cash flow hedging instruments - - - - 3,788 - - 3,788 Total comprehensive income for the year - - - - - 2,220,617 Transactions with the shareholder Dividends - - - - - 640,132) - (640,132) - (640,132) - (905) - - - (905) - - - (905) - - - (905) - - (640,132) - (641,037) - (641,037) - - (640,132) - - (641,037) - -	Currency translation adjustments	-	-	-	27,383	-	-	27,383
Share of other comprehensive loss of associates Losses on hedging instruments of net investments in foreign operations Sains on cash flow hedging instruments Total comprehensive income for the year Transactions with the shareholder Dividends Changes in ownership of subsidiaries Changes in ownership of subsidiaries 2,021,896 County of the shareholder Dividends Changes in ownership of subsidiaries Chang								
Losses on hedging instruments of net investments in foreign operations Gains on cash flow hedging instruments 3,788 Total comprehensive income for the year Transactions with the shareholder Dividends Changes in ownership of subsidiaries	•	-	-	-		-	-	
in foreign operations Gains on cash flow hedging instruments Gains on cash flow hedging instruments Gains on cash flow hedging instruments Total comprehensive income for the year Transactions with the shareholder Dividends Changes in ownership of subsidiaries Changes in ownership of subsidiaries Total transactions with the shareholder Dividends Changes in ownership of subsidiaries Gains on cash flow hedging instruments	·	-	-	-	(3,383)	-	-	(3,383)
Gains on cash flow hedging instruments Total comprehensive income for the year					(25.296)			(25.206)
Total comprehensive income for the year - - - - - - 2,200,617 Transactions with the shareholder Dividends - - - - - (640,132) - (640,132) - (640,132) - (905) - - - (905) - - - (641,032) - (641,037) - (641,037) -		-	-	-		-	-	
Transactions with the shareholder Dividends - - - - (640,132) - (640,132) Changes in ownership of subsidiaries - - (905) - - - (905) Total transactions with the shareholder - - (905) - (640,132) - (641,037) Balance at December 31, 2018 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866						2 272 836		
Dividends - - - - - (640,132) - (640,132) - (640,132) - (640,132) - (905) - - - (905) - - - (640,132) - (641,037) - - (640,132) - - (641,037) - <td>Total comprehensive meeting for the year</td> <td></td> <td></td> <td></td> <td>(12,210)</td> <td>2,272,000</td> <td></td> <td>2,200,011</td>	Total comprehensive meeting for the year				(12,210)	2,272,000		2,200,011
Dividends - - - - - (640,132) - (640,132) - (640,132) - (640,132) - (905) - - - (905) - - - (640,132) - (641,037) Total transactions with the shareholder - - - (905) - (640,132) - (641,037) Balance at December 31, 2018 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866	Transactions with the shareholder							
Changes in ownership of subsidiaries - - (905) - - - (905) Total transactions with the shareholder - - (905) - (640,132) - (641,037) Balance at December 31, 2018 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866		_	_	_	_	(640 132)	_	(640 132)
Total transactions with the shareholder - - (905) - (640,132) - (641,037) Balance at December 31, 2018 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866		_		(905)		(0.10,102)	_	, , ,
Balance at December 31, 2018 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866	•					(640 132)		, ,
	Total transactions with the shaleholder			(000)		(040,102)		(041,001)
Balance at January 1, 2019 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866	Balance at December 31, 2018	2,021,896	-	5,218,788	115,784	19,311,398	-	26,667,866
Balance at January 1, 2019 2,021,896 - 5,218,788 115,784 19,311,398 - 26,667,866								
	Ralance at January 1, 2010	2 021 806		5 210 700	115 794	10 311 309		26 667 966
The effect of changes in accounting policies	• •	2,021,090		3,210,700	113,764	19,311,390		20,007,000
Comprehensive income for the year								
	•					0.400.070		0.400.070
	•	-	-	-	(40,000)	2,439,079	-	
Remeasurements of net defined benefit liabilities (40,369) (40,369) Net gains on equity instruments		-	-	-	(40,369)	-	-	(40,369)
		_	_	_	1.324	(18.475)	_	(17,151)
Currency translation adjustments 26,271 26,271		_	_	_		(,)	_	
Net gains on debt instruments at fair value through	· · · · · · · · · · · · · · · · · · ·				,			, :
other comprehensive income 34,275 34,275	other comprehensive income	-	-	-	34,275	-	-	34,275
Share of other comprehensive loss of associates 7,546 - 7,546	·	-	-	-		-	-	
in foreign operations (6,267) (6,267)	0 1	-	-	-		-	-	
								(15,230)
Total comprehensive income for the year - - - - 7,550 2,420,604 - 2,428,154	lotal comprehensive income for the year				7,550	2,420,604		2,428,154
Transactions with the shareholder	Transactions with the shareholder							
		_	_	_	_	(667,226)	_	(667,226)
Studnee of hybrid securities - 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523 574,523		_	574 523	_	_	(55.,220)	_	
Changes in ownership of subsidiaries 916 916	•	_		016	_	_	_	
· · · · · · · · · · · · · · · · · · ·	•		574 523			(667 226)		(91,787)
- 377,020 - (007,220) - (91,707)	Total Gallouddollo With the oligicilotuci		317,023	310		(001,220)		(31,737)
Balance at December 31, 2019 2,021,896 574,523 5,219,704 123,334 21,064,776 - 29,004,233	Balance at December 31, 2019	2,021,896	574,523	5,219,704	123,334	21,064,776		29,004,233

^(*) The consolidated statements of comprehensive income for the year ended December 31, 2019 are prepared applying Korean IFRS 1116, and the comparative consolidated statements of comprehensive income for the year ended December 31, 2018 have not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1116.

(In millions of Korean won)	Notes	2019	2018
Cash flows from operating activities			
Profit for the year	_	2,439,079	2,259,198
Adjustment for non-cash items			
Net losses(gains) on financial assets/liabilities at fair value through profit or loss		(201,982)	(EG 201
Net losses(gains) on derivative financial instrument		(201,962)	(56,385
for hedging purposes		(110,405)	41,522
Adjustment of fair value of derivative financial instruments		282	410
Provision for credit losses		103,170	93,916
Net gains on financial investments		(95,524)	(88,079
Share of profit of associates and subsidiaries		(29,240)	(49,698
Depreciation and amortization expense		509,346	246,488
Other net losses(gains) on property and equipment/intangib	le assets	1,518	(139,092
Share-based payment		15,173	4,05
Post-employment benefits		157,946	140,87
Net interest expense		236,930	250,854
Gains on foreign currency translation		(100,131)	(9,004
Other expense	_	60,496 547,579	16,356 452,216
Changes in operating assets and liabilities	_	347,379	452,210
Financial assets at fair value through profit or loss		(1,497,738)	(2,983,784
Derivative financial instrument		(7,944)	(2,903,765
Loans at amortized cost		(16,595,592)	(25,553,376
Current income tax assets		(9,265)	(1,416
Deferred income tax assets		1,110	(649
Other assets		(905,137)	1,622,046
Financial liabilities at fair value through profit or loss		(23,165)	10,419
Deposits		28,107,474	19,633,55
Deferred income tax liabilities		137,700	56,200
Other liabilities		1,176,035	975,835
		10,383,478	(6,251,035
Net cash inflow(outflow) from operating activities	_	13,370,136	(3,539,621
Cash flows from investing activities			
Net cash flows from derivative financial instrument for hedging	purposes	7,120	(14,918
Disposal of financial assets at fair value through profit or loss		7,807,186	8,303,648
Acquisition of financial assets at fair value through profit or loss	3	(7,817,304)	(6,220,238
Disposal of financial investments Acquisition of financial investments		59,540,128 (68,825,567)	53,180,83
Disposal of investments in associates		30,354	(57,553,020 44,86
Acquisition of investments in associates		(69,005)	(159,320
Disposal of property and equipment		60	1,72
Acquisition of property and equipment		(525,605)	(333,949
Acquisition of investment property		(230,584)	(000,010
			(179
Disposal of investment property		(200,001)	
Disposal of investment property Disposal of intangible assets		7.126	139,639
Disposal of intangible assets		7,126	139,639 1,429
		-	139,639 1,429 (53,057
Disposal of intangible assets Acquisition of intangible assets		7,126 (73,726)	139,639 1,429 (53,057 14,280
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others	-	7,126 (73,726) 212,279	139,639 1,429 (53,057 14,280 301,012
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities	<u>-</u>	7,126 (73,726) 212,279 (59,809)	139,63 1,42 (53,05 14,28 301,01
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities		7,126 (73,726) 212,279 (59,809) (9,997,347)	139,63: 1,42: (53,05: 14,28: 301,01: (2,347,24)
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347)	139,63: 1,42: (53,05: 14,28: 301,01: (2,347,24:
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505	139,63: 1,42: (53,05: 14,28: 301,01: (2,347,24: (17,69: 1,517,01:
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347)	139,63: 1,42: (53,05: 14,28: 301,01: (2,347,24: (17,69: 1,517,01: 14,209,94:
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968	139,63 1,42 (53,05) 14,28 301,01: (2,347,24) (17,69) 1,517,01: 14,209,94 (10,414,51)
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others let cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629)	139,63 1,42 (53,05) 14,28 301,01: (2,347,24) (17,69) 1,517,01: 14,209,94 (10,414,51) (640,13)
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends	_ _ purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226)	139,63 1,42 (53,05 14,28 301,01 (2,347,24; (17,69 1,517,01 14,209,94 (10,414,51; (640,13;
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends Net increase(decrease) in other payables from trust accounts	purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226) (68,647)	139,63 1,42 (53,05) 14,28 301,01 (2,347,24) (17,69) 1,517,01 14,209,94 (10,414,51) (640,13) 267,07
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends Net increase(decrease) in other payables from trust accounts Issuance of hybrid securities Others	purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226) (68,647) 574,523	139,63 1,42 (53,05) 14,28 301,01: (2,347,24) (17,69) 1,517,01: 14,209,94 (10,414,51: (640,13) 267,07 (220,61)
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends Net increase(decrease) in other payables from trust accounts Issuance of hybrid securities Others Net cash inflow(outflow) from financing activities	purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226) (68,647) 574,523 (66,498) (3,527,635)	139,63 1,42 (53,05) 14,28 301,01; (2,347,24) (17,69) 1,517,01; 14,209,94 (10,414,51; (640,13; 267,07) (220,61) 4,701,07
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends Net increase(decrease) in other payables from trust accounts Issuance of hybrid securities Others Net cash inflow(outflow) from financing activities Exchange gains (losses) on cash and cash equivalents	purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226) (68,647) 574,523 (66,498) (3,527,635)	139,638 1,428 (53,057 14,286 301,017 (2,347,248 (17,698 1,517,019 14,209,944 (10,414,512 (640,132 267,076 (220,618 4,701,07
Disposal of intangible assets Acquisition of intangible assets Net cash flows from changes in ownership of subsidiaries Others Net cash outflow from investing activities Cash flows from financing activities Net cash flows from derivative financial instrument for hedging Net increase in debts Increase in debentures Decrease in debentures Payment of dividends Net increase(decrease) in other payables from trust accounts Issuance of hybrid securities	purposes	7,126 (73,726) 212,279 (59,809) (9,997,347) (28,631) 1,290,505 9,543,968 (14,105,629) (667,226) (68,647) 574,523 (66,498) (3,527,635)	(175 139,638 1,428 (53,057 14,286 301,012 (2,347,248 (17,698 1,517,019 14,209,940 (10,414,512 (640,132 267,076 (220,618 4,701,07) (35,660 (1,221,458 6,077,95

^(*) The consolidated statements of comprehensive income for the year ended December 31, 2019 are prepared applying Korean IFRS 1116, and the comparative consolidated statements of comprehensive income for the year ended December 31, 2018 have not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1116.

The accompanying notes are an integral part of these consolidated financial statements.

1. The Bank

Kookmin Bank (the "Bank" or the "Parent Company") was incorporated in 1963 under the Citizens National Bank Act to provide banking services to the general public and to small and medium-sized enterprises. Pursuant to the Repeal Act of the Citizens National Bank Act, effective January 5, 1995, the Bank's status changed to a financial institution which operates under the Banking Act and Commercial Act.

The Bank merged with Korea Long Term Credit Bank on December 31, 1998, and with its subsidiaries, Daegu, Busan, Jeonnam Kookmin Mutual Savings & Finance Co., Ltd., on August 22, 1999. Pursuant to the directive from the Financial Services Commission related to the Structural Improvement of the Financial Industry Act, the Bank acquired certain assets, including performing loans, and assumed most of the liabilities of Daedong Bank on June 29, 1998. Also, the Bank completed the merger with Housing and Commercial Bank ("H&CB") on October 31, 2001, and merged with Kookmin Credit Card Co., Ltd., a majority-owned subsidiary, on September 30, 2003. Meanwhile, the Bank spun off its credit card business segment on February 28, 2011, and KB Kookmin Card Co., Ltd. became a subsidiary of KB Financial Group Inc.

The Bank listed its shares on the Stock Market Division of the Korea Exchange ("KRX," formerly Korea Stock Exchange) in September 1994. As a result of the merger with H&CB, the shareholder of the former Kookmin Bank and H&CB received new common shares of the Bank which were relisted on the KRX on November 9, 2001. In addition, H&CB listed its American Depositary Shares ("ADS") on the New York Stock Exchange ("NYSE") on October 3, 2000, prior to the merger. Following the merger with H&CB, the Bank listed its ADS on the NYSE on November 1, 2001. The Bank became a wholly owned subsidiary of KB Financial Group Inc. through a comprehensive stock transfer on September 29, 2008. Subsequently, the Bank's shares and its ADS, each listed on the KRX and the NYSE, were delisted on October 10, 2008 and September 26, 2008, respectively. As at December 31, 2019, the Bank's paid-in capital is \text{\text{\text{W}2,021,896} million}.

The Bank engages in the banking business in accordance with the Banking Act, trust business and other relevant businesses in accordance with the Financial Investment Services and Capital Markets Act, and telecommunication Services in accordance with the Special Act on Financial Innovation Support. As at December 31, 2019, the Bank operates 1,051 domestic branches and offices, and eight overseas branches (excluding four subsidiaries and two offices).

2. Basis of Preparation

2.1 Application of Korean IFRS

The Bank and its subsidiaries (collectively the "Group") maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with Korean IFRS. The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

The preparation of the consolidated financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 2.4.

The Group newly applied the following amended and enacted standards and interpretations from January 1, 2019, and these applications did not have a material impact on the consolidated financial statements, except for the adoption of Korean IFRS 1116 *Leases*.

- Amendments to Korean IFRS 1116 Leases

Korean IFRS 1116 adopts a single lease model and requires lesses to recognize assets and liabilities for all leases of which lease term is over 12 months and underlying assets are not low value assets. A lessee is required to recognize a right-of-use asset and a lease liability representing its obligation to make lease payments.

The Group changed its accounting policies as a result of adopting Korean IFRS 1116 *Leases*. The Group applied the new accounting policies retrospectively, as permitted under the specific transitional provisions in the standard. The cumulative effect of initial application of Korean IFRS 1116 was recognized on the date of initial application (January 1, 2019). The Group did not elect to restate its comparative prior financial statements. See Note 42 for the effect of adoption of Korean IFRS 1116 *Leases*.

- Amendments of Korean IFRS 1109 Financial Instruments

The narrow-scope amendments made to Korean IFRS 1109 *Financial Instruments* enable entities to measure certain pre-payable financial assets with negative compensation at amortized cost. When a modification of a financial liability measured at amortized cost that does not result in the derecognition, a modification gain or loss shall be recognized in profit or loss. The amendments had no material impact on the Group's financial statements.

- Amendments of Korean IFRS 1019 Employee Benefits

The amendments require that an entity shall calculate current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement based on updated actuarial assumptions from the date of the change. The amendments also require that a reduction in a surplus must be recognized in profit or loss even if that surplus was not previously recognized because of the impact of the asset ceiling. The amendments had no material impact on the Group's financial statements.

- Amendments of Korean IFRS 1028 Investments in Associates and Joint Ventures

The amendments clarify that an entity shall apply Korean IFRS 1109 to financial instruments in an associate or joint venture to which the equity method is not applied. These include long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture. The amendments had no material impact on the Group's financial statements.

- Enactment to Interpretation of Korean IFRS 2123 Uncertainty over Income Tax Treatments

The interpretation explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment, and includes guidance on how to determine whether each uncertain tax treatment is considered separately or together. It also presents examples of circumstances where a judgment or estimate is required to be reassessed. The enactment did not have a significant impact on the financial statements.

- Amendments to K-IFRS No. 1109, *Financial Instruments*, and No. 1107, *Financial Instruments:* Disclosure

Due to benchmark interest rate reform, exceptions have been added that allow hedge accounting to be applied while uncertainty exists. With regards to the hedging relationship, we assume that the benchmark interest rate, which is the underlying variable of cash flows, is not changed by the benchmark interest rate reform when examining the likelihood of anticipated transactions and the subsequent evaluation of the hedging effect. For hedges of interest rate risk factors not specified in the contract, the requirement that the hedged risk must be separately identified applies only at the inception of the hedge relationship. The application of this exception is terminated when uncertainty regarding the timing and amount of cash flows based on the benchmark interest rates resulting from the benchmark interest rate reform ceases or the hedging relationship ceases. The amendments were implemented from January 1, 2020, but the Group adopted those amendments early as early adoption was allowed. The significant benchmark interest rate indicator for the hedge relationship is LIBOR and CD Rates, and the hedge accounted for in this amendment is hedge accounting in Note 9.

- Annual Improvements 2015-2017 Cycle

Korean IFRS 1103 Business Combination

The amendments clarify that when a party to a joint arrangement obtains control of a business that is a joint operation, and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. In such cases, the acquirer shall remeasure its entire previously held interest in the joint operation. The amendments had no material impact on the Group's financial statements..

Korean IFRS 1111 Joint Agreements

The amendments clarify that when a party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business. In such cases, previously held interests in the joint operation are not remeasured. The amendments had no material impact on the Group's financial statements.

Paragraph 57A of Korean IFRS 1012 Income Tax

The amendment is applied to all the income tax consequences of dividends and requires an entity to recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized those past transactions or events. The amendment had no material impact on the Group's financial statements.

Korean IFRS 1023 Borrowing Cost

The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use (or sale), it becomes part of general borrowings. The amendments had no material impact on the Group's financial statements.

Certain new accounting standards and interpretations that have been published but are not mandatory for the reporting period commencing January 1, 2019 and have not been early adopted by the Group are set out below.

- Amendments to Korean IFRS 1001 Presentation of Financial Statements and Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors – Definition of Material

The amendments clarify the explanation of the definition of material and amended Korean IFRS 1001 and Korean IFRS 1008 in accordance with the clarified definitions. Materiality is assessed by reference to omission or misstatement of material information as well as effects of immaterial information, and to the nature of the users when determining the information to be disclosed by the Group. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Group does not expect that these amendments had a significant impact on the financial statements.

- Amendments to Korean IFRS 1103 Business Combination - Definition of a Business

To consider the integration of the required activities and assets as a business, the amended definition of a business requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs and excludes economic benefits from the lower costs. An entity can apply a concentration test, an optional test, where substantially all of the fair value of gross assets acquired is concentrated in a single asset or a group of similar assets, the assets acquired would not represent a business. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Group does not expect that these amendments had a material impact on the financial statements.

- New interpretations not yet adopted by the Group

On December 16, 2019, the IFRS Interpretation Committee announced that all economic penalties for the termination of the lease are taken into account when determining the enforceable period for lease term and useful life of leasehold improvements. The Group is analyzing the impact of changes in accounting policy for the enforceable period on consolidated financial statements.

Due to the large number of lease contracts held by the Group and varying terms of the contract, the Group expects that sufficient time would be required to assess items to be included in the review of extensive economic penalty and to establish procedures for collecting and analyzing necessary information. Therefore, the effect of the changes in accounting policy for the lease term has not been reflected in the consolidated financial statements for the current reporting period.

If the accounting policy for the lease term is changed in the annual periods beginning on or after January 1, 2020, the amount of the related right-of-use assets and lease liabilities may increase, and the consolidated financial statements may need to be retroactively restated to reflect this effect.

2.2 Measurement Basis

The consolidated financial statements have been prepared under the historical cost convention unless otherwise specified.

2.3 Functional and Presentation Currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Korean won, which is the Parent Company's functional and presentation currency. Refer to Notes 3.2.

2.4 Critical Accounting Estimates

The preparation of consolidated financial statements requires the application of accounting policies, certain critical accounting estimates and assumptions that may have a significant impact on the assets (liabilities) and incomes (expenses). Management's estimates of outcomes may differ from actual outcomes if management's estimates and assumptions based on management's best judgment at the reporting date are different from the actual environment.

Estimates and assumptions are continually evaluated and any change in an accounting estimate is recognized prospectively by including it in profit or loss in the period of the change, if the change affects that period only. Alternatively if the change in accounting estimate affects both the period of change and future periods, that change is recognized in the profit or loss of all those periods.

Uncertainty in estimates and assumptions with significant risk that may result in material adjustment to the consolidated financial statements are as follows:

2.4.1 Income Taxes

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain.

If certain portion of the taxable income is not used for investments, increase in wages, and others in accordance with the Tax Law for Promotion of investment and Collaborative Cooperation (Recirculation of Corporate Income), the Group is liable to pay additional income tax calculated based on the tax laws. The new tax law is effective for three years from 2018 and measurement of current and deferred income tax is affected. As the Group's income tax is dependent on the investments, increase in wages, and others, there exists uncertainty with regard to measuring the final tax effects.

2.4.2 Fair Value of Financial Instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on material market conditions existing at the end of each reporting period. Refer to Note 6 for details on valuation techniques and inputs used to determine the fair value of financial instruments.

2.4.3 Provisions for Credit Losses (allowances for loan losses, provisions for acceptances and guarantees, and unused loan commitments)

The Group determines and recognizes allowances for losses on financial assets at amortized cost and fair value through other comprehensive income through impairment test and recognizes provisions for acceptances and guarantees, and unused loan commitments. The accuracy of provisions for credit losses is determined by the methodology and assumptions used for the estimation of expected cash flows of the borrower for individually assessed allowances of loans, collectively assessed allowances for groups of loans, acceptances and guarantees, and unused loan commitments.

2.4.4 Net Defined Benefit Liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions

2.4.5 Estimated Impairment of Goodwill

The Group tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations.

3. Significant Accounting Policies

The significant accounting policies and calculation methods applied in the preparation of these consolidated financial statements have been consistently applied to all periods presented, except for the impact of changes due to enactment of new standards, amendments and interpretations disclosed in Note 2.1 and the following paragraph.

3.1 Consolidation

3.1.1 Subsidiaries

Subsidiaries are companies that are controlled by the Group. The Group controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The existence and effects of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date when control is transferred to the Group and de-consolidated from the date when control is lost.

If a subsidiary uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to make the subsidiary's accounting policies conform to those of the Group when the subsidiary's financial statements are used by the Group in preparing the consolidated financial statements.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Parent Company and to the non-controlling interests, if any. Total comprehensive income is attributed to the owners of the Parent Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions; that is, as transactions with the owners in their capacity as owners. The difference

between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

3.1.2 Associates

Associates are entities over which the Group has significant influence in the financial and operating policy decisions. If the Group holds 20% or more of the voting power of the investee, it is presumed that the Group has significant influence.

If the Group's share of losses of an associate equals or exceeds its interest in the associate (including long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. After the Group's interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group determines at each reporting period whether there is any objective evidence that the investments in the associates are impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associates and its carrying value and recognizes the amount as 'non-operating income (expense)' in the statement of comprehensive income.

Under the equity method, investments in associates are initially recognized at cost and the carrying amount is increased or decreased to recognize the Group's share of the profit or loss of the investee and changes in the investee's equity after the date of acquisition. The Group's share of the profit or loss of the investee is recognized in the Group's profit or loss. Distributions received from an investee reduce the carrying amount of the investment. Profit and loss resulting from 'upstream' and 'downstream' transactions between the Group and associates are eliminated to the extent at the Group's interest in associates. Unrealized losses are eliminated in the same way as unrealized gains except that they are only eliminated to the extent that there is no evidence of impairment.

If an associate uses accounting policies other than those of the Group for like transactions and events in similar circumstances, if necessary, adjustments shall be made to make the associate's accounting policies conform to those of the Group when the associate's financial statements are used by the entity in applying the equity method.

3.1.3 Structured Entity

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. When the Group decides whether it has power to the structured entities in which the Group has interests, it considers factors such as the purpose, the form, the practical ability to direct the relevant activities of a structured entity, the nature of its

relationship with a structured entity and the amount of exposure to variable returns.

3.1.4 Trusts and Funds

The Group provides management services for trust assets, collective investment and other funds. These trusts and funds are not consolidated in the Group's consolidated financial statements, except for trusts and funds over which the Group has control.

3.1.5 Intra-group Transactions

All intra-group balances and transactions, and any unrealized gains arising on intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealized losses are eliminated in the same way as unrealized gains except that they are only eliminated to the extent that there is no evidence of impairment.

3.2 Foreign Currency

3.2.1 Foreign Currency Transactions and Balances

A foreign currency transaction is recorded, on initial recognition in the functional currency, by applying the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. At the end of each reporting period, foreign currency monetary items are translated using the closing rate which is the spot exchange rate at the end of the reporting period. Non-monetary items that are measured at fair value in a foreign currency are translated using the spot exchange rates at the date when the fair value was determined and non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the spot exchange rate at the date of the transaction.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognized in profit or loss in the period in which they arise, except for exchange differences arising on net investments in a foreign operation and financial liability designated as a hedge of the net investment. When gains or losses on a non-monetary item are recognized in other comprehensive income, any exchange component of those gains or losses are also recognized in profit or loss, any exchange component of those gains or losses are also recognized in profit or loss, any exchange component of those gains or losses are also recognized in profit or loss.

3.2.2 Foreign Operations

The financial performance and financial position of all foreign operations, whose functional currencies differ from the Group's presentation currency, are translated into the Group's presentation currency using the following procedures.

Assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the reporting period. Income and expenses in the statement of comprehensive income presented are translated at average exchange rates for the period. All resulting exchange differences are recognized in other comprehensive income.

Any goodwill arising from the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising from the acquisition of that foreign operation are treated

as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and are translated into the presentation currency at the closing rate.

On the disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation, recognized in the other comprehensive income and the separate component of equity, is reclassified from other comprehensive income to profit or loss (as a reclassification adjustment) when the gains or losses on disposal are recognized. On the partial disposal of a subsidiary that includes a foreign operation, the Group re-attributes the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income to the non-controlling interests in that foreign operation. In any other partial disposal of a foreign operation, the Group reclassifies to profit or loss only the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income.

3.2.3 Translation of the net investment in a foreign operation

If the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely to occur in the foreseeable future, then foreign currency difference arising on the item which in substance is considered to form part of the net investment in the foreign operation, are recognized in the other comprehensive income and shall be reclassified to profit or loss on disposal of the investment.

3.3 Recognition and Measurement of Financial Instruments

3.3.1 Initial Recognition

The Group recognizes a financial asset or a financial liability in its consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument. A regular way purchase or sale of financial assets (a purchase or sale of a financial asset under a contract whose terms require delivery of the financial instruments within the time frame established generally by market regulation or practice) is recognized and derecognized using trade date accounting.

The Group classifies financial assets as financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income or financial assets at amortized cost. The Group classifies financial liabilities as financial liabilities at fair value through profit or loss, or other financial liabilities. The classification depends on the Group's business model for managing financial instruments and the contractual cash flow characteristics of the financial instruments at initial recognition.

At initial recognition, a financial asset or financial liability is measured at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The fair value of a financial instrument on initial recognition is normally the transaction price (that is, the fair value of the consideration given or received) in an arm's length transaction.

3.3.2 Subsequent Measurement

After initial recognition, financial instruments are measured at amortized cost or fair value based on classification at initial recognition.

Amortized cost

The amortized cost of a financial asset or financial liability is the amount at which the financial asset or financial liability is measured at initial recognition and adjusted to reflect principal repayments, cumulative amortization using the effective interest method and any reduction (directly or through the use of an allowance account) for impairment or uncollectibility.

Fair value

Fair values, which the Group primarily uses for the measurement of financial instruments, are the published price quotations based on market prices or dealer price quotations of financial instruments traded in an active market where available. These are the best evidence of fair value. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, an entity in the same industry, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

If the market for a financial instrument is not active, fair value is determined either by using a valuation technique or independent third-party valuation service. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, referencing to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models.

The Group uses valuation models that are commonly used by market participants and customized for the Group to determine fair values of common over-the-counter (OTC) derivatives such as options, interest rate swaps and currency swaps which are based on the inputs observable in markets. For more complex instruments, the Group uses internally developed models, which are usually based on valuation methods and techniques generally used within the industry, or a value measured by an independent external valuation institution as the fair values if all or some of the inputs to the valuation models are not market observable and therefore it is necessary to estimate fair value based on certain assumptions.

The Group's Fair Value Evaluation Committee, which consists of the risk management department, trading department and accounting department, reviews the appropriateness of internally developed valuation models, and approves the selection and changing of the external valuation institution and other considerations related to fair value measurement. The review results on the fair valuation models are reported to the Market Risk Management subcommittee by the Fair Value Evaluation Committee on a regular basis.

If the valuation technique does not reflect all factors which market participants would consider in setting a price, the fair value is adjusted to reflect those factors. Those factors include counterparty credit risk, bid-ask spread, liquidity risk and others.

The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It incorporates all factors that market participants would consider in setting a price and is consistent with economic methodologies applied for pricing financial instruments. Periodically, the Group calibrates the valuation technique and tests its validity using prices of observable current market transactions of the same instrument or based on other relevant observable market data

3.3.3 Derecognition

Derecognition is the removal of a previously recognized financial asset or financial liability from the statement of financial position. The Group derecognizes a financial asset or a financial liability when, and only when:

Derecognition of financial assets

Financial assets are derecognized when the contractual rights to the cash flows from the financial assets expire or the financial assets have been transferred and substantially all the risks and rewards of ownership of the financial assets are also transferred, or all the risks and rewards of ownership of the financial assets are neither substantially transferred nor retained and the Group has not retained control. If the Group neither transfers nor disposes of substantially all the risks and rewards of ownership of the financial assets, the Group continues to recognize the financial asset to the extent of its continuing involvement in the financial asset.

If the Group transfers the contractual rights to receive the cash flows of the financial asset, but retains substantially all the risks and rewards of ownership of the financial asset, the Group continues to recognize the transferred asset in its entirely and recognize a financial liability for the consideration received.

The Group writes off the carrying amount and allowance of financial assets in its entirety or to a portion thereof when the principal and interest are determined to be no longer recoverable. In general, the Group considers write-off when it is determined that the debtor does not have sufficient resources or income to cover the principal and interest, and this write-off decision is made in accordance with internal regulations. After the write-off, the Group can collect the written-off loans continuously according to the internal policy. Recovered amounts from written-off financial assets are recognized in profit or loss.

Derecognition of financial liabilities

Financial liabilities are derecognized from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired.

3.3.4 Offsetting

Financial assets and financial liabilities are offset and the net amount are presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to offset the recognized amounts and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

3.4 Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, foreign currency, and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

3.5 Non-derivative Financial Assets

3.5.1 Financial Assets at Fair Value through Profit or Loss

Financial assets classified as held for trading, financial assets designated by the Group as at fair value

through profit or loss upon initial recognition, and financial assets that are required to be mandatorily measured at fair value through profit or loss are classified as financial assets at fair value through profit or loss.

The Group may designate certain financial assets upon initial recognition as at fair value through profit or loss when the designation eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'an accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

After initial recognition, a financial asset at fair value through profit or loss is measured at fair value and gains or losses arising from a change in the fair value are recognized in profit or loss. Interest income using the effective interest method and dividend income from financial assets at fair value through profit or loss are also recognized in profit or loss.

3.5.2 Financial Assets at Fair Value through Other Comprehensive Income

The Group classifies below financial assets as financial assets at fair value through other comprehensive income;

- Debt instruments that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and where the assets' cash flows represent solely payments of principal and interest on the principal amount outstanding or;
- Equity instruments that are not held for trading with the objective of generating a profit from short-term fluctuations in price or dealer's margin, designated as financial assets at fair value through other comprehensive income.

After initial recognition, a financial asset at fair value through other comprehensive income is measured at fair value. Gains or losses arising from a change in fair value, other than dividend income, interest income using effective interest method and exchange differences arising on monetary items which are recognized directly in profit or loss, are recognized as other comprehensive income in equity.

Upon disposal of financial assets at fair value through other comprehensive income, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss. However, cumulative gain or loss of equity instrument designated as fair value through other comprehensive income are reclassified to retained earnings not to profit or loss at disposal.

Financial assets at fair value through other comprehensive income denominated in foreign currencies are translated at the closing rate. Exchange differences on the amortized cost of changes in fair value are recognized in profit or loss, and other changes are recognized as equity.

3.5.3 Financial Assets at Amortized Cost

A financial asset, which are held within the business model whose objective is to hold assets in order to collect contractual cash flows and consistent with representing solely payments of principal and interest on the principal amount outstanding, are classified as a financial asset at amortized cost.

These financial assets are subsequently carried at amortized cost using the effective interest method after initial recognition and interest income is recognized using the effective interest method.

The carrying amount of financial assets at amortized cost is presented by deducting allowance for doubtful accounts, and the measurement method is described in Note 3.6.

3.6 Expected Credit Loss of Financial Assets (Debt Instruments)

The Group measures expected credit loss and recognizes loss allowance at the end of the reporting period for financial assets at amortized cost and fair value through other comprehensive income with the exception of financial asset at fair value through profit or loss.

Expected credit losses are estimated at present value of probability-weighted amount that is determined by evaluating a range of possible outcomes. The Group measures expected credit losses by reflecting reasonable and supportable information that is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions.

The approaches of measuring expected credit losses in accordance with Korean IFRS are as follows:

- General approach: for financial assets not subject to the below approach and unused loan commitments on off-balance sheet
- Credit-impaired approach: for financial assets that are credit-impaired at the time of acquisition

Application of general approach is differentiated depending on whether credit risk has increased significantly after initial recognition. After initial recognition, loss allowances for the assets without significant increase in credit risk are measured at the amount of 12 month expected credit losses, whereas the loss allowances for the assets with significant increase in credit risk are measured at the amount of lifetime expected credit losses. Lifetime is presumed to be a period to the contractual maturity date of financial assets (the expected life of financial assets).

The Group determines whether the credit risk has increased significantly using the following information, and if one or more of the following items are met, it is deemed as significant increase in credit risk. Information of more than 30 days overdue is applied to all subsidiaries, and other information is applied selectively considering specific indicators of each subsidiary or additionally considering specific indicators of each subsidiary. When the contractual cash flows of a financial asset are renegotiated or otherwise modified, the Group determines whether the credit risk has increased significantly using the same following information.

- Exceeds 30 days past due
- Decline in credit rating at period end by more than certain notches as compared to that at initial recognition
- Subsequent managing ratings below certain level in the early warning system
- Debt restructuring (except for impaired financial assets) and
- Credit delinquency information on the Korea Federation of Banks, and etc.

If one or more of the following items are met, it is generally deemed as credit-impaired:

- 90 days or more past due
- Legal proceedings related to collection
- A borrower registered on the credit management list of the Korea Federation of Banks
- A corporate borrower with the credit rating C or D
- Refinancing or

- Debt restructuring, and etc.

3.6.1 Forward-looking Information

The Group uses forward-looking information, when it determines whether the credit risk has increased significantly and measures the expected credit losses.

The Group assumes the risk components have a certain correlation with the economic cycle, and uses statistical methodologies to estimate the relation between key macroeconomic variables and risk components for the expected credit losses. The Group has derived a correlation between the time series data of more than 11 years and the key macroeconomic variables, and calculates the expected credit losses by reflecting the results of the correlation on the risk component. The correlation between the major macroeconomic variables and the credit risk is as follows:

	Correlation between the major
Key macroeconomic variables	macroeconomic variables and the credit risk
Domestic GDP growth rate	(-)
Composite stock index	(-)
Construction investment change rate	(-)
Rate of change in housing transaction price index	(-)
Interest rate spread	(+)
Private consumption growth rate	(-)

Correlation between the major

Forward-looking information used in calculation of expected credit losses is based on the macroeconomic forecasts utilized by the management of the Bank for its business plan taking into account reliable external agency's forecasts and others. The forward-looking information is generated by KB Research under KB Financial Group with comprehensive approach to capture the possibility of various economic forecast scenarios that are derived from the internal and external viewpoints of the macroeconomic situation. The Group determines the macroeconomic variables to use in forecasting future condition of the economy, taking into account the direction of the forecast scenario and the significant relationship between macroeconomic variables and time series data. And there are some changes compared to the macroeconomic variables used in the previous year.

3.6.2 Measuring Expected Credit Losses on Financial Assets at Amortized Cost

The expected credit losses on financial assets at amortized cost are measured as the difference between the asset's contractual terms of cash flow and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate. The Group estimates expected future cash flows for financial assets that are individually significant (individual assessment of impairment).

For financial assets that are not individually significant, the Group collectively estimates expected credit loss by grouping loans with homogeneous credit risk profile (collective assessment of impairment).

Individual assessment of impairment

Individual assessment of impairment losses are calculated by discounting the expected future cash flows of a loan at its original effective interest rate and comparing the resultant present value with the loan's current carrying amount. This process normally encompasses management's best estimate, such as operating cash flow of the borrower and net realizable value of any collateral held.

Collective assessment of impairment

Collective assessment of impairment is performed by using a methodology based on historical loss experience and reflecting forward-looking information. Such methodology applies factors such as type of collateral, product and borrowers, credit rating, portfolio size, recovery period, probability of default estimated for each group of assets and loss given default by type of recovery method. Also, consistent assumptions are applied to form a formula-based model in estimating expected credit loss and to determine factors on the basis of historical loss experience and forward-looking information. The methodology and assumptions used for collective assessment of impairment are reviewed regularly to reduce any differences between estimated and actual losses.

Lifetime expected credit loss is measured by applying Probability of Default ("PD") and adjusted Loss Given Default ("LGD") reflecting the changes in carrying amount to the carrying amount as at the end of the reporting period deducted by expected repayment of principals.

3.6.3 Measuring Expected Credit Losses on Financial Assets at Fair Value through Other Comprehensive Income

Measuring method of expected credit losses on financial assets at fair value through other comprehensive income is equal to that of financial assets at amortized cost. However, the changes in loss allowances are recognized as other comprehensive income. Upon disposal or repayment of financial assets at fair value through other comprehensive income, the amount of loss allowances is reclassified from other comprehensive income to profit or loss.

3.7 Derivative Financial Instruments

The Group enters into numerous derivative financial instrument contracts such as currency forwards, interest rate swaps, currency swaps and others for trading purposes or to manage its exposures to fluctuations in interest rates and currency exchange, amongst others. The Group's derivative operations focus on addressing the needs of the Group's corporate clients to hedge their risk exposure and to hedge the Group's risk exposure that results from such client contracts. These derivative financial instruments are presented as derivative financial instruments within the consolidated financial statements irrespective of transaction purpose and subsequent measurement requirement.

The Group designates certain derivatives and non-derivatives as hedging instruments to hedge the risk of changes in fair value and cash flow of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge and cash flow hedge). The Group designates part of derivatives and non-derivatives as hedging instruments to hedge the risk of foreign exchange of a net investment in a foreign operation (hedge of net investment).

At the inception of the hedge, there is formal designation and documentation of the hedging relationship and the Group's risk management objective and strategy for undertaking the hedge. That documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value attributable to the hedged risk.

See Note 9 for changes in fair value of the hedging instruments and changes in other comprehensive income related to derivatives held for cash flow hedging.

The Group applies hedge accounting for risk management activities aligned with the requirements and qualifying criteria for hedge accounting of Korean IFRS 1109.

3.7.1 Derivative Financial Instruments Held for Trading

All derivative financial instruments, except for derivatives that are designated and qualify for hedge accounting, are measured at fair value. Gains or losses arising from changes in fair value are recognized in profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss.

3.7.2 Fair Value Hedges

If derivatives and non-derivatives qualify for a fair value hedge, the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk are recognized in profit or loss as part of other operating income and expenses. If the hedged items are equity instruments for which the Group has elected to present changes in fair value in other comprehensive income, the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk are recognized in other comprehensive income. Fair value hedge accounting is discontinued prospectively if the hedging instrument expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for hedge accounting or the Group revokes the designation. Once fair value hedge accounting is discontinued, the adjustment to the carrying amount of a hedged item is amortized to profit or loss by the maturity of the financial instrument using the effective interest method.

3.7.3 Cash Flow Hedges

The effective portion of changes in fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income, limited to the cumulative change in fair value (present value) of the hedged item (the present value of the cumulative change in the future expected cash flows of the hedged item) from the inception of the hedge. The ineffective portion is recognized in gain or loss (other operating income or expense). The associated gains or losses that were previously recognized in other comprehensive income are reclassified from equity to profit or loss (other operating income and expenses) as a reclassification adjustment in the same period or periods during which the hedged forecast cash flows affects profit or loss. Cash flow hedge accounting is discontinued prospectively if the hedging instrument expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for hedge accounting or the Group revokes the designation. When the cash flow hedge accounting is discontinued, the cumulative gains or losses on the hedging instrument that have been recognized in other comprehensive income are reclassified to profit or loss over the period in which the forecast transaction occurs. If the forecast transaction is no longer expected to occur, the cumulative gains or losses that had been recognized in other comprehensive income are immediately reclassified to profit or loss.

3.7.4 Hedge of Net Investment

If derivatives and non-derivatives qualify for a net investment hedge, the effective portion of changes in fair value of hedging instrument is recognized in other comprehensive income or loss and the ineffective portion is recognized in net other operating income (expense). The gain or loss on the hedging instrument relating to the effective portion of the hedge that has been recognized in other comprehensive income will be reclassified from other comprehensive income or loss to profit or loss as a reclassification adjustment on the disposal or partial disposal of the foreign operation.

3.7.5 Risk Management Strategy

Interest rate risk arises from changes in fair value resulting from changes in the discount rate of fixed rate financial instruments, and changes in cash flows resulting from changes in the nominal interest rate of floating rate financial instruments. Foreign currencies risk arises from net investment in a foreign operation, whose functional currencies differ from the Group's functional currency.

While the Group entirely hedges the interest rate risk, the Group hedges the foreign currencies risk only the proportional part of the notional amount.

At inception of the hedge relationship, the Group reviews the hedge effectiveness; and periodically reviews the effectiveness in order to confirm that economic relationship between the hedged item and the hedging instrument exists. The requirement that an economic relationship exists means that the hedging instrument and the hedged item have values that generally move in the opposite direction because of the same risk, which is the hedged risk. The Group designates the exposure of hedged item opposite to the exposure of hedging instruments in order to meet economic relationship requirement.

The Group designates hedge relationship at one-on-one ratio between the nominal amount of hedging instrument and to the nominal amount of hedged item.

Ineffectiveness could arise because of differences in the underlying parameters (acquisition date, credit risk or liquidity and others) or other differences between the hedging instrument and the hedged item that the Group accepts in order to achieve a cost-effective hedging relationship.

The Group avoids the cash flow variability of its floating rate debt securities by using interest rate swaps. Both are linked to the same interest rate; however, the paid amount of the floating rate may be set on different dates. Even if the variability of interest rate related cash flows (as a risk factor) are designated as a hedged item, the difference in set-up dates creates an hedge ineffectiveness.

The Group avoids the variability of fair values of its fixed rate debt securities by using interest rate swaps. The calculating method of the number of the dates for paying fixed-rate interest amount can be different between both. Even if the variability of the fair value due to the benchmark interest rate (as a risk factor) are designated as a hedged item, the difference calculating in set-up dates creates an hedge ineffectiveness.

3.7.6 Embedded Derivatives

An embedded derivative is separated from the host contract and accounted for as a derivative if, and only if, 1) the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract, 2) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and, 3) the hybrid contract contains a host that is not a financial asset and is not designated as at fair value through profit or loss. Gains or losses arising from a change in the fair value of an embedded derivative separated from the host contract are recognized in net profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss.

3.7.7 Day One Gain and Loss

If the Group uses a valuation technique that incorporates data not obtained from observable markets for the fair value at initial recognition of the financial instrument, there may be a difference between the transaction price and the amount determined using that valuation technique. In these circumstances, the difference is deferred and not recognized in profit or loss, and is amortized by using the straight-line method over the life of the financial instrument. If the fair value of the financial instrument is subsequently determined using observable market inputs, the remaining deferred amount is recognized in profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss or other operating income and expenses.

3.8 Property and Equipment

3.8.1 Recognition and Measurement

All property and equipment that qualify for recognition as an asset are measured at cost and subsequently carried at cost less any accumulated depreciation and any accumulated impairment losses.

The cost of property and equipment includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent expenditures are capitalized only when they prolong the useful life or enhance values of the assets but the costs of the day-to-day servicing of the assets such as repair and maintenance costs are recognized in profit or loss as incurred.

3.8.2 Depreciation

Land is not depreciated whereas other property and equipment are depreciated using the method that reflects the pattern in which the asset's future economic benefits are expected to be consumed by the Group. The depreciable amount of an asset is determined after deducting its residual value.

The depreciation methods and estimated useful lives of the assets are as follows:

Property and equipment	Depreciation method	Estimated useful lives
Buildings and structures	Straight-line	40 years
Leasehold improvements	Declining-balance	4 years
Equipment and vehicles	Declining-balance	4 years

The residual value, the useful life and the depreciation method applied to an asset are reviewed at least at each financial year end and, if expectations differ from previous estimates or if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the changes are accounted for as a change in an accounting estimate.

3.9 Investment Properties

3.9.1 Recognition and Measurement

Properties held to earn rentals or for capital appreciation or both are classified as investment properties. Investment properties are measured initially at their cost and subsequently the cost model is used.

3.9.2 Depreciation

Land is not depreciated, whereas other investment properties are depreciated using the method that reflects the pattern in which the asset's future economic benefits are expected to be consumed by the Group. The depreciable amount of an asset is determined after deducting its residual value.

The depreciation method and estimated useful lives of the assets are as follows:

Investment properties	Depreciation method	Estimated useful lives
Buildings	Straight-line	40 years

The residual value, the useful life and the depreciation method applied to an asset are reviewed at least at each financial year end and, if expectations differ from previous estimates or if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the changes are accounted for as a change in an accounting estimate.

3.10 Intangible Assets

Intangible assets are measured initially at cost and subsequently carried at their cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets, except for goodwill and membership rights, are amortized using the straight-line method with no residual value over their estimated useful economic life since the asset is available for use.

Intangible assets	Amortization method	Estimated useful lives		
Industrial property rights	Straight-line	5 years		
Software	Straight-line	4 ~ 5 years		
Others	Straight-line	1 ~ 13 years		

The amortization period and the amortization method for intangible assets with a finite useful life are reviewed at least at each financial year end. Where an intangible asset is not being amortized, because its useful life is considered to be indefinite, the Group carries out a review in each accounting period to confirm whether or not events and circumstances still support the assumption of an indefinite useful life. If they do not, the change from the indefinite to finite useful life is accounted for as a change in an accounting estimate.

3.10.1 Goodwill

Recognition and measurement

Goodwill acquired from business combinations before January 1, 2010, is stated at its carrying amount which was recognized under the Group's previous accounting policy, prior to the transition to Korean IFRS.

Goodwill acquired from business combinations after January 1, 2010, is initially measured as the excess of the aggregate of the consideration transferred, fair value of non-controlling interest and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the business acquired, the difference is recognized in profit or loss.

For each business combination, the Group decides whether the non-controlling interest in the acquiree is initially measured at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets at the acquisition date.

Acquisition-related costs incurred to effect a business combination are charged to expenses in the periods in which the costs are incurred and the services are received, except for the costs to issue debt or equity securities.

Additional acquisitions of non-controlling interest

Additional acquisitions of non-controlling interests are accounted for as equity transactions. Therefore, no additional goodwill is recognized.

Subsequent measurement

Goodwill is not amortized and is stated at cost less accumulated impairment losses. However, goodwill that forms part of the carrying amount of an investment in associates is not separately recognized and an impairment loss recognized is not allocated to any asset, including goodwill, which forms part of the carrying amount of the investment in the associates.

3.10.2 Subsequent Expenditure

Subsequent expenditure is capitalized only when it enhances values of the assets. Internally generated intangible assets, such as goodwill and trade name, are not recognized as assets but expensed as incurred.

3.11 Impairment of Non-financial Assets

The Group assesses at the end of each reporting period whether there is any indication that a non-financial asset, except for (i) deferred income tax assets, (ii) assets arising from employee benefits and (iii) non-current assets (or group of assets to be sold) classified as held for sale, may be impaired. If any such indication exists, the Group estimates the recoverable amount of the asset. However, irrespective of whether there is any indication of impairment, the Group tests (i) goodwill acquired in a business combination, (ii) intangible assets with an indefinite useful life and (iii) intangible assets not yet available for use for impairment annually by comparing their carrying amount with their recoverable amount.

The recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group determines the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit). A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit that are discounted by a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss and recognized immediately in profit or loss. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units that are expected to benefit from the synergies of the combination. The impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then to the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit.

An impairment loss recognized for goodwill is not reversed in a subsequent period. The Group assesses at the end of each reporting period whether there is any indication that an impairment loss recognized in prior periods for an asset, other than goodwill, may no longer exist or may have decreased, and an impairment loss recognized in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. The increased carrying amount of an asset other than goodwill attributable to a reversal of an impairment loss cannot exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset in prior years.

3.12 Non-current Assets Held for Sale

A non-current asset or disposal group is classified as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For being qualified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. A non-current asset (or disposal group) classified as held for sale is measured at the lower of its carrying amount and fair value less costs to sell which is measured in accordance with the applicable Korean IFRS, immediately before the initial classification of the asset (or disposal group) as held for sale.

A non-current asset while it is classified as held for sale or while it is part of a disposal group classified as held for sale is not depreciated (or amortized).

Impairment loss is recognized for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. Gains are recognized for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss that has been recognized.

3.13 Financial Liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

3.13.1 Financial Liabilities at Fair Value through Profit or Loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

In relation to securities lending or borrowing transactions, the Group records transaction using memorandum value when it borrows securities from Korea Securities Depository and others. The borrowed securities are treated as financial liabilities at fair value through profit or loss when they are sold. Changes in fair value at the end of the reporting period and difference between carrying amount at redemption and purchased amount is recognized as profit or loss.

3.13.2 Other Financial Liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. Other financial liabilities include deposits, debts, debentures and others. Upon of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

In case an asset is sold under repurchase agreement, the Group does not derecognize the asset while the amount sold is accounted for as financial liabilities. The Group derecognizes a financial liability from the consolidated statement of financial position only when the obligation specified in the contract is discharged, cancelled or expired.

3.14 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of provisions, and where the effect of the time value of money is material, the amount of provisions are the present value of the expenditures expected to be required to settle the obligation.

Provisions on confirmed and unconfirmed acceptances and guarantees, unfunded commitments of credit cards and unused credit lines of consumer and corporate loans are recognized using a valuation model that applies the credit conversion factor, probability of default, and loss given default.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provisions are reversed.

If the Group has a contract that is onerous, the present obligation under the contract is recognized and measured as provisions. An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the minimum net cost to exit from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfill it. When an onerous contract is occurred, the present obligation under the contract is recognized and measured as provisions.

3.15 Financial Guarantee Contracts

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due according to the original or modified terms of a debt instrument.

Financial guarantee contracts are initially recognized at fair value and classified as other liabilities, and are amortized over the contractual term. After initial recognition, financial guarantee contracts are measured at the higher of:

- Provisions measured in accordance with Korean IFRS 1109 Financial Instruments and
- The initial amount recognized, less, when appropriate, cumulative amortization recognized in accordance with Korean IFRS 1115 *Revenue from Contracts with Customers*.

3.16 Equity Instrument Issued by the Group

An equity instrument is any contract or agreement that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

3.16.1 Ordinary share

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares and exercising stock options are deducted, net of tax, from the equity.

3.16.2 Hybrid Capital Securities

The financial instruments can be classified as either financial liabilities or equity in accordance with the terms of the contract. The Group classifies hybrid securities as an equity if the Group has the unconditional right to avoid any contractual obligation to deliver financial assets such as cash in relation to the financial instruments. As a result, Hybrid Capital Securities issued by subsidiaries are classified as non-controlling interests, dividends are recognized in the consolidated statement of comprehensive income as profit attributable to non-controlling interests.

3.17 Revenue Recognition

The Group recognizes revenues in accordance with the following steps determined in accordance with Korean IFRS 1115 *Revenue from Contracts with Customers*.

- Step 1: Identify the contract with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

3.17.1 Interest Income and Expense

Interest income and expense from debt instruments at fair value through profit or loss (excluding beneficiary certificates, equity investments and other debt instruments), loans, financial instruments at amortized cost and debt instruments at fair value through other comprehensive income, are recognized in statement of comprehensive income using the effective interest method in accordance with IFRS1109 *Financial Instruments*. The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability (or groups of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period.

The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument but does not consider future credit losses. The calculation includes all fees and points paid(main components of effective interest rates only) or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts. In those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a financial instrument (or group of financial instruments), the Group uses the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Interest on impaired financial assets is recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Interest income earned from debt instruments at fair value through profit or loss is also classified as interest income in the statement of comprehensive income.

3.17.2 Fee and Commission Income

The Group recognizes financial service fees in accordance with the purpose of charging the fees and the accounting standard of the financial instrument related to the fees earned.

Fees that are an integral part of the effective interest of a financial instrument

Such fees are generally treated as adjustments of effective interest. Such fees may include compensation for activities such as evaluating the borrower's financial condition, evaluating and recording guarantees, collateral and other security arrangements, negotiating the terms of the instrument, preparing and processing documents and closing the transaction and origination fees received on issuing financial liabilities at amortized cost. However, fees relating to the creation or acquisition of a financial instrument at fair value through profit or loss are recognized as revenue immediately.

Fees related to performance obligations in the contract satisfied over time

As control over related goods and services of fees and commission income of performance obligation contracts transfer over time, commission income is recognized over the period of performance obligations. Fees and commission income, including asset management fees and commission fees are recognized as the related services are rendered.

Fees earned at a point in time

Fees earned at a point in time are recognized when a customer obtains controls of a promised asset and the Group satisfies a performance obligation.

Commission on negotiation or participation in negotiation for the third party such as trading stocks or other securities, arranging transfer and acquisition of business is recognized as revenue when the transaction has been completed.

A syndication fee that arranges a loan and retains no part of the loan package for itself (or retains a part at the same effective interest rate for comparable risk as other participants) is compensation for the service of syndication. Such a fee is recognized as revenue when the syndication has been completed.

3.17.3 Net Gains/Losses on Financial Instruments at Fair Value through Profit or Loss

Net gains/losses on financial instruments at fair value through profit or loss include profit or loss (including changes in fair value, dividends, and gain/loss from foreign currency translation) from following financial instruments:

- Gain or loss from financial instruments at fair value through profit or loss, excluding interest income calculated by the effective interest rate
- Gain or loss from derivatives for trading, including derivatives for hedging that does not meet the criteria for hedge accounting

3.17.4 Dividend Income

Dividend income is recognized as profit or loss when the right to receive payment is established. Dividend income is recognized as net gain or loss on financial assets/liabilities at fair value through profit or loss or other operating income in depending of the classification of equity securities.

3.18 Employee Compensation and Benefits

3.18.1 Post-employment Benefits:

Defined benefit plans

All post-employment benefits, other than defined contribution plans, are classified as defined benefit plans. The amount recognized as a net defined benefit liability is the present value of the defined benefit obligation less the fair value of plan assets at the end of the reporting period.

The present value of the defined benefit obligation is calculated annually by independent actuaries using the Projected Unit Credit method. The rate used to discount post-employment benefit obligations is determined by reference to market yields at the end of the reporting period on high quality corporate bonds. The currency and term of the corporate bonds are consistent with the currency and estimated term of the post-employment benefit obligations. Actuarial gains and losses including experience adjustments and the effects of changes in actuarial assumptions are recognized in other comprehensive income (loss).

When the total of the present value of the defined benefit obligation minus the fair value of plan assets results in an asset, it is recognized to the extent of the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

Past service cost is the change in the present value of the defined benefit obligation, which arises when the Group introduces a defined benefit plan or changes the benefits of an existing defined benefit plan. Such past service cost is immediately recognized as an expense for the period.

Defined contribution plans

The contributions are recognized as employee benefit expense when they are due.

3.18.2 Short-term Employee Benefits

Short-term employee benefits are employee benefits (other than termination benefits) that are due to be settled within 12 months after the end of the period in which the employees render the related service. The undiscounted amount of short-term employee benefits expected to be paid in exchange for that service is recognized as a liability (accrued expense), after deducting any amount already paid.

The expected cost of profit-sharing and bonus payments are recognized as liabilities when the Group has a present legal or constructive obligation to make such payments as a result of past events rendered by employees and a reliable estimate of the obligation can be made.

3.18.3 Share-based Payment

The Group has share grant and mileage stock programs to directors and employee. When the stock grant is exercised the Group either distributes issued stock of KB Financial Group Inc., the Parent Company, or makes payment in cash based on the stock price. The mileage stock is exercised, the Group makes payment in cash based on the stock price of KB Financial Group Inc.

For a share-based payment transaction in which the terms of the arrangement provide the Group with the choice of whether to settle in cash or by issuing equity instruments, the Group determines that it

has a present obligation to settle in cash because the Group has a past practice and a stated policy of settling in cash. Therefore, the fair value of the employee service is recognized as expense and accrued expenses over the vesting period. Also, the Group accounts for the mileage stock in accordance with the requirements of cash-settled share-based payment transactions, and recognizes the corresponding liability and expenses at the vesting period.

Until the liability is settled, the Group remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period.

3.18.4 Termination Benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group shall recognize a liability and expense for termination benefits at the earlier of the following dates: when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring that is within the scope of Korean IFRS 1037 and involves the payment of termination benefits. Termination benefits are measured by considering the number of employees expected to accept the offer in the case of a voluntary early retirement. Termination benefits over 12 months after the reporting period are discounted to present value.

3.19 Income Tax Expenses

Income tax expense comprises current tax expense and deferred income tax expense. Current and deferred income tax are recognized as income or expense for the period, except to the extent that the tax arises from a transaction or an event which is recognized, in the same or a different period outside profit or loss, either in other comprehensive income or directly in equity and a business combination.

Income tax expense for the period is recognized based on management's best estimate of the weighted average annual income tax rate expected for the full financial year.

3.19.1 Current income tax

Current income tax is the amount of income tax payable in respect of the taxable profit (loss) for a period. A difference between the taxable profit and accounting profit may arise when income or expense is included in accounting profit in one period, but is included in taxable profit in a different period. Differences may also arise if there is revenue that is exempt from taxation, or expense that is not deductible in determining taxable profit (loss). Current income tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period

3.19.2 Deferred Income Tax

Deferred income tax is recognized, using the asset-liability method, on temporary differences arising between the taxes based amount of assets and liabilities and their carrying amount in the consolidated financial statements. Deferred income tax liabilities are recognized for all taxable temporary differences and deferred income tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. However, deferred income tax liabilities are not recognized if they arise from the initial

recognition of goodwill; deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, and associates, except for deferred income tax liabilities for which the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of a deferred income tax asset is reviewed at the end of each reporting period. The Group reduces the carrying amount of a deferred income tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred income tax asset to be utilized.

Deferred tax assets and liabilities shall be measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets shall reflect the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

The Group offsets deferred income tax assets and deferred income tax liabilities when the Group has a legally enforceable right to offset current income tax assets against current income tax liabilities; and the deferred income tax assets and the deferred income tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity; or different taxable entities which intend either to settle current income tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred income tax liabilities or assets are expected to be settled or recovered.

3.19.3 Uncertain Tax Positions

Uncertain tax positions arise from tax treatments applied by the Group which may be challenged by the tax authorities due to the complexity of the transaction or different interpretation of the tax laws, a claim for rectification brought by the Group, an appeal for a refund claimed from the tax authorities related to additional assessments or a tax investigation processed by the tax authorities. The Group recognizes its uncertain tax positions in the consolidated financial statements based on the guidance in Korean IFRS 1012. The income tax asset is recognized if a tax refund is probable for taxes paid and levied by the tax authority, and the amount to be paid as a result of the tax investigation and others is recognized as the current tax payable. However, interest and penalties related to income taxes are recognized in accordance with Korean IFRS 1037 as its economic substances.

3.20 Transactions with the Trust Accounts

Under the Financial Investment Services and Capital Markets Act, the Group recognizes trust accounts ("the trust accounts") as separate. The borrowings from trust accounts represent transfer of funds in trust accounts into banking accounts. Such borrowings from trust accounts are recorded as receivables from the banking accounts in the trust accounts and as borrowings from trust accounts in the banking accounts. The Group earns trust fees from the trust accounts for its management of trust assets and operations. The reserves for future profits and losses are set up in the trust accounts for profits and losses related to those trust funds with a guarantee of the principal or of the principal and a certain minimum rate of return in accordance with the relevant laws and regulations applicable to trust

operations. The reserves are used to provide for the losses on such trust funds and, if the losses incurred are in excess of the reserves, the excess losses are compensation paid as a loss on trust management in other operating expenses and the trust accounts recognize the corresponding compensation as compensation from banking accounts.

3.21 Leases

As explained in Note 2 above, the Group has changed its accounting policy for leases. The impact of the new accounting policies is disclosed in Note 42.

Lease income from operating leases where the Group is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as expense over the lease term on the same basis as lease income. The respective leased assets are included in the statement of financial position based on their nature. The Group did not need to make any adjustments to the accounting for assets held as lessor as a result of adopting the new leasing standard.

At inception of a contract, the Group is required to assess whether the contract is, or contains, a lease. Also, at the date of initial application, the Group has assessed whether the contract is, or contains, a lease in accordance with the standard. However, the Group did not reassess all contracts as the Group elected to apply the practical expedient not to apply the standard to contracts that were not previously identified as containing a lease. On the basis of the date of initial application, the Group assesses whether the contract is, or contains, a lease.

A lessee is required to recognize a right-of-use asset (lease assets) representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. Assets and liabilities arising from a lease are initially measured on a present value basis.

Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate
- Amounts expected to be payable by the lessee under residual value guarantees
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs

However, short-term lease (lease that, at the commencement date, has a lease term of 12 months or less) and lease of low-value assets (For example, underlying leased asset under \$ 5,000) are permitted to elect exceptional conditions. The Group applies the exemption of the standard for one time lease of real estate (for training purpose) and leases of low-value assets (underlying assets less than $\mbox{$\seta$}$ 5 million and \$5,000).

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term.

3.22 Operating Segments

Operating segments are components of the Group where separate financial information is available and is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

Segment information includes items which are directly attributable and reasonably allocated to the segment.

4. Financial Risk Management

4.1 Summary

4.1.1 Overview of Financial Risk Management Policy

The financial risks that the Group is exposed to are credit risk, market risk, liquidity risk, operational risk and others.

The note regarding financial risk management provides information about the risks that the Group is exposed to, including the objectives, policies and processes for managing the risks, the methods used to measure the risks, and capital management. Additional quantitative information is disclosed throughout the consolidated financial statements.

The Group's risk management system focuses on increasing transparency, developing the risk management environment, preventing transmission of risk to other risk types, and the preemptive response to risk due to rapid changes in the financial environment to support the Group's long-term strategy and business decisions efficiently. Credit risk, market risk, liquidity risk, and operational risk have been recognized as the Group's key risks. These risks are measured and managed in Internal Capital or VaR (Value at Risk) using a statistical method.

4.1.2 Risk Management Organization

Risk Management Committee

The Risk Management Committee establishes risk management strategies in accordance with the directives of the Board of Directors and determines the Group's target risk appetite, approves significant risk matters and reviews the level of risks that the Group is exposed to and the appropriateness of the Group's risk management operations as an ultimate decision-making authority.

Risk Management Council

The Risk Management Council is a consultative group which reviews and makes decisions on matters delegated by the Risk Management Committee and discusses the detailed issues relating to the Group's risk management.

Risk Management Subcommittee

The Risk Management Subcommittee enforces decisions made by Risk Management Council, and makes practical decisions to implement risk management policies and procedures.

- Credit Risk Management Subcommittee

The Credit Risk Management Subcommittee approves exotic and hybrid products accompanying credit risk and reviews newly developed products accompanying credit risk. Also, it reviews and approves the exposure limits by industry.

- Market Risk Management Subcommittee

The Market Risk Management Subcommittee reviews and makes decisions on setting risk limits and approving the standard for investments in newly developed standard, exotic and hybrid products.

- Operational Risk Management Subcommittee

The Operational Risk Management Subcommittee reviews the issues that have a significant effect on the Group's operational risk relating to establishment, amendment and abolition of major system, process and others.

Risk Strategy Group

The Risk Strategy Group is responsible for managing specific policies, procedures and work processes relating to the Group's risk management.

4.2 Credit Risk

4.2.1 Overview of Credit Risk

Credit risk is the risk of possible losses in an asset portfolio in the event of a counterparty's default, breach of contract and deterioration in the credit quality of the counterparty. For risk management reporting purposes, the individual borrower's default risk, country risk, specific risks and other credit risk exposure components are considered as a whole. The Group uses definition of default as defined and applied in the calculation of Capital Adequacy Ratio (Basel III) in accordance with the new Basel Accord.

4.2.2 Credit Risk Management

The Group measures expected losses and internal capital on assets that are subject to credit risk management whether on- or off-balance sheet items and uses expected losses and internal capital as a management indicator. The Group manages credit risk by allocating credit risk internal capital limits.

In addition, the Group controls the credit concentration risk exposure by applying and managing total exposure limits to prevent an excessive risk concentration to each industry and borrower.

The Group has organized a credit risk management group that focuses on credit risk management in accordance with the Group's credit risk management policy. The Group's credit group, customer service group and SME/SOHO group, which are independent from the sales department, are responsible for

loan policy, loan limit, loan review, credit evaluation, restructuring and subsequent events. The credit risk strategy group is also responsible for planning risk management policy, applying limits of credit lines, measuring the credit risk internal capital, adjusting credit limits, reviewing credit and verifying credit evaluation models.

4.2.3 Maximum Exposure to Credit Risk

The Group's maximum exposures of financial instruments excluding equity securities to credit risk without consideration of collateral values as at December 31, 2019 and 2018 are as follows:

(In millions of Korean we

	2019	2018
Financial assets		
Due from financial institutions ¹	11,786,957	11,831,688
Financial assets at fair value through profit or loss		
Securities	13,446,838	11,883,025
Loans	188,133	212,596
Financial instruments indexed to gold	79,805	78,808
Derivatives	2,317,425	1,613,970
Loans at amortized cost 1	293,531,433	276,944,202
Financial investments		
Securities at fair value through other comprehensive income	36,116,988	27,682,463
Securities at amortized cost ¹	13,964,339	12,792,526
Loans at fair value through other comprehensive income	344,292	349,547
Other financial assets 1	5,464,704	4,199,197
	377,240,914	347,588,022
Off-balance sheet items ²		
Acceptances and guarantees contracts	8,327,494	7,277,136
Financial guarantee contracts	3,305,051	3,135,589
Commitments	87,866,225	81,278,583
	99,498,770	91,691,308
	476,739,684	439,279,330

¹ Due from financial institutions, loans at amortized cost, securities at amortized cost and other financial assets are presented net of allowance.

4.2.4 Credit Risk of Loans

The Group maintains an allowance for loan losses associated with credit risk on loans to manage its credit risk.

The Group assesses expected credit loss on financial asset at amortized cost and financial asset at fair value through other comprehensive income (debt instruments) other than financial asset at fair value through profit or loss and recognizes loss allowance. Expected credit losses are a probability-weighted estimate of possible credit losses occurred in a certain range by reflecting reasonable and supportable information that which is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions. The Group measures the expected credit losses on loans classified as financial assets measured at amortized cost, and by deducting allowances for credit losses. The expected credit losses of loans

² For details of relevant provisions, see Note 22.

classified as financial assets at fair value through other comprehensive income are presented in other comprehensive income on the financial statements.

Credit risk exposure

Loans as at December 31, 2019 and 2018, are classified as follows:

2	n	4	0

	Financial instruments applying 12-	Financial ir applying expected cr	lifetime	Financial instruments	Financial instruments not	
	month expected credit losses	Non- impaired	Impaired	applying credit impaired approach	applying expected credit losses	Total
Financial as	sets at amortiz	ed cost				
Corporate						
Grade 1	77,685,587	1,722,935	837	-	-	79,409,359
Grade 2	55,097,112	4,512,631	6,397	-	-	59,616,140
Grade 3	2,486,531	2,135,130	4,188	-	-	4,625,849
Grade 4	423,926	796,468	4,185	-	-	1,224,579
Grade 5	16,648	344,920	744,335			1,105,903
	135,709,804	9,512,084	759,942			145,981,830
Retail						
Grade 1	135,445,215	3,556,937	7,560	-	-	139,009,712
Grade 2	3,125,163	4,249,881	8,278	-	-	7,383,322
Grade 3	158,769	1,305,097	8,312	-	-	1,472,178
Grade 4	9,468	151,552	2,575	-	-	163,595
Grade 5	8,666	423,127	424,964			856,757
	138,747,281	9,686,594	451,689			148,885,564
	274,457,085	19,198,678	1,211,631			294,867,394
Financial as Corporate	sets at fair valu	ie through oth	ner comprehe	nsive income		
Grade 1	210,718	-	-	-	-	210,718
Grade 2	133,574	-	-	-	-	133,574
Grade 3	-	-	-	-	-	-
Grade 4	-	-	-	-	-	-
Grade 5						
	344,292					344,292
Retail						
Grade 1	-	-	-	-	-	-
Grade 2	-	-	-	-	-	-

Grade 3	_	_	_	_	-	-
Grade 4	-	-	-	-	-	_
Grade 5			-			
			-			
	344,292					344,292
	274,801,377	19,198,678	1,211,631			295,211,686
(In millions o	f Korean won)		2018			
	Financial instruments applying 12-	Financial in applying expected cr	lifetime	Financial instruments	Financial instruments not	
	month expected credit losses	Non- impaired	Impaired	applying credit impaired approach	applying expected credit losses	Total
Financial as	sets at amortiz	ed cost				
Corporate	•					
Grade 1	69,619,761	1,451,514	1,573	-	-	71,072,848
Grade 2	54,119,274	4,073,167	1,610	-	-	58,194,051
Grade 3	2,698,199	1,691,008	6,566	-	-	4,395,773
Grade 4	395,707	903,215	40,043	-	-	1,338,965
Grade 5	26,019	342,477	935,447			1,303,943
	126,858,960	8,461,381	985,239			136,305,580
Retail						
Grade 1	124,212,610	4,387,477	8,836	-	-	128,608,923
Grade 2	4,171,518	7,058,259	6,218	-	-	11,235,995
Grade 3	140,074	881,415	4,158	-	-	1,025,647
Grade 4	478,701	154,535	5,103	-	-	638,339
Grade 5	8,478	296,087	379,555			684,120
	129,011,381	12,777,773	403,870			142,193,024
	255,870,341	21,239,154	1,389,109			278,498,604
Financial as	sets at fair valu	ue through oth	er comprehe	nsive income		
Corporate	•					
Grade 1	149,226	25,731	-	-	-	174,957
Grade 2	128,712	45,878	-	-	-	174,590
Grade 3	-	-	-	-	-	-
Grade 4	-	-	-	-	-	-
Grade 5						
	277,938	71,609				349,547
	256,148,279	21,310,763	1,389,109			278,848,151

(*) Before netting of allowance.

	Corporate	Retail
Grade 1	AAA ~ BBB+	1 ~ 5 grade
Grade 2	BBB ~ BB	6 ∼ 8 grade
Grade 3	BB- ∼ B	9 ~ 10 grade
Grade 4	B- ∼ CCC	11 grade
Grade 5	CC or under	12 grade or under

Credit risk mitigation by collateral

The quantification of the extent to which collateral and other credit enhancements mitigate credit risk as at December 31, 2019 and 2018, are as follows:

	2019					
	Financial instruments applying	Financial ir applying lifeti credit	me expected	Financial instruments applying	Financial instruments	
	12-month expected credit losses	Non- impaired	Impaired	credit impaired approach	not applying expected credit losses	Total
Guarantees	69,711,057	3,834,566	177,047	-	-	73,722,670
Deposits and savings	1,376,045	118,204	6,156	-	-	1,500,405
Property and equipment	3,169,212	314,236	1,123	-	-	3,484,571
Real estate	152,887,321	10,508,403	382,471			163,778,195
	227,143,635	14,775,409	566,797			242,485,841

(In millions of Korean won)

			20)18		
	Financial instruments applying	Financial in applying lifeti credit	me expected	Financial instruments applying	Financial instruments	
	12-month expected credit losses	Non- impaired	Impaired	credit impaired approach	not applying expected credit losses	Total
Guarantees	60,020,814	5,864,526	146,818	-	-	66,032,158
Deposits and savings	1,372,286	76,960	5,265	-	-	1,454,511
Property and equipment	2,540,384	97,807	2,461	-	-	2,640,652
Real estate	145,155,068	12,512,423	388,109			158,055,600
	209,088,552	18,551,716	542,653			228,182,921

4.2.5 Credit Quality of Securities

The credit quality of financial investments excluding equity securities that are exposed to credit risk as at December 31, 2019 and 2018, are as follows:

2019

				. •		
	Financial instruments applying 12-	Financial instrun		Financial instruments applying	Financial instruments	
	month expected			credit impaired	not applying expected	
	credit losses	Non-impaired	Impaired	approach	credit losses	Total
Securities at a	mortized cost					
Grade 1	13,894,203	-	-	-	-	13,894,203
Grade 2	33,148	-	-	-	-	33,148
Grade 3	38,230	-	-	-	-	38,230
Grade 4	-	-	-	-	-	-
Grade 5						
	13,965,581				-	13,965,581
Securities at f	air value through ot	her comprehensive i	ncome			
Grade 1	34,841,376	-	-	-	-	34,841,376
Grade 2	1,273,007	-	-	-	-	1,273,007
Grade 3	2,606	-	-	-	-	2,606
Grade 4	-	-	-	-	-	-
Grade 5						
	36,116,989					36,116,989
	50,082,570					50,082,570

(In millions of Korean won)

			201	18		
	Financial			Financial		
	instruments applying 12- month	Financial instrun		instruments applying credit	Financial instruments not applying	
	expected credit losses	Non-impaired	Impaired	impaired approach	expected credit losses	Total
Securities at a	amortized cost	- Non-impaired	IIIIpairea	approach	Credit 103363	Total
Grade 1	12,769,605	-	-	-	-	12,769,605
Grade 2	9,569	-	-	-	-	9,569
Grade 3	14,649	-	-	-	-	14,649
Grade 4	-	-	-	-	-	-
Grade 5						
	12,793,823	-				12,793,823
Securities at f	air value through ot	her comprehensive i	ncome			
Grade 1	27,120,098	-	-	-	-	27,120,098
Grade 2	559,855	-	-	-	-	559,855
Grade 3	-	-	-	-	-	-
Grade 4	2,510	-	-	-	-	2,510
Grade 5					<u> </u>	
	27,682,463					27,682,463
	40,476,286	-	-	-	-	40,476,286

¹ Before netting of allowance.

The credit qualities of securities, excluding equity securities according to the credit ratings by external rating agencies as at December 31, 2019 are as follows:

Credit		Domestic			Foreign	
quality	KIS	NICE P&I	FnPricing Inc.	S&P	Fitch-IBCA	Moody's
Grade 1	AA0 to AAA	AA0 to AAA	AA0 to AAA	A- to AAA	A- to AAA	A3 to Aaa
Grade 2	A- to AA-	A- to AA-	A- to AA-	BBB- to BBB+	BBB- to BBB+	Baa3 to Baa1
Grade 3	BBB0 to BBB+	BBB0 to BBB+	BBB0 to BBB+	BB to BB+	BB to BB+	Ba2 to Ba1
Grade 4	BB0 to BBB-	BB0 to BBB-	BB0 to BBB-	B+ to BB-	B+ to BB-	B1 to Ba3
Grade 5	Under BB-	Under BB-	Under BB-	Under B	Under B	Under B2

Credit qualities of debt securities denominated in Korean won are based on the lowest credit rating by the three domestic credit rating agencies above, and those denominated in foreign currencies are based on the lowest credit rating by the three foreign credit rating agencies above.

4.2.6 Credit Risk of Due from Financial Institutions

The credit quality of due from financial institutions as at December 31, 2019 and 2018 are classified as follows:

	2019						
	Financial instruments applying 12-month expected	struments olying 12- Financial instruments a lifetime expected credit		Financial instruments applying credit impaired			
	credit losses	Non-impaired	Impaired	approach	Total		
Due from fin	ancial institutions at a	mortized cost					
Grade 1	10,936,300	-	-	-	10,936,300		
Grade 2	149,927	-	-	-	149,927		
Grade 3	677,249	-	-	-	677,249		
Grade 4	-	-	-	-	-		
Grade 5	13,990	13,179	360	<u>-</u>	27,529		

Kookmin Bank and Subsidiaries

Notes to the Consolidated Financial Statements December 31, 2019 and 2018

	11,777,466	13,179	360	<u> </u>	11,791,005
(In millions o	f Korean won)				
			2018		
	Financial instruments applying 12-	Financial instrum	1170	Financial instruments applying credit	
	month expected			impaired	
	credit losses	Non-impaired	Impaired	approach	Total
Due from fin	ancial institutions at a	mortized cost			
Grade 1	11,035,800	-	-	-	11,035,800
Grade 2	167,900	-	-	_	167,900
Grade 3	608,314	-	-	-	608,314
Grade 4	19,531	-	-	-	19,531
Grade 5	1,691	<u>-</u>			1,691

¹ Before netting of allowance.

The classification criteria of the credit quality for due from financial institutions are the same as the criteria for securities (excluding equity securities).

4.2.7 Credit Risk Mitigation of Derivative Financial Instruments

The quantification of the extent to which collateral mitigates credit risk of derivative financial instruments as at December 31, 2019 and 2018, is as follows:

(In millions of Korean won)	2019	2018
Deposits and savings, securities and others	496,294	381,959

4.2.8 Credit Risk Concentration Analysis

148,885,564

Details of the Group's loans by country as at December 31, 2019 and 2018, are as follows:

146,514,255

(In millions of Korean won)

	Retail	Corporate ¹	Total	%	Allowances	Carrying amount
Korea	148,609,480	139,599,908	288,209,388	97.58	(1,303,099)	286,906,289
China	-	3,135,501	3,135,501	1.06	(20,652)	3,114,849
Japan	101	629,717	629,818	0.21	(547)	629,271
United States	-	1,838,883	1,838,883	0.62	(5,421)	1,833,462
Europe	-	752,590	752,590	0.25	(3,680)	748,910
Others	275,983	557,656	833,639	0.28	(2,562)	831,077

295,399,819

100.00

(1,335,961)

294,063,858

2019

(In millions of Korean won)

2018	3
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	Retail	Corporate ¹	Total	%	Allowances	Carrying amount
Korea	142,003,442	132,576,712	274,580,154	98.40	(1,524,099)	273,056,055
China	-	2,278,545	2,278,545	0.82	(20,586)	2,257,959
Japan	106	333,918	334,024	0.12	(1,865)	332,159
United States	-	892,958	892,958	0.32	(5,165)	887,793
Europe	-	348,336	348,336	0.12	(498)	347,838
Others	189,476	437,254	626,730	0.22	(2,189)	624,541
	142,193,024	136,867,723	279,060,747	100.00	(1,554,402)	277,506,345

¹ Expected credit loss of loans at fair value through other comprehensive income as at December 31, 2019 and December 31, 2018, are ₩ 582 million and ₩ 1,307 million, respectively.

Details of the Group's corporate loans by industry as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

20	1	9
~~		J

	Loans ¹	%	Allowances	Carrying amount
Financial institutions	13,564,347	9.26	(5,091)	13,559,256
Manufacturing	42,707,287	29.15	(389,602)	42,317,685
Service	62,713,574	42.80	(178,869)	62,534,705
Wholesale and retail	17,900,225	12.22	(97,238)	17,802,987
Construction	2,833,544	1.93	(163,791)	2,669,753
Public	1,170,823	0.80	(2,005)	1,168,818
Others	5,624,455	3.84	(24,794)	5,599,661
	146,514,255	100.00	(861,390)	145,652,865

(In millions of Korean won)

2018

			Carrying
Loans ¹	%	Allowances	amount
11,118,159	8.12	(5,798)	11,112,361
42,063,832	30.73	(448,644)	41,615,188
59,278,536	43.31	(249,776)	59,028,760
16,284,464	11.90	(93,091)	16,191,373
2,640,614	1.93	(283,768)	2,356,846
821,317	0.60	(3,286)	818,031
4,660,801	3.41	(24,512)	4,636,289
136,867,723	100.00	(1,108,875)	135,758,848
	11,118,159 42,063,832 59,278,536 16,284,464 2,640,614 821,317 4,660,801	11,118,159 8.12 42,063,832 30.73 59,278,536 43.31 16,284,464 11.90 2,640,614 1.93 821,317 0.60 4,660,801 3.41	11,118,159 8.12 (5,798) 42,063,832 30.73 (448,644) 59,278,536 43.31 (249,776) 16,284,464 11.90 (93,091) 2,640,614 1.93 (283,768) 821,317 0.60 (3,286) 4,660,801 3.41 (24,512)

¹ Expected credit loss of loans at fair value through other comprehensive income as at December 31, 2019 and December 31, 2018, are ₩ 582 million and ₩ 1,307 million, respectively.

Details of the Group's retail loans by type as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019					
				Carrying		
	Loans	%	Allowances	amount		
Housing purpose	77,523,389	52.07	(33,536)	77,489,853		
General purpose	71,362,175	47.93	(441,035)	70,921,140		
	148,885,564	100.00	(474,571)	148,410,993		
(In millions of Korean won)	2018					
				Carrying		
	Loans	%	Allowances	amount		
Housing purpose	70,178,328	49.35	(28,940)	70,149,388		
General purpose	72,014,696	50.65	(416,587)	71,598,109		
	142,193,024	100.00	(445,527)	141,747,497		

Details of the Group's mortgage loans¹ as at December 31, 2019 and 2018, are as follows:

20	ä	0
20	ı	J

	Loans	%	Allowances	Carrying amount
Group1	9,410,202	9.99	(4,634)	9,405,568
Group2	19,269,533	20.48	(6,270)	19,263,263
Group3	33,500,810	35.61	(7,304)	33,493,506
Group4	30,517,828	32.44	(13,244)	30,504,584
Group5	1,364,155	1.45	(2,389)	1,361,766
Group6	25,763	0.03	(128)	25,635
	94,088,291	100.00	(33,969)	94,054,322

(In millions of Korean won)

2018

				Carrying
	Loans	%	Allowances	amount
Group1	6,671,012	7.11	(3,296)	6,667,716
Group2	18,911,235	20.16	(8,322)	18,902,913
Group3	35,580,948	37.94	(8,753)	35,572,195
Group4	32,256,160	34.39	(12,338)	32,243,822
Group5	356,892	0.38	(737)	356,155
Group6	16,776	0.02	(35)	16,741
	93,793,023	100.00	(33,481)	93,759,542

¹ Retail loans for general purpose with the real estate as collateral are included.

Ran	ges
-----	-----

Group1	LTV 0% to less than 20%
Group2	LTV 20% to less than 40%
Group3	LTV 40% to less than 60%
Group4	LTV 60% to less than 80%
Group5	LTV 80% to less than 100%
Group6	LTV over 100%

¹ LTV: Loan to Value ratio

Details of the Group's credit risk concentration of due from financial institutions, securities excluding equity securities and derivative financial instruments as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019				
				Carrying	
	Amount	%	Allowances	amount	
Due from financial institutions	at amortized cost	t			
Finance and insurance	11,791,005	100.00	(4,048)	11,786,957	
	11,791,005	100.00	(4,048)	11,786,957	
Securities at fair value through	profit or loss				
Government and government funded					
institutions	2,810,692	20.90	-	2,810,692	
Finance and insurance ¹	9,033,080	67.18	-	9,033,080	
Others	1,603,067	11.92	-	1,603,067	
	13,446,839	100.00	-	13,446,839	
Derivatives					
Government and government funded					
institutions	7,330	0.32	-	7,330	
Finance and insurance	2,146,545	92.62	-	2,146,545	
Others	163,551	7.06	-	163,551	
	2,317,426	100.00	-	2,317,426	
Securities at fair value through	other comprehe	nsive incom	e ²		
Government and government funded					
institutions	13,852,627	38.35	-	13,852,627	
Finance and insurance	18,726,118	51.85	-	18,726,118	
Others	3,538,244	9.80		3,538,244	
	36,116,989	100.00	-	36,116,989	
Securities at amortized cost					
Government and government funded					
institutions	2,317,794	16.60	(15)	2,317,779	
Finance and insurance	11,637,772	83.33	(1,225)	11,636,547	
Others	10,015	0.07	(2)	10,013	
	13,965,581	100.00	(1,242)	13,964,339	
	77,637,840		(5,290)	77,632,550	

(In millions of Korean won)	2018					
				Carrying		
	Amount	%	Allowances	amount		
Due from financial institutions	s at amortized cost	t				
Finance and insurance	11,833,236	100.00	(1,548)	11,831,688		
	11,833,236	100.00	(1,548)	11,831,688		
Securities at fair value throug	h profit or loss					
Government and government funded						
institutions	2,755,250	23.19	-	2,755,250		
Finance and insurance ¹	7,523,708	63.31	-	7,523,708		
Others	1,604,067	13.50	-	1,604,067		
	11,883,025	100.00		11,883,025		
Derivatives						
Government and government funded						
institutions	39,290	2.43	-	39,290		
Finance and insurance	1,485,912	92.07	-	1,485,912		
Others	88,768	5.50	-	88,768		
	1,613,970	100.00	-	1,613,970		
Securities at fair value throug	h other compreher	nsive incom	e ²			
Government and government funded						
institutions	7,844,258	28.34	-	7,844,258		
Finance and insurance	17,770,112	64.19	-	17,770,112		
Others	2,068,093	7.47	-	2,068,093		
	27,682,463	100.00	-	27,682,463		
Securities at amortized cost						
Government and government funded						
institutions	1,937,657	15.15	(4)	1,937,653		
Finance and insurance	10,826,102	84.62	(1,287)	10,824,815		
Others	30,064	0.23	(6)	30,058		
	12,793,823	100.00	(1,297)	12,792,526		
	65,806,517		(2,845)	65,803,672		

¹ Collective investment securities included in securities at fair value through profit or loss are classified as finance and insurance.

² Expected credit loss of securities at fair value through other comprehensive income as at December 31, 2019 and December 31, 2018, are ₩ 2,028 million and ₩ 1,348 million, respectively.

Details of the Group's credit risk of due from financial institutions, securities, excluding equity securities, and derivative financial instruments by country as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019				
				Carrying	
5 6 6	Amount		Allowances	amount	
Due from financial institution					
Korea	8,765,109	74.34	-	8,765,109	
United States	1,244,220	10.55	-	1,244,220	
Others	1,781,676	15.11	(4,048)	1,777,628	
	11,791,005	100.00	(4,048)	11,786,957	
Securities at fair value throu	gh profit or loss				
Korea	12,460,493	92.66	-	12,460,493	
United States	626,596	4.66	-	626,596	
Others	359,750	2.68	-	359,750	
	13,446,839	100.00		13,446,839	
Derivatives					
Korea	938,971	40.52	_	938,971	
	461,145	19.90	-	461,145	
United States	299,491	12.92	-	299,491	
France	617,819	26.66	-	617,819	
Others					
	2,317,426	100.00		2,317,426	
Securities at fair value throu	gh other compreh	ensive incor	me ¹		
Korea	33,895,666	93.85	-	33,895,666	
United States	423,145	1.17	-	423,145	
Others	1,798,178	4.98	-	1,798,178	
	36,116,989	100.00		36,116,989	
Securities at amortized cost					
Korea	12,841,002	91.95	(833)	12,840,169	
United States	165,745	1.19	(34)	165,711	
United Kingdom	765,438	5.48	(237)	765,201	
Others	193,396	1.38	(138)	193,258	
Outers	13,965,581	100.00	(1,242)	13,964,339	
	77,637,840	100.00	(5,290)	77,632,550	
	, , , -			, , ,	

(In millions of Korean won)	December 31, 2018				
	Amount	%	Allowances	Carrying amount	
Due from financial institutio			Allowances	umount	
Korea	9,478,190	80.10	_	9,478,190	
United States	667,139	5.64	(6)	667,133	
Others	1,687,907	14.26	(1,542)	1,686,365	
	11,833,236	100.00	(1,548)	11,831,688	
Securities at fair value throu	gh profit or loss				
Korea	10,524,924	88.57	-	10,524,924	
United States	726,271	6.11	-	726,271	
Others	631,830	5.32	-	631,830	
	11,883,025	100.00		11,883,025	
Derivatives					
Korea	752,028	46.59	-	752,028	
United States	285,460	17.69	-	285,460	
France	222,905	13.81	-	222,905	
Others	353,577	21.91	-	353,577	
	1,613,970	100.00		1,613,970	
Securities at fair value throu	gh other compreh	ensive incor	ne ¹		
Korea	26,139,297	94.43	-	26,139,297	
United States	711,946	2.57	-	711,946	
Others	831,220	3.00		831,220	
	27,682,463	100.00		27,682,463	
Securities at amortized cost					
Korea	11,805,442	92.26	(945)	11,804,497	
United States	155,417	1.22	(32)	155,385	
United Kingdom	705,790	5.52	(247)	705,543	
Others	127,174	1.00	(73)	127,101	
	12,793,823	100.00	(1,297)	12,792,526	
	65,806,517		(2,845)	65,803,672	

¹ Expected credit loss of securities at fair value through other comprehensive income as at December 31, 2019 and December 31, 2018, are \forall 2,028 million and \forall 1,348 million, respectively.

Due from financial institutions, financial assets at fair value through profit or loss that linked to gold price and derivatives are mostly relevant to finance and insurance industry with high credit ratings.

4.3 Liquidity risk

4.3.1 Overview of Liquidity Risk

Liquidity risk is the risk of insolvency or loss due to a disparity between the inflow and outflow of funds, unexpected outflow of funds, and obtaining funds at a high price or disposing of securities at an unfavorable price due to lack of available funds. The Group manages its liquidity risk through analysis of the contractual maturity of interest-bearing assets and liabilities, assets and liabilities related to the other in and outflows, and off-balance sheet items related to the inflows and outflows of currency derivative instruments and others.

4.3.2 Liquidity Risk Management and Indicator

The liquidity risk is managed by ALM ('Asset Liability Management') and related guidelines which are applied to the risk management policies and procedures that addresses all the possible risks that arise from the overall business of the Group.

The Group has to establish the liquidity risk management strategy including the objectives of liquidity risk management, management policies and internal control system, and obtain approval from Risk Management Committee. Risk Management Committee operates the Risk Management Council for the purpose of efficient risk management, monitors establishment and enforcement of policies based on risk management strategy.

For the purpose of liquidity management, LCR, NSFR, the liquidity gap ratio, liquidity ratio, maturity gap ratio and the results of the stress testing related to liquidity risk on transactions affecting the inflows and outflows of funds and transactions of off-balance sheet items are measured, managed and reported to the Risk Management Committee and Risk Management Council on a regular basis.

4.3.3 Analysis of Remaining Contractual Maturity of Financial Assets and Liabilities

Cash flows disclosed below are undiscounted contractual principal and interest to be received (paid) and, thus, differ from the amounts in financial statements which are based on the present value of expected cash flows. The amount of interest to be received or paid on floating rate assets and liabilities is measured on the assumption that the current interest rate would be the same through maturity.

The remaining contractual maturity of financial assets and liabilities, excluding derivatives held for cash flow hedging, as at December 31, 2019 and 2018, is as follows:

(In millions of Korean won)				2019			
		Up to	1-3	3-12	1-5	Over 5	
	On demand	1 month	months	months	years	years	Total
Financial assets							
Cash and due from financial institutions ¹ Financial assets at fair value through profit	4,738,842	283,601	233,046	487,877	-	-	5,743,366
or loss ² Derivatives held for	13,677,669	251	17,846	134,012	-	87,445	13,917,223
trading ² Derivatives held for	2,184,099	-	-	-	-	-	2,184,099
hedging ³ Loans at amortized	-	4,306	17,145	24,016	39,693	66,176	151,336
cost	_	22,455,411	28,091,644	115,979,519	78,654,724	89,601,437	334,782,735
Financial investments	1,893,179	1,253,141	3,045,348	10,727,300	35,015,283	2,859,162	54,793,413
Financial assets at fair value through other comprehensive	.,000,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,0.0,0.0	. 0,1 21,000	00,010,200	2,000,102	3 1,7 33, 1.13
income ⁴ Securities at	1,893,179	310,261	1,122,554	5,499,868	30,502,706	456,250	39,784,818
amortized cost	-	942,880	1,922,794	5,227,432	4,512,577	2,402,912	15,008,595
Other financial assets		3,672,079		996,994			4,669,073
	22,493,789	27,668,789	31,405,029	128,349,718	113,709,700	92,614,220	416,241,245
Financial liabilities Financial liabilities at fair value through profit or loss ² Derivatives held for trading ² Derivatives held for hedging ³	80,235 2,132,771	- - 5.973	- - 696	- - (4,529)	- - 11,575	- - 129	80,235 2,132,771 13,844
Deposits ⁵	137,848,626	17,156,280	27,200,257	109,833,508	10,608,833	2,538,473	305,185,977
Debts	1,407	5,218,386	2,484,905	6,541,727	4,473,295	753,997	19,473,717
Debentures	22,285	1,014,596	1,870,767	5,668,559	9,593,393	1,633,467	19,803,067
Lease liabilities Other financial	520	14,196	27,962	101,976	198,415	13,885	356,954
liabilities		12,130,281	773	77,688	88,594		12,297,336
	140,085,844	35,539,712	31,585,360	122,218,929	24,974,105	4,939,951	359,343,901
Off-balance sheet items	07.000.00=						07.000.005
Commitments ⁶ Acceptances and guarantees	87,866,225	-	-	-	-	-	87,866,225
contracts Financial	8,327,494	-	-	-	-	-	8,327,494
guarantee contracts 7	3,305,051					- -	3,305,051
	99,498,770						99,498,770

 $^{^{1}}$ The amounts of ₩ 8,759,558 million which are restricted amount due from the financial institutions as at December 31, 2019 are excluded.

² Financial liabilities at fair value through profit or loss derivatives held for trading and financial assets at fair value through profit or loss (excluding loans) are not managed by contractual maturity because they are held for trading or redemption before maturity. Therefore, the carrying amounts are included in the 'On demand' category.

³ Cash flows of derivative instruments held for hedging are shown at net amounts of cash inflows and outflows by

remaining contractual maturity.

- ⁴ Equity securities designated as financial assets at fair value through other comprehensive income included in the 'On demand' category as most are available for sale at any time. However, in the case of equity securities which are restricted for sale, these will be classified to its respective maturity when the restriction on disposal is released. ⁵ Deposits that are contractually repayable on demand or on short notice are included under the 'On demand' category.
- ⁶ Unused lines of credit within commitments are included under the 'On demand' category as payments can be required upon request.
- ⁷ Financial guarantee contracts are included under the 'On demand' category as payments can be required upon request.

(In millions of Korean won)	2018						
		Up to	1-3	3-12	1-5	Over 5	
	On demand	1 month	months	months	years	years	Total
Financial assets Cash and due from financial institutions ¹ Financial assets at fair	4,727,159	339,350	178,406	458,164	-	-	5,703,079
value through profit or loss ²	12,043,909	230	7,182	184,881	5,542	90,736	12,332,480
Derivatives held for trading ² Derivatives held for	1,533,650	-	-	-	-	-	1,533,650
hedging ³ Loans at amortized	-	2,289	1,364	16,251	20,025	40,830	80,759
cost	-	18,705,807	27,929,002	107,831,857	71,668,732	95,363,933	321,499,331
Financial investments Financial assets at fair value through other comprehensive	1,898,944	2,176,313	3,646,572	13,634,982	20,703,303	2,454,592	44,514,706
income ⁴ Securities at	1,898,944	1,418,537	2,278,547	9,765,281	14,987,787	191,966	30,541,062
amortized cost	-	757,776	1,368,025	3,869,701	5,715,516	2,262,626	13,973,644
Other financial assets	285	2,449,979	520	1,020,442			3,471,226
	20,203,947	23,673,968	31,763,046	123,146,577	92,397,602	97,950,091	389,135,231
Financial liabilities Financial liabilities at fair value through							
profit or loss ² Derivatives held for	87,168	-	-	-	-	-	87,168
trading ² Derivatives held for	1,553,858	-	-	-	-	-	1,553,858
hedging ³	-	4,091	(4,249)	(14,415)	15,660	31	1,118
Deposits 5	123,264,494	16,840,316	27,895,787	94,902,004	11,164,154	2,780,594	276,847,349
Debts	872	2,683,213	3,317,577	6,830,511	4,348,308	669,151	17,849,632
Debentures Other financial	30,160	702,704	2,368,679	8,329,923	12,113,285	673,863	24,218,614
liabilities		10,451,177	2,206	76,647	60,145		10,590,175
	124,936,552	30,681,501	33,580,000	110,124,670	27,701,552	4,123,639	331,147,914
Off halance about !t							
Off-balance sheet items Commitments ⁶ Acceptances and	81,278,583	-	-	-	-	-	81,278,583
guarantees contracts Financial	7,277,136	-	-	-	-	-	7,277,136
guarantee contracts 7	3,135,590						3,135,590
	91,691,309						91,691,309

¹ The amounts of ₩ 9,203,969 million which are restricted amount due from the financial institutions as at

December 31, 2018, are excluded.

- ² Financial liabilities at fair value through profit or loss derivatives held for trading and financial assets at fair value through profit or loss (excluding loans) are not managed by contractual maturity because they are held for trading or redemption before maturity. Therefore, the carrying amounts are included in the 'On demand' category.
- ³ Cash flows of derivative instruments held for hedging are shown at net amounts of cash inflows and outflows by remaining contractual maturity.
- ⁴ Equity securities designated as financial assets at fair value through other comprehensive income included in the 'On demand' category as most are available for sale at any time. However, in the case of equity securities which are restricted for sale, these will be classified to its respective maturity when the restriction on disposal is released.
- ⁵ Deposits that are contractually repayable on demand or on short notice are included under the 'On demand' category.
- ⁶ Unused lines of credit within commitments are included under the 'On demand' category as payments can be required upon request.
- ⁷ Financial guarantee contracts are included under the 'On demand' category as payments can be required upon request.

The remaining contractual cash flows of derivatives held for cash flow hedging as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019						
	Up to	1-3	3-12	1-5	Over 5		
	1 month	months	months	years	years	Total	
Cash flow to be received of net							
settlement derivatives	38	357	1,015	564	-	1,974	
Cash flow to be paid of net							
settlement derivatives	191	1,340	2,001	342	-	3,874	
(In millions of Korean won)	2018						
	Up to	1-3	3-12	1-5	Over 5		
	1 month	months	months	years	years	Total	
Cash flow to be received of net							
settlement derivatives	251	2,548	4,871	11,642	-	19,312	
Cash flow to be paid of net							
settlement derivatives	197	129	493	79	-	898	

4.4 Market Risk

4.4.1 Concept

Market risk is the risk of possible losses which arise from changes in market factors, such as interest rate, stock price, foreign exchange rate and other market factors, and incurred in securities, derivatives and others. The most significant risks associated with trading positions are interest rate risks and currency risks, and other risks include stock price risks. In addition, the Group is exposed to interest rate risks associated with non-trading positions. The Group classifies exposures to market risk into either trading or non-trading positions for managerial purpose.

4.4.2 Risk Management

The Group sets internal capital limits for market risk and interest rate risk and monitors the risks to manage the risk of trading and non-trading positions. The Group maintains risk management systems and procedures, such as trading policies and procedures, market risk management guidelines for trading positions and ALM risk management guidelines for non-trading positions in order to manage market risk efficiently. The procedures mentioned are implemented with approval from the Risk

Management Committee and Risk Management Council.

The Group establishes market risk management policy, sets position limits, loss limits and VaR limits of each business group and approves newly developed products through its Risk Management Council. The Market Risk Management Subcommittee, which is chaired by the Chief Risk Officer (CRO), is the decision maker and sets position limits, loss limits, VaR limits, sensitivity limits and scenario loss limits for each division, at the level of each individual business department.

The Asset-Liability Management Committee (ALCO) determines the operational standards of interest and commission, the details of establishment and prosecution of the Asset Liability Management (ALM) policies, and enacts and amends relevant guidelines. The Risk Management Council monitors the establishment and enforcement of ALM risk management policies and enact and amend ALM risk management guidelines. The interest rate risk limit is set based on the future assets/liabilities position and interest rate volatility estimation reflects the annual work plan. The ALM Department and Risk Management Department measures and monitors the interest risk status and limits on a regular basis. The status and limits of interest rate risks, such as interest rate EaR, duration gap and interest rate VaR, are reported to the ALCO and Risk Management Council on a monthly basis and to the Risk Management Committee on a quarterly basis. To ensure adequacy of interest rate and liquidity risk management, the Risk Management Department assigns the limits, monitors and reviews the risk management procedures and tasks conducted by the ALM Department. Also, the Risk Management Department independently reports related information to management.

4.4.3 Trading Position

Definition of a trading position

Trading positions subject to market risk management are interest rate, stock price positions for short-term profit-taking and others. Also, they include all foreign exchange rate positions. The basic requirements of trading positions are defined under the Trading Policy and Guideline, are as follows:

- The trading position is not restricted for purchase and sale, is measured daily at fair value, and its significant inherent risks are able to be hedged in the market.
- The criteria for classification as a trading position are clearly defined in the Trading Policy and guideline, and separately managed by the trading department.
- The trading position is operated in accordance with the documented trading strategy and managed through position limits.
- The operating department or professional dealers have an authority to enforce a deal on the trading position within predetermined limits without pre-approval.
- The trading position is reported periodically to management for the purpose of the Group's risk management.

Observation method on market risk arising from trading positions

The Group calculates VaR to measure the market risk by using market risk management systems on the entire trading portfolio. Generally, the Group manages market risk on the trading portfolio. In addition, the Group controls and manages the risk of derivative trading based on the regulations and guidelines formulated by the Financial Supervisory Service.

Value at Risk (VaR)

i. Value at Risk (VaR)

The Group uses the Value-at-Risk methodology to measure the market risk of trading positions.

The Group now uses the ten-day VaR, which estimates the maximum amount of loss that could occur in ten days under an historical simulation model which is considered to be a full valuation method. The distributions of portfolio's value changes are estimated based on the data over the previous 250 business days, and ten-day VaR is calculated by subtracting net present market value from the value measured at a 99% confident level of portfolio's value distribution results.

VaR is a commonly used market risk measurement technique. However, the method has some shortcomings. VaR estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movements are, however, not necessarily a good indicator of future events, as there may be conditions and circumstances in the future that the model does not anticipate. As a result, the timing and magnitude of the actual losses may vary depending on the assumptions made at the time of the calculation. In addition, the time periods used for the model, generally one or ten days, are assumed to be a sufficient holding period before liquidating the relevant underlying positions. If these holding periods are not sufficient, or too long, the VaR results may understate or overstate the potential loss.

The Group uses an internal model (VaR) to measure general risk, and a standard method to measure each individual risk. When the internal model is not permitted for certain market risk, the Group uses the standard method. Therefore, the market risk VaR may not reflect the market risk of each individual risk and some specific positions.

ii. Back-Testing

Back-testing is conducted on a daily basis to validate the adequacy of the VaR model. In back- testing, the Group compares both the actual and hypothetical profit or loss with the VaR calculations.

iii. Stress Testing

Stress testing is carried out to analyze the impact of abnormal market situations on the trading and available-for-sale portfolio. It reflects changes in interest rates, stock prices, foreign exchange rates, implied volatilities of options and other risk factors that have significant influence on the value of the portfolio. The Group uses historical scenarios and hypothetical scenarios for the analysis of abnormal market situations. Stress testing is performed at least once every quarter.

The units that analyze total VaR can be categorized as follows: ① by product: interest rate products (debt securities in Korean won and foreign currencies, etc.), foreign currency products (spots, futures, and CRS, etc.), equity securities (equities, ELS, etc.), ② by risk factors: interest rates (government bond interest rate in Korean won and foreign currencies, corporate bond interest rate, etc.), exchange rates (USD/KRW, USD/JPY, etc.), and stock market indexes (KOSPI, S&P 500, etc.); the Group previously assesses VaR by product considering timeliness and efficiency.

However, as the amount of investment property in foreign currencies increases, products evaluated as multiple risk factors (i.e. for foreign currency bonds, ① by product: interest rate product ② by risk factor: interest rate and foreign exchange rate) had a tendency that dispersion effect is excessive due to not reflecting the actual hedge position by products in detail; to prevent which, the Group has decided to use VaR by risk factor from 2018.

VaR at a 99%, excluding Stressed Value at Risks, confidence level of interest rate, stock price and foreign exchange rate risk for trading positions with a ten-day holding period as at December 31, 2019 and 2018, are as follows:

2019

(III IIIIIII OI I KOICAII WOII)	2010				
	Average	Minimum	Maximum	Ending	
Interest rate risk	11,190	1,725	20,467	16,628	
Stock price risk	3,434	2,402	4,310	3,914	
Foreign exchange rate risk	15,760	11,416	20,704	13,081	
Deduction of diversification effect				(13,246)	
Total VaR	17,545	13,641	24,849	20,377	
(In millions of Korean won)		2018	3		
	Average	Minimum	Maximum	Ending	

(III IIIIIIIOIIS OI NOICAII WOII)	2010						
	Average	Minimum	Maximum	Ending			
Interest rate risk	12,513	6,044	18,684	7,074			
Stock price risk	2,995	1,253	4,831	3,348			
Foreign exchange rate risk	9,443	5,033	16,453	16,453			
Deduction of diversification effect				(11,939)			
Total VaR	16,221	11,653	23,078	14,936			

The required equity capital using the standard method related to the positions which are not measured by VaR as at December 31, 2019 and 2018, is as follows:

(In millions of Korean won)	2019	2018
Interest rate risk	83,731	112,153
Stock price risk	1,954	19,756
Foreign exchange rate risk	1,850	1,339
	87,535	133,248

Details of risk factors

(In millions of Korean won)

i. Interest rate risk

Trading position interest rate risk usually arises from debt securities denominated in Korean won. The Group's trading strategy is to benefit from short-term movements in the prices of debt securities arising from changes in interest rates. The Group manages interest rate risk on major trading portfolios using market value-based tools such as VaR and sensitivity analysis (Price Value of a Basis Point: PVBP).

ii. Stock price risk

Stock price risk arises primarily from stock spot positions held by payment guarantee trust and stock-related derivatives of the Capital Markets Department. These stock price risks are managed through VaR, sensitivity limits and others.

iii. Foreign exchange rate risk

Foreign exchange rate risk arises from holding assets and liabilities denominated in foreign currency and foreign currency derivatives. Net foreign currency exposure mostly occurs from the foreign assets and liabilities which are denominated in US Dollars and Chinese Yuan. The Group sets both loss limits

and net foreign currency exposure limits and manages comprehensive net foreign exchange exposures which consider both trading and non-trading portfolios.

- 4.4.4 Non-trading Position (Interest Rate Risk of Banking Book)
- i. Definition of interest rate risk of banking book

Interest rate risk of banking book(IRRBB) is interest rate risk arises from a change in equity and earnings caused by fluctuation in value of interest rate sensitive assets and liabilities, and these risks are measured with change in Economic Value of Equity (\triangle EVE) or interest rate VaR and change in Net Interest Income (\triangle NII).

ii. Bank's overall interest rate risk management and mitigation strategy

The Risk Management Committee approves policies, procedures and limits for interest rate risk management, and the management department regularly reports on interest rate risk levels of \triangle EVE, \triangle NII and changes of market conditions etc., as compared to the set limit and changes of market conditions etc. To measure the sensitivity of banks' Economic Value of Measures and Earnings-Based Measures affected by interest rate changes, the interest rate and duration gaps of assets and liabilities are calculated every month. In addition, the management department conducts interest rate risk crisis analysis at least once a quarter, assuming abnormal interest rate fluctuations, and reports the results to the Risk Management Council. Independent internal and external audit departments regularly check the process of identifying, measuring and monitoring interest rate risk. The evaluation of adequacy of interest rate risk model is regularly conducted at least once a year by a department that is independent of the function they are assigned to review.

iii. Main modeling assumption used for the Bank's interest rate risk measurement system for internal management

The Bank separately calculates \triangle EVE for the internal management purpose using Historical-simulation based on the volatility of interest rates in the past finance crisis(FY08-FY09), the portfolio of assets/liabilities and 27 interest rate gaps, considering the management strategy.

iv. The Bank's interest rate risk hedging methodology and related accounting

The Bank hedges the interest rate risk through the same back-to-back interest rate swap transaction. The Bank officially documents and manages the risk management strategy for hedge accounting application, risk management purpose, hedging relationship, and methods for assessing compliance with hedge effectiveness.

v. Main assumptions used for calculating ΔEVE, ΔNII

Interest rate risk is measured by considering the cash flows of all interest-sensitive assets, liabilities and off-balance sheet items in the Banking Book. ΔEVE assumes a run-off balance sheet with an outflow view in which existing bank account positions are derecognized and are not replaced by new business

In addition, ΔEVE is calculated by the cash flows generated by applying contracted interest rates which include commercial margins and other interest rate components are used for ΔEVE . Risk-free interest rate that does not include commercial margins and other interest rate components is applied when discounting the estimated cash flows to present value.

ΔNII is computed assuming a constant balance sheet, where maturing or repricing cash flows are replaced by new cash flows with identical features with regard to the amount, replaced period and spread components. Interest rate risk for interest rate shock scenarios is calculated considering only loss in each currency. Non-maturity deposits are categorized as retail_transactional, retail_non-

transactional and wholesale according to depositor characteristics and account characteristics. The core deposit rate and upper average maturity cap of each aforementioned category are considered to determine average interest rate repricing maturity of non-maturity deposits. The average interest rate repricing maturity for non-maturity deposits is 2.5 years for core deposits and 1 day for non-core deposits, with the longest interest rate repricing maturity of 5 years. The prepayment rate of fixed-rate loan and early redemption rate of term deposit are estimated based on prepayment amount of fixed-rate loan and early redemption amount of term deposits during a month, respectively.

vi. △EVE, △NII

The Group calculates $\triangle EVE$ by applying six rate shock and stress scenarios, and $\triangle NII$ by applying parallel shock up and down scenarios. The results as at December 31, 2019 are as follows:

(In millions of Korean won)	2019				
	Changes in the				
	Economic Value of	Changes in net			
	Equity Capital	interest income			
Scenario 1 (Parallel up)	483,207	152,013			
Scenario 2 (Parallel down)	31,718	9,717			
Scenario 3(Steepener)	257,756	-			
Scenario 4 (Flattener)	411,237	-			
Scenario 5 (Short rate up)	378,380	-			
Scenario 6 (Short rate down)	492,047	-			
Maximum of Scenarios 1-6	492,047	152,013			
Basic capital	27,609,684	-			

(*) As of the end of December 2019, interest rate risk was calculated by different method from the previous disclosure due to the revision of the Detailed Supervisory Regulations on Banking Business.

The risk is measured using interest rate VaR, which is the maximum possible amount of loss that can occur at 99.90% confidence on interest rate risk and the results as at December 31, 2018 are as follows:

(In millions of Korean won)	2018
Interest Rate VaR	168,282

4.4.5 Financial Assets and Liabilities in Foreign Currencies

Financial assets and liabilities in foreign currencies as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)				2019			
	USD	JPY	EUR	GBP	CNY	Others	Total
Financial assets							
Cash and due from							
financial institutions	1,914,554	254,502	145,066	33,239	1,148,375	490,021	3,985,757
Financial assets at fair							
value through profit or							
loss	1,700,956	3,387	165,330	3,373	-	23,355	1,896,401
Derivatives held for							
trading	98,786	-	-	-	6,786	-	105,572
Derivatives held for							
hedging	83,610	-	-	-	-	-	83,610
Loans at amortized cost	14,070,820	465,849	593,530	137,585	1,205,297	613,780	17,086,861
Financial assets at fair							
value through other							
comprehensive income	3,953,899	21,267	5,192	-	282,390	37,977	4,300,725
Financial assets at							
amortized cost	1,026,325	-	-	-	97,844	-	1,124,169
Other financial assets	1,193,680	230,223	289,187	5,178	167,525	87,967	1,973,760
	24,042,630	975,228	1,198,305	179,375	2,908,217	1,253,100	30,556,855
Financial liabilities							_
Derivatives held for trading	212,569	6	53	-	7,806	-	220,434
Derivatives held for							
hedging	35,538	-	-	-	-	-	35,538
Deposits	11,939,600	731,178	761,897	45,340	1,471,566	530,990	15,480,571
Debts	8,576,321	125,096	340,530	118,848	15,092	73,640	9,249,527
Debentures	4,083,040	-	-	-	-	101,967	4,185,007
Other financial liabilities	2,111,089	59,761	97,325	21,583	173,480	163,990	2,627,228
	26,958,157	916,041	1,199,805	185,771	1,667,944	870,587	31,798,305
Off-balance sheet items	16,745,727	32,694	191,210	-	252,369	37,195	17,259,195

(In millions of Korean won)				2018			
	USD	JPY	EUR	GBP	CNY	Others	Total
Financial assets							
Cash and due from	4 07 4 400	007.500	100 500	04.500	4 000 000	000 707	0.040.070
financial institutions	1,374,423	307,580	188,508	24,536	1,088,299	362,727	3,346,073
Financial assets at fair							
value through profit or loss	1,756,048	44,175	69,728			17,773	1,887,724
Derivatives held for	1,730,040	44,173	09,720	-	-	11,113	1,007,724
trading	98,101	_	_	_	4,643	_	102,744
Derivatives held for	00,101				1,010		102,711
hedging	32,996	_	_	-	-	-	32,996
Loans at amortized cost	12,155,429	333,848	571,077	5,993	990,705	396,228	14,453,280
Financial assets at fair							
value through other							
comprehensive income	2,999,581	36,538	5,134	-	125,571	3,699	3,170,523
Financial assets at							
amortized cost	949,227	-	-	-	38,802	-	988,029
Other financial assets	942,708	297,430	17,184	21,447	251,725	24,149	1,554,643
	20,308,513	1,019,571	851,631	51,976	2,499,745	804,576	25,536,012
Financial liabilities							
Derivatives held for trading	103,451	14	42	-	4,062	-	107,569
Derivatives held for							
hedging	88,367	-	-	-	-	-	88,367
Deposits	8,948,057	616,551	491,628	48,264	1,263,562	450,340	11,818,402
Debts	8,984,548	90,778	184,173	-	11,393	24,057	9,294,949
Debentures	3,960,312	-	31,979	-	-	42,240	4,034,531
Other financial liabilities	898,222	103,395	130,282	3,566	265,080	41,853	1,442,398
	22,982,957	810,738	838,104	51,830	1,544,097	558,490	26,786,216
Off-balance sheet items	13,573,398	32,619	1,262	-	270,018	7,552	13,884,849

4.5 Operational Risk

4.5.1 Concept

The Group defines operational risk as risk of loss resulting from inadequate or failed internal processes, people, systems and external events. The operational risk includes financial and non-financial risks.

4.5.2 Risk Management

The purpose of operational risk management is not only to comply with requirements of regulatory authorities but is also to establish an integrated system to cultivate enterprise culture that values importance of risk management, strengthen internal controls, improve processes and provide with timely feedback to management so that eventually mitigate operational risk of the Group. In addition, the Group established Business Continuity Planning (BCP) to ensure critical business functions can be maintained, or restored, in the event of material disruptions arising from internal or external events. It has constructed replacement facilities as well as has carried out full scale test for head office and IT departments to test its BCPs.

4.6 Capital Management

The Group complies with the capital adequacy standard established by the Financial Services Commission. The capital adequacy standard is based on Basel III revised by Basel Committee on Banking Supervision in Bank for International Settlements in June 2011, and was implemented in Korea in December 2013.

The Group is required to maintain a minimum Common Equity Tier 1 ratio of at least 4.5%, a minimum Tier 1 ratio of 6.0% and a minimum Total Regulatory Capital of 8.0% as at December 31, 2019. Capital Conservation Buffer of 2.5% and Capital Requirement of Domestic Systemically Important Bank (D-SIB) of 1.0% are additionally applied. Therefore, the Group is required to maintain a capital ratio including a minimum capital ratio and additional capital requirements (a Common Equity Tier 1 Ratio of 8.0% (December 31, 2018: 7.125%), a Tier 1 Ratio of 9.5% (December 31, 2018: 8.625%), and a Total Regulatory Capital Ratio of 11.5% (December 31, 2018: 10.625%)).

The Group's equity capital is classified into three categories in accordance with Detailed Supervisory Regulations on Banking Business:

- Common Equity Tier 1 Capital: Common Equity Tier 1 Capital represents the issued capital that takes the first and proportionately greatest share of any losses and represents the most subordinated claim in liquidation of the Group, and not repaid outside of liquidation. It includes common shares issued, capital surplus, retained earnings, non-controlling interests of consolidated subsidiaries, accumulated other comprehensive income, other capital surplus and others.
- Additional Tier 1 Capital: Additional Tier 1 Capital includes perpetual instruments issued by the Group that meet the criteria for inclusion in Additional Tier 1 capital, and stock surplus resulting from the issue of instruments included in Additional Tier 1 capital and others.
- Tier 2 Capital: Tier 2 Capital represents the capital that takes the proportionate share of losses in the liquidation of the Group. Tier 2 Capital includes a fund raised by issuing subordinated debentures maturing in not less than 5 years that meet the criteria for inclusion in Tier 2 capital, and the allowance for loan losses which are accumulated for assets classified as normal or precautionary in accordance with Regulations on Supervision of Banking Business and others.

Risk weighted asset means the assets weighted according to the inherent risks in the total assets and the possible losses resulting from the errors of internal process and external events which the Group should cover. The Group calculates risk weighted asset by each risk (credit risk, market risk and operational risk) based on Detailed Regulations on Supervision of Banking Business and uses it for its capital ratio calculation. The Group complied with external capital adequacy requirements as at December 31, 2019 and December 31, 2018.

In addition to the capital ratio, the Group assesses its adequacy of capital by using the internal assessment and management policy of the capital adequacy. The assessment of the capital adequacy is conducted by comparing available capital (actual amount of available capital) and internal capital (amount of capital enough to cover all significant risks under target credit rate set by the Group). The Group monitors the soundness of finance and provides risk adjusted basis for performance review using the assessment of the capital adequacy. The internal capital is calculated by adding the stress testing results and other required items to the total internal capitals which are calculated for each risk.

The Risk Management Council of the Group determines the Group's risk appetite and allocates internal capital by risk type and business group. Each business group efficiently operates its capital within range of granted internal capital. The Risk Management Department of the Group monitors a management of the limit on internal capital and reports the results to management and the Risk Management Council.

The Group maintains the adequacy of capital through proactive review and approval of the Risk Management Committee when the internal capital is expected to exceed the limits.

Details of the Group's capital adequacy calculation in line with Basel III requirements as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Equity Capital:	29,809,730	27,694,178
Tier I Capital	27,609,684	25,567,995
Common Equity Tier 1 Capital	27,035,161	25,567,995
Additional Tier 1 Capital	574,523	-
Tier II Capital	2,200,046	2,126,183
Risk-weighted assets:	188,075,177	178,433,263
Credit risk ¹	172,985,173	163,693,288
Market risk ²	5,150,641	4,747,989
Operational risk ³	9,939,363	9,991,986
Equity Capital (%):	15.85	15.52
Tier I Capital (%)	14.68	14.33
Common Equity Tier 1 Capital (%)	14.37	14.33

¹ Credit risk weighted assets are measured using the Internal Rating-Based Approach an Standardized Approach.

5. Segment Information

5.1 Overall Segment Information and Business Segments

The Group is organized into Banking, Retail Banking and Other Activities. These business divisions are based on the nature of the products and services provided, the type or class of customer, and the Group's management organization.

- Corporate banking: The activities within this segment include providing credit, deposit products and other related financial services to large, small and medium-sized enterprises and SOHOs, and their local subsidiaries-related works
- Retail banking: The activities within this segment include providing credit, deposit products and other related financial services to individuals and households.
- Other activities : The activities within this segment include trading activities in securities and derivatives, funding, trust and other activities.

² Market risk weighted assets are measured using the Internal Model-Based Approach and Standardized Approach.

³ Operational risk weighted assets are measured using the Advanced Measurement Approach.

Financial information by business segment for the years ended December 31, 2019 and 2018 are as follows:

(In millions of Korean won)			2019		
	Corporate	Retail		Intra-group	
	Banking	Banking	Others	Adjustment	Total
Operating revenues from external					
customers	2,557,438	2,979,503	1,782,127	-	7,319,068
Segment operating					
revenues(expenses)	22,838	-	24,382	(47,220)	-
	2,580,276	2,979,503	1,806,509	(47,220)	7,319,068
Net interest income	2,844,881	3,148,061	370,603	242	6,363,787
Interest income	4,642,555	4,872,937	1,302,085	(37,629)	10,779,948
Interest expense	(1,797,674)	(1,724,876)	(931,482)	37,871	(4,416,161)
Net fee and commission income	349,393	471,869	329,432	(17,398)	1,133,296
Fee and commission income	459,879	577,845	473,637	(27,999)	1,483,362
Fee and commission expense	(110,486)	(105,976)	(144,205)	10,601	(350,066)
Net gains (losses) on financial assets/					
liabilities at fair value through profit					
or loss	(2,527)	_	474,420	(49,269)	422,624
Net other operating income (expense)	(611,471)	(640,427)	632,054	19,205	(600,639)
General and administrative expenses	(1,241,721)	(1,982,375)	(663,618)	295	(3,887,419)
Operating profit before provision for					
credit losses	1,338,555	997,128	1,142,891	(46,925)	3,431,649
Reversal (provision) for credit losses	125,919	(235,995)	7,582	(1,036)	(103,530)
Operating profit	1,464,474	761,133	1,150,473	(47,961)	3,328,119
Share of profit of associates	_	_	29,240	-	29,240
Net other non-operating income					
(expense)	(263)	_	(19,741)	(18,883)	(38,887)
Segment profit before income tax	, ,		,	, ,	, ,
expense	1,464,211	761,133	1,159,972	(66,844)	3,318,472
Income tax income (expense)	(404,425)	(209,311)	(265, 190)	(467)	(879,393)
Profit for the year	1,059,786	551,822	894,782	(67,311)	2,439,079
Profit attributable to the shareholder of				, ,	
the Parent Company	1,059,786	551,822	894,782	(67,311)	2,439,079
Profit attributable to non-controlling				, ,	
interests	-	_	-	-	-
Total assets 1	139,496,394	147,468,173	104,297,056	(3,836,585)	387,425,038
Total liabilities ¹	142,063,121	161,834,984	56,127,857	(1,605,157)	358,420,805
				,	

¹ Amounts before intra-segment transaction adjustment.

(In millions of Korean won)			2018		
	Corporate	Retail		Intra-group	
	Banking	Banking	Others	Adjustment	Total
Operating revenues from external					
customers	2,386,035	2,989,240	1,478,104	-	6,853,379
Segment operating					
revenues(expenses)	27,687	-	(39,343)	11,656	-
	2,413,722	2,989,240	1,438,761	11,656	6,853,379
Net interest income	2,753,928	2,960,598	386,407	(211)	6,100,722
Interest income	4,267,675	4,547,615	1,227,614	(23,016)	10,019,888
Interest expense	(1,513,747)	(1,587,017)	(841,207)	22,805	(3,919,166)
Net fee and commission income	287,978	490,447	362,846	(18,523)	1,122,748
Fee and commission income	381,481	583,213	486,034	(27,937)	1,422,791

-					
Fee and commission expense	(93,503)	(92,766)	(123,188)	9,414	(300,043)
Net gains (losses) on financial assets/					
liabilities at fair value through profit					
or loss	13,933	-	297,938	14,524	326,395
Net other operating income (expense)	(642,117)	(461,805)	391,570	15,866	(696,486)
General and administrative expenses	(1,091,556)	(1,970,409)	(706, 164)	1,134	(3,766,995)
Operating profit before provision for					
credit losses	1,322,166	1,018,831	732,597	12,790	3,086,384
Reversal (provision) for credit losses	77,224	(179,229)	(273)	8,362	(93,916)
Operating profit	1,399,390	839,602	732,324	21,152	2,992,468
Share of profit of associates	_	_	49,698	_	49,698
Net other non-operating income					
(expense)	(65)	-	123,936	(79,699)	44,172
Segment profit before income tax	, ,				
expense	1,399,325	839,602	905,958	(58,547)	3,086,338
Income tax income (expense)	(386,764)	(230,891)	(208,403)	(1,082)	(827,140)
Profit for the year	1,012,561	608,711	697,555	(59,629)	2,259,198
Profit attributable to the shareholder of					
the Parent Company	1,012,561	608,711	697,555	(59,629)	2,259,198
Profit attributable to non-controlling				,	
interests	_	_	-	-	_
Total assets ¹	131,303,734	140,814,393	88,399,951	(3,558,820)	356,959,258
Total liabilities ¹	, ,	152,173,062		(1,240,600)	330,291,392
	,,-	, -,	, -,	(, -,,	, ,

¹ Amounts before intra-segment transaction adjustment.

5.2 Services and Geographical Segments

5.2.1 Services Information

Operating revenues from external customers by services for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Corporate banking service	2,557,438	2,386,035
Retail banking service	2,979,503	2,989,240
Other service	1,782,127	1,478,104
	7,319,068	6,853,379

5.2.2 Geographical Information

Geographical operating revenues from external customers for the years ended December 31, 2019 and 2018, and major non-current assets as at December 31, 2019 and 2018, are as follows:

	20	19	20°	18
	Revenues		Revenues	
	from	Major	from	Major
	external	non-current	external	non-current
	customers	assets	customers	assets
Domestic	7,156,642	4,488,801	6,721,355	3,600,570
United States	13,971	9,452	11,727	144
New Zealand	6,946	3,516	6,213	72
China	92,475	12,946	81,620	3,623
Japan	6,692	3,480	4,166	1,210
Myanmar	4,002	1,570	2,675	707
Vietnam	10,449	1,938	7,655	239
Cambodia	14,764	3,944	9,849	2,696
United Kingdom	9,958	1,893	8,119	537
India	3,169	1,533	-	-
Intra-group Adjustment	-	-	-	-
	7,319,068	4,529,073	6,853,379	3,609,798

6. Financial Assets and Financial Liabilities

6.1 Classification and Fair Value

Carrying amount and fair values of financial assets and liabilities as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019		
	Carrying amount	Fair value	
Financial assets			
Cash and due from financial institutions	14,481,309	14,478,216	
Financial assets at fair value through profit or			
loss	13,866,303	13,866,303	
Debt securities	13,446,838	13,446,838	
Equity securities	151,527	151,527	
Loans	188,133	188,133	
Others	79,805	79,805	
Derivatives held for trading	2,184,099	2,184,099	
Derivatives held for hedging	133,326	133,326	
Loans at amortized cost	293,531,433	293,767,751	
Financial assets at fair value through other			
comprehensive income	38,454,954	38,454,954	
Debt securities	36,116,988	36,116,988	
Equity securities	1,993,674	1,993,674	
Loans	344,292	344,292	
Securities at amortized cost	13,964,339	14,056,395	
Others	5,464,704	5,464,704	
	382,080,467	382,405,748	
Financial liabilities			
Financial liabilities at fair value through profit			
or loss	80,235	80,235	
Derivatives held for trading	2,132,770	2,132,770	
Derivatives held for hedging	36,212	36,212	
Deposits	300,917,482	301,409,018	
Debts	19,141,262	19,141,682	
Debentures	18,739,992	18,959,416	
Other financial liabilities	15,446,504	15,446,504	
_	356,494,457	357,205,837	
(In millions of Korean won)	2018	.	
·	Carrying amount	Fair value	
Financial assets			
Cash and due from financial institutions	14,889,010	14,885,511	
Financial assets at fair value through profit or	•		
loss	12,257,005	12,257,005	
Debt securities	11,883,025	11,883,025	
Equity securities	82,576	82,576	
· ·		-	

Loans	212,596	212,596
Others	78,808	78,808
Derivatives held for trading	1,533,650	1,533,650
Derivatives held for hedging	80,321	80,321
Loans at amortized cost	276,944,202	276,957,040
Financial assets at fair value through other		
comprehensive income	29,930,955	29,930,955
Debt securities	27,682,464	27,682,464
Equity securities	1,898,944	1,898,944
Loans	349,547	349,547
Securities at amortized cost	12,792,526	12,823,961
Others	4,199,197	4,199,197
•	352,626,866	352,667,640
Financial liabilities		
Financial liabilities at fair value through profit		
or loss	87,168	87,168
Derivatives held for trading	1,553,858	1,553,858
Derivatives held for hedging	88,551	88,551
Deposits	272,484,528	273,131,227
Debts	17,496,056	17,523,408
Debentures	23,163,585	23,445,303
Other financial liabilities	13,297,404	13,297,394
	328,171,150	329,126,909
·		

The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The Group discloses the fair value of each class of assets and liabilities in a way that permits it to be compared with its carrying amount at the end of each reporting period. The best evidence of fair value of financial instruments is a quoted price in an active market.

Methods of determining fair value for financial instruments are as follows:

Cash and due from financial institutions

The carrying amounts of cash and demand due from financial institutions and payment due from financial institutions are reasonable approximation of fair values. These financial instruments do not have a fixed maturity and are receivable on demand. Fair value of ordinary due from financial institutions is measured using DCF model (Discounted Cash Flow Model).

Investment securities/ Gold deposits and deposits due to customers

The fair value of financial instruments, gold deposits and deposits due to customers that are quoted in active markets is determined using the quoted prices. Fair value is determined through the use of independent third-party pricing services where quoted prices are not available. Pricing services use one or more of the following valuation techniques including DCF Model, Monte Carlo Simulation, FCFE (Free Cash Flow to Equity Model), Comparable Company Analysis, Dividend Discount Model and Net Asset Value Method.

Loans

The fair value of loans is determined through DCF Model and the use of independent third-party pricing services. Fair value measured by DCF Model is determined by discounting the expected cash flows, which are contractual cash flows adjusted by the expected prepayment rate, at appropriate discount rate. Fair value of the other loans that is not determined through DCF model is determined by independent third-party pricing services using Tree Model.

Derivatives

For exchange traded derivatives, quoted price in an active market is used to determine fair value and for OTC derivatives, fair value is determined using valuation techniques. The Group uses internally developed valuation models that are widely used by market participants to determine fair values of plain OTC derivatives including options, interest rate swaps, and currency swaps, based on observable market parameters. However, some complex financial instruments are valued using appropriate models developed from generally accepted market valuation models including the Finite Difference Method, the Monte Carlo Simulation and the Tree model or independent third-party valuation service. For OTC derivatives, the credit risk of counterparty and the Group's own credit risk are applied through CVA(Credit Valuation Adjustment).

Deposits

The carrying amount of demand deposits is regarded as representative of fair value because they do not have a fixed maturity and are payable on demand. Fair value of time deposits is determined using a DCF model. Fair value is determined by discounting the expected cash flows, which are contractual cash flows adjusted by the expected prepayment rate, at an appropriate discount rate.

Debts

Carrying amount of overdraft in foreign currency is regarded as representative of fair value because they do not have a fixed maturity and are payable on demand. Fair value of other debts is determined using a DCF model discounting contractual future cash flows at an appropriate discount rate.

Debentures Fair value is determined by using the valuations of external professional

valuation institution, which are calculated using market inputs and use of

DCF Model to calculate fair value.

Other Financial assets and liabilities

The carrying amounts are reasonable approximation of fair values, without applying DCF Model. These financial instruments are temporary accounts used for other various transactions and their maturities are relatively short

or not defined.

Fair value hierarchy

The Group believes that valuation methods used for measuring the fair values of financial instruments are reasonable and that the fair values recognized in the statements of financial position are appropriate. However, the fair values of the financial instruments recognized in the statements of financial position may be different if other valuation methods or assumptions are used. Additionally, as there is a variety of valuation techniques and assumptions used in measuring fair value, it may be difficult to reasonably compare the fair value with that of other financial institutions.

The Group classifies and discloses the fair value of the financial instruments into the following three-level hierarchy:

Level 1: The fair values are based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: The fair values except for quoted prices included within Level 1 are based on inputs that are observable for the asset or liability, either directly or indirectly.

Level 3: The fair values are based on unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which the fair value measurement is categorized in its entirety shall be determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. For this purpose, the significance of an input is assessed against the fair value measurement in its entirety. If a fair value measurement uses observable inputs that require significant adjustment based on unobservable inputs, that measurement is a Level 3 measurement.

Fair value hierarchy of financial assets and liabilities at fair value in the statements of financial position

The fair value hierarchy of financial assets and liabilities at fair value in the statements of financial position as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	n won) 2019			
		value hierarchy		
	Level 1	Level 2	Level 3	Total
Financial assets Financial assets at fair value through profit or loss				
Debt securities Equity securities	2,960,226 107,480	8,633,172 -	1,853,440 44,047	13,446,838 151,527
Loans Others	- 79,805	- -	188,133 	188,133 79,805
	3,147,511	8,633,172	2,085,620	13,866,303
Derivatives held for trading Derivatives held for hedging Financial assets at fair value through other comprehensive inc	- - ome	2,184,029 133,326	70	2,184,099 133,326
Debt securities Equity securities Loans	12,896,896 952,427	23,220,092 - 344,292	1,041,247	36,116,988 1,993,674 344,292
Loans	13,849,323	23,564,384	1,041,247	38,454,954
	16,996,834	34,514,911	3,126,937	54,638,682
Financial liabilities Financial liabilities at fair value through profit or	10,000,001	01,011,011	0,120,001	
loss	80,235	-	-	80,235
Derivatives held for trading Derivatives held for hedging	-	2,132,286 36,212	484	2,132,770 36,212
Delivatives field for fledging	80,235	2,168,498	484	2,249,217
	· · · · · · · · · · · · · · · · · · ·			
In millions of Korean won)		2018		
		value hierarchy		
	Level 1	Level 2	Level 3	Total
Financial assets Financial assets at fair value through profit or loss				
Debt securities	2,298,811	8,103,073	1,481,141	11,883,025
Equity securities Loans	43,088	-	39,488 212,596	82,576 212,596
Others	78,808	-	212,590	78,808
0.110.10	2,420,707	8,103,073	1,733,225	12,257,005
Derivatives held for trading Derivatives held for hedging	-	1,533,572 80,321	78 -	1,533,650 80,321
Financial assets at fair value through other comprehensive inc		40.004.040		27 002 404
Debt securities Equity securities Loans	8,998,246 971,367 -	18,684,218 - 349,547	927,577	27,682,464 1,898,944 349,547
	9,969,613	19,033,765	927,577	29,930,955
	12,390,320	28,750,731	2,660,880	43,801,931
Financial liabilities	<u> </u>			·

Financial liabilities at fair value through profit or				
loss	87,168	-	-	87,168
Derivatives held for trading	-	1,553,072	786	1,553,858
Derivatives held for hedging	-	88,551	<u>-</u>	88,551
	87,168	1,641,623	786	1,729,577

Valuation techniques and the inputs used in the fair value measurement of financial assets and liabilities classified as Level 2

Valuation techniques and inputs of financial assets and liabilities at fair value in the statements of financial position and classified as Level 2 as at December 31, 2019 and 2018, are as follows:

	Fair value		
	2019	Valuation techniques	Inputs
Financial assets			
Financial assets at fair v	alue through profit or	loss	
Debt securities	8,633,172	DCF Model, Net Asset Value, Monte Carlo Simulation	Discount rate, Interest rate, prices of underlying assets(debt securities, stocks, etc.)
	8,633,172		
Derivatives held for trading	2,184,029	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and stock price and others
Derivatives held for hedging	133,326	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and others
Financial assets at fair v	alue through other co	mprehensive income	
Debt securities	23,220,092	DCF Model	Discount rate
Loans	344,292	DCF Model	Discount rate
	23,564,384		
	34,514,911		
Financial liabilities			
Derivatives held for trading	2,132,286	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
Derivatives held for		DCF Model, Closed Form,	Discount rate, volatility,
hedging	36,212	FDM	foreign exchange rate and others
	2,168,498		

(In millions of Korean wor	1)		
	Fair value		
	2018	Valuation techniques	Inputs
Financial assets			
Financial assets at fair v	alue through profit or	loss	
Debt securities	8,103,073	DCF Model, Net Asset Value	Discount rate, prices of underlying assets(debt securities, stocks, etc.)
	8,103,073		
Derivatives held for trading	1,533,572	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
Derivatives held for hedging	80,321	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and others
Financial assets at fair v	alue through other co	mprehensive income	
Debt securities	18,684,218	DCF Model	Discount rate
Loans	349,547	DCF Model	Discount rate
	19,033,765		
	28,750,731		
Financial liabilities			
Derivatives held for trading	1,553,072	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
Derivatives held for hedging	88,551	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and others
	1,641,623		

Fair value hierarchy of financial assets and liabilities whose fair value is disclosed

The fair value hierarchy of financial assets and liabilities whose fair value is disclosed as at December 31, 2019 and 2018, is as follows:

(In millions of Korean won)	2019				
	Fa				
	Level 1	Level 2	Level 3	Total	
Financial assets					
Cash and due from financial					
institutions ¹	2,694,352	10,695,432	1,088,432	14,478,216	
Loans at amortized cost	-	-	293,767,751	293,767,751	
Securities at amortized cost	4,372,712	9,683,683	-	14,056,395	
Other financial assets ²	-	-	5,464,704	5,464,704	
	7,067,064	20,379,115	300,320,887	327,767,066	
Financial liabilities					
Deposits ¹	-	138,097,349	163,311,669	301,409,018	
Debts ¹	-	4,685	19,136,997	19,141,682	
Debentures	-	18,959,416	-	18,959,416	
Other financial liabilities ²	-	-	15,446,504	15,446,504	
	-	157,061,450	197,895,170	354,956,620	

² The carrying amounts of other financial assets and other financial liabilities that are classified as Level 3 are reasonable approximation of the fair values and presented in the financial statements as at December 31, 2019.

(In millions of Korean won)	2018				
	Fa	ir value hierar	chy		
	Level 1	Level 2	Level 3	Total	
Financial assets					
Cash and due from financial					
institutions ¹	3,057,323	10,827,281	1,000,908	14,885,512	
Loans at amortized cost	-	-	276,957,040	276,957,040	
Securities at amortized cost	4,126,591	8,697,370	-	12,823,961	
Other financial assets ²	-	-	4,199,197	4,199,197	
	7,183,914	19,524,651	282,157,145	308,865,710	
Financial liabilities					
Deposits ¹	-	123,778,718	149,352,509	273,131,227	
Debts ¹	-	38,403	17,485,005	17,523,408	
Debentures	-	23,445,303	-	23,445,303	
Other financial liabilities ³	-	-	13,297,394	13,297,394	
		147,262,424	180,134,908	327,397,332	

¹ The amounts included in Level 2 are the carrying amounts which are reasonable approximation of the fair values.

Valuation techniques and inputs used in the fair value measurement

Valuation techniques and inputs of financial assets and liabilities which are disclosed by the carrying amounts because it is a reasonable approximation of fair value are not subject to be disclosed.

Valuation techniques and inputs of financial assets and liabilities whose fair values are disclosed and classified as Level 2 as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	
		Valuation	
	Fair value	technique	Inputs
Financial assets			
Securities at amortized cost	9,683,683	DCF Model, Monte Carlo Simulation	Discount rate, Interest rate
Financial liabilities Debentures	18,959,416	DCF Model	Discount rate

¹ The amounts included in Level 2 are the carrying amounts which are reasonable approximation of the fair values.

² The amounts of other financial assets included in Level 3 are the carrying amounts which are reasonable approximation of the fair values as at December 31, 2018.

³ The ₩13,289,339 million of other financial liabilities included in Level 3 are the carrying amounts which are reasonable approximation of fair values as at December 31, 2018.

(In millions of Korean won)	2018			
	Fair value	Valuation technique	Inputs	
Financial assets				
Securities at amortized cost	8,697,370	DCF Model	Discount rate	
Financial liabilities				
Debentures	23,445,303	DCF Model	Discount rate	

Valuation techniques and inputs of financial assets and liabilities whose fair values are disclosed and classified as Level 3 as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

			2019	
		Valuation		Unobservabl
	Fair value	techniques	Inputs	e inputs
Financial assets				
Cash and due from financial institutions	1,088,432	DCF Model	Credit spread, other spread, interest rate	Credit spread, other spread
Loans at amortized cost	293,767,751	DCF Model	Credit spread, other spread, prepayment rate, interest rate	Credit spread, other spread, prepayment rate
	294,856,183			
Financial liabilities				
Deposits	163,311,669	DCF Model	Other spread, prepayment rate, Interest rate	Other spread, prepayment rate
Debts	19,136,997	DCF Model	Other spread, interest rate	Other spread
	182,448,666			

	Valuation		Unobservable
Fair value	techniques	Inputs	inputs
1,000,908	DCF Model	Credit spread, other spread, interest rates	Credit spread, other spread
276,957,040	DCF Model	Credit spread, other spread, prepayment rate, interest rate	Credit spread, other spread, prepayment rate
277,957,948			
149,352,509	DCF Model	Other spread, prepayment rate, interest rates	Other spread, prepayment rate
17,485,005	DCF Model	Other spread, interest rates	Other spread
8,055	DCF Model	Other spread, interest rates	Other spread
166,845,569			
	1,000,908 276,957,040 277,957,948 149,352,509 17,485,005 8,055	Fair value techniques 1,000,908 DCF Model 276,957,040 DCF Model 277,957,948 DCF Model 149,352,509 DCF Model 8,055 DCF Model	Fair valuetechniquesInputs1,000,908DCF ModelCredit spread, other spread, interest rates276,957,040DCF ModelCredit spread, other spread, prepayment rate, interest rate277,957,948DCF ModelOther spread, prepayment rate, interest rates17,485,005DCF ModelOther spread, interest rates8,055DCF ModelOther spread, interest rates0 Other spread, interest rates

6.2 Level 3 of the Fair Value Hierarchy Disclosure

6.2.1 Valuation Policy and Process of Level 3 Fair Value

The Group uses external, independent and qualified third-party valuation service in addition to internal valuation models to determine the fair value of the Group's assets at the end of every reporting period.

Where a reclassification between the levels of the fair value hierarchy occurs for a financial asset or liability, the Group's policy is to recognize such transfers as having occurred at the beginning of the reporting period.

6.2.2 Changes in Fair Value (Level 3) Measured using Valuation Technique based on Unobservable Inputs in Market

Changes in Level 3 of the fair value hierarchy for the years ended December 31 2019 and 2018, are as follows:

	2019						
	Financial as value through		Financial investments	Net derivatives financial instruments			
	Securities at fair value through profit or loss	Loans at fair value through profit or loss	Equity securities at fair value through other comprehensive income	Derivatives held for trading	Derivatives held for hedging		
Beginning							
balance	1,520,631	212,596	927,577	(708)	-		
Total gains or loss	es						
 Profit or loss 	35,553	10,412	-	3,233	-		
- Other comprehensive							
income	-	-	36,714	-	-		
Purchases	617,814	154,005	78,626	-	-		
Sales	(276,511)	(188,880)	(1,671)	-	-		
Settlements	-	-	-	(2,941)	-		
Ending balance	1,897,487	188,133	1,041,246	(416)			

(III IIIIIII OI I KOI GAIT WE	•••				
_			2018		
	Financial as	sets at fair			
	value throug	jh profit or	Financial	Net derivativ	es financial
_	los	<u>s</u>	investments	instru	ments
	Securities		Equity		
	at fair	Loans at	securities at		
	value	fair value	fair value		
	through	through	through other	Derivatives	Derivatives
	profit or	profit or	comprehensive	held for	held for
	loss	loss	income	trading	hedging
Beginning					
balance ¹	1,277,304	132,722	750,036	(771)	704
Total gains or losses					
 Profit or loss 	19,789	4,347	-	4,295	(116)
- Other					
comprehensive					
income	-	-	124,633	-	-
Purchases	460,309	184,655	53,388	-	-
Sales	(236,705)	(109, 128)	(480)	-	-
Settlements	-	-	-	(1,220)	(588)
Transfers into					
Level 3 ²	-	-	-	(3,012)	-
Transferred from					
Level 3 ²	(66)	-	-	-	-
Ending balance	1,520,631	212,596	927,577	(708)	

¹ Restated based on Korean IFRS 1109.

² Changes in levels for the financial instruments occurred due to the change in the availability of observable market data.

In relation to changes in Level 3 of the fair value hierarchy, total gains or losses recognized in profit or loss for the period, and total gains or losses for the period included in profit or loss for financial instruments held at the end of the reporting period in the statements of comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	
	Net losses from financial instruments at fair value through profit or loss	Other operating income	Net interest income
Total gains or losses included in profit or loss for the period	47,801	1,375	
Total gains or losses for the period included in profit or loss for financial instruments held at the			
end of the reporting period	39,472	1,319	-
(In millions of Korean won)	Net losses from	2018	
	financial instruments at fair value through profit or loss	Other operating income	Net interest income
Total gains or losses included in profit or loss for the period Total gains or losses for the period included in profit or loss for financial instruments held at the	28,103	(405)	617
end of the reporting period	22,187	(289)	43

6.2.3 Sensitivity Analysis of Changes in Unobservable Inputs

Information about fair value measurements using unobservable inputs as at December 31, 2019 and 2018, are as follows:

,	,			2019		
	Fair value	Valuation techniques	Inputs	Unobservable inputs	Range of unobservable inputs (%)	Relationship of unobservable inputs to fair value
Financial as:	sets					
Financial ass	sets at fair valu	e through profit of	or loss			
Debt securities	1,853,440	Monte Carlo Simulation, Net Asset Value, DCF Model	Price of underlying asset, interest rate, dividend yield, volatilities	Volatilities of the underlying asset	16.80~30.55	Higher the volatility, higher the fair value fluctuation
			and correlation of underlying asset, discount rate, liquidation value, volatility	Correlation of underlying asset	3.11~95.67	Higher the correlation, higher the fair value fluctuation
			of the real estate price	Discount rate	7.47	Lower the discoun rate, higher the fair value

				Liquidation value	0.00	Higher the liquidation value, higher the fair value
				Volatility of the real estate disposal price	0.00	Higher the sale price, higher the fair value
Equity securities	44,047	DCF Model, Comparabl e Company	Growth rate, discount rate	Growth rate	0.00	Higher the growth rate, higher the fair value
		Analysis,		Discount rate	5.89~16.15	Lower the discount rate, higher the fair value
Loans	188,133	B Tree Model, DCF Model	Stock price, volatility of the stock price	Volatility of the stock price	12.91~48.28	Higher the volatility, higher the fair value fluctuation
				Discount rate	10.81	Lower the discount rate, higher the fair value
Derivatives h	eld for tradir 7	•	Stock price	\/olatility.of	24.05	Llighar tha
Stock and index	,	o Tree Model	Stock price, Interest rate, volatility of the stock price, dividend rate	Volatility of the stock price	21.85	Higher the volatility, higher the fair value fluctuation
Financial ass	ets at fair va	llue through other o	comprehensive inco	me		
Equity securities	1,041,247	DCF Model, Comparable Company	Growth rate, discount rate, volatility of the	Growth rate	0.00	Higher the growth rate, higher the fair value
		Analysis, Tree Model	stock price, stock price	Discount rate	3.04 ~ 16.37	Lower the discount rate, higher the fair value
-	3,126,937			Volatility of the stock price	20.97~22.19	Higher the volatility, higher the fair value
Financial liab	vilitios					
Derivatives h		ng				
Others	484	MonteCarlo Simulation, DCF Model	Stock price, interest rate, volatility of the stock	Volatility of the stock price	16.28	Higher the volatility, higher the fair value fluctuation
			price, volatility of the interest rate, discount rate	Volatility of the interest rate	0.52	Higher the volatility, higher the fair value fluctuation
			dissourit rate	Discount rate	1.94 ~ 2.00	Higher the discount rate, lower the fair value
	484					

				2018		
	Fair value	Valuation techniques	Inputs	Unobservable inputs	Range of unobservable inputs (%)	Relationship of unobservable inputs to fair value
Financial ass	ets					
Financial asse Debt securities	ets at fair value 1,481,141	through profit or l Monte Carlo Simulation, Net Asset Value, DCF Model	Price of underlying asset, interest rate, dividend yield,	Volatilities of the underlying asset	19.61 ~ 27.62	Higher the volatility, higher the fair value fluctuation
		Zor meger	volatilities and correlation of underlying asset, discount rate.	Correlation of underlying asset	24.57 ~ 69.18	Higher the correlation, higher the fair value fluctuation
			liquidation value, volatility of the real	Discount rate	1.95 ~ 4.82	Lower the discount rate, higher the fair value
			estate price	Liquidation value	0.00	Higher the liquidation value, higher the fair value
				Volatility of the real estate disposal price	0.00	Higher the sale price, higher the fair value
Equity securities	39,488	DCF Model, Comparable Company	Growth rate, discount rate	Growth rate	0.00	Higher the growth rate, higher the fair value
		Analysis,		Discount rate	7.58~14.14	Lower the discount rate, higher the fair value
Loans	212,596	Tree Model	Stock price, volatility of the stock price	Volatility of the stock price	17.66~49.28	Higher the volatility, higher the fair value fluctuation
Derivatives h Stock and index	neld for trading 78	Tree Model	Stock price, volatility of the stock price, dividend rate	Volatility of the stock price	25.29	Higher the volatility, higher the fair value fluctuation
Currency Financial asse		DCF Model	Interest rate, foreign exchange rate, loss given default mprehensive incom	Loss given default	100.00	Higher the loss given default, lower the fair value
Equity securities		DCF Model, Comparable Company	Growth rate, discount rate	Growth rate	0.00	Higher the growth rate, higher the fair value
		Analysis		Discount rate	3.87~17.40	Lower the discount rate, higher the fair value

Financial liabilities Derivatives held for	trading					
Others	786	MonteCarlo Simulation, DCF Model	Stock price, interest rate, volatility of the stock	Volatility of the stock price	20.85	Higher the volatility, higher the fair value fluctuation
			price, volatility of the interest rate, discount rate	Volatility of the interest rate	0.69	Higher the volatility, higher the fair value fluctuation
	786			Discount rate	2.19~2.26	Higher the discount rate, lower the fair value
	700					

Sensitivity analysis of changes in unobservable inputs

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the amounts represent the most favorable or unfavorable. Amongst Level 3 financial instruments subject to sensitivity analysis, the changes in fair values of debt securities, loans, equity-related derivatives, currency-related derivatives, interest rate-related derivatives and other derivatives are recognized in profit or loss, and the changes in fair value of equity securities are recognized in profit or loss or other comprehensive income or loss.

Sensitivity analysis by type of instrument as a result of varying input parameters are as follows:

(In millions of Korean won)	2019					
	Recognition in	profit or loss	Other compreh	ensive income		
	Favorable	Unfavorable	Favorable	Unfavorable		
	changes	changes	changes	changes		
Financial assets						
Financial assets at fair value	•					
through profit or loss						
Debt securities ^{3, 5}	3,374	(3,429)	-	-		
Equity securities ^{2, 5}	10,906	(3,858)	-	-		
Loans ⁴	6,362	(4,344)	-	-		
Derivatives held for trading ¹	1	(1)	-	-		
Financial assets at fair value						
through other comprehensive	e income					
Equity securities ^{2, 5, 6}			188,090	(94,201)		
	20,643	(11,632)	188,090	(94,201)		
Financial liabilities						
Derivatives held for trading ¹	17	(17)	-	-		
	17	(17)				
(In millions of Korean won)	2018					
	Recognition in	profit or loss	Other comprehensive income			

-	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Financial assets				
Financial assets at fair value				
through profit or loss				
Debt securities ^{3, 5}	4,231	(4,311)	-	-
Equity securities ^{2, 5}	5,299	(2,794)	-	-
Loans ⁴	129	(46)	-	-
Derivatives held for trading ¹	20	(1)	-	-
Financial assets at fair value				
through other comprehensive	income			
Equity securities ^{2, 5, 6}	-	-	140,516	(70,691)
_	9,679	(7,152)	140,516	(70,691)
Financial liabilities				
Derivatives held for trading ¹	88	(124)	-	-
_	88	(124)		
-		, ,		

 $^{^{1}}$ For Derivatives financial instruments, the changes in fair value are calculated by shifting principal unobservable input parameters; such as, price and volatility of underlying asset by \pm 10%. For certain derivatives in previous year, the changes in fair value were calculated by shifting the loss given default ratio by \pm 1%.

6.2.4 Day One Gain or Loss

If the Group uses a valuation technique that incorporates data not obtained from observable markets for the fair value at initial recognition of financial instruments, there could be a difference between the transaction price and the amount determined using that valuation technique. In these circumstances, the fair value of financial instruments is recognized as the transaction price and the difference is deferred and not recognized in profit or loss, and is amortized by using the straight-line method over the life of the financial instrument. If the fair value of the financial instruments is subsequently determined using observable market inputs, the remaining deferred amount is recognized in profit or loss.

The aggregate deferred differences yet to be recognized in profit or loss at the beginning and end of the periods and changes in the balances of these differences are as follows:

² For equity securities, the changes in fair value are calculated by shifting principal unobservable input parameters such as discount rate $(-1\sim1\%)$ and growth rate $(0\sim0.5\%)$.

³ For beneficiary certificates, it is difficult to measure the sensitivity amounts per changes in input factor for practical reasons; only for those consisted with real estate, the sensitivity amounts are calculated by increasing and decreasing volatilities of real estate disposal price (-1~1%). For equity investments, the sensitivity amounts are calculated by increasing and decreasing the correlations between the liquidation value (-1~1%) and the discount rates (-1~1%). There were no significant correlation among major unobservable inputs.

⁴ For loans, the changes in fair value are calculated by shifting principal unobservable input parameters such as stock prices, volatilities of stock prices (± 10%) and discount rate (± 1%).

⁵ The amounts of ₩ 1,634,743 million and ₩ 1,437,513 million of financial assets classified as level 3 as at December 31, 2019 and December 31, 2018, respectively, are excluded because it is impracticable to calculate the sensitivity amounts.

⁶ For some equity securities, the changes in fair value are calculated by shifting principal unobservable input parameters such as stock prices and volatilities of stock prices by ± 10%.

(In millions of Korean won)	2019	2018
Balance at the beginning of the period (A)	(2,916)	(4,054)
New transactions (B)	-	-
Amounts recognized in profit or loss during the period		
(C= a+b)	1,138	1,138
a. Amortization	1,138	1,138
b. Settlement	-	-
Balance at the end of the period (A+B+C)	(1,778)	(2,916)

6.3 Carrying Amounts of Financial Instruments by Category

Financial assets and liabilities are measured at fair value or amortized cost. The carrying amounts of financial assets and liabilities by category as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

(III IIIIIIIIIIII OIIS OI NOI Eari Wo	111)					
			2019			
	Financial instruments at fair value through profit or loss	Financial instruments mandatorily measured at fair value through other comprehensi ve income	Financial instruments designated at fair value through other comprehens ive income	Financial instruments at amortized cost	Derivatives held for hedging	Total
Financial assets						
Cash and due from financial institutions Financial assets at fair value through profit	-	-	-	14,481,309	-	14,481,309
or loss	13,866,303	-	-	-	-	13,866,303
Derivatives Loans at amortized	2,184,099	-	-	-	133,326	2,317,425
cost	-	-	-	293,531,433	-	293,531,433
Financial investments	-	36,461,280	1,993,674	13,964,339	-	52,419,293
Other financial assets				5,464,704		5,464,704
	16,050,402	36,461,280	1,993,674	327,441,785	133,326	382,080,467

(In millions of Korean won)

(III TIMMONO OI TROPOGIT II	,	2019		
	Financial instruments at fair value through profit or loss	Financial instruments at amortized cost	Derivatives held for hedging	Total
Financial liabilities Financial liabilities at fair value through profit or				
loss	80,235	-	-	80,235
Derivatives	2,132,771	-	36,211	2,168,982
Deposits	-	300,917,482	-	300,917,482
Debts	-	19,141,262	-	19,141,262
Debentures Other financial	-	18,739,992	-	18,739,992
liabilities		15,446,504		15,446,504
	2,213,006	354,245,240	36,211	356,494,457

	Financial instruments at fair value through profit or loss	Financial instruments mandatorily measured at fair value through other comprehensi ve income	2018 Financial instruments designated at fair value through other comprehens ive income	Financial instruments at amortized cost	Derivatives held for hedging	Total
Financial assets						
Cash and due from financial institutions Financial assets at fair	-	-	-	14,889,010	-	14,889,010
value through profit or loss	12,257,005	-	-	-	-	12,257,005
Derivatives Loans at amortized	1,533,650	-	-	-	80,320	1,613,970
cost	-	-	-	276,944,202	-	276,944,202
Financial investments	-	28,032,010	1,898,944	12,792,526	-	42,723,480
Other financial assets				4,199,197		4,199,197
	13,790,655	28,032,010	1,898,944	308,824,935	80,320	352,626,864

(III IIIIIIIOIIS OI NOICAII W	7011)	2018		
	Financial instruments at fair value through profit or loss	Financial instruments at amortized cost	Derivatives held for hedging	Total
Financial liabilities Financial liabilities at fair value through profit or	07.160			97.469
loss	87,168	-	-	87,168
Derivatives	1,553,858	-	88,551	1,642,409
Deposits	-	272,484,528	-	272,484,528
Debts	-	17,496,055	-	17,496,055
Debentures Other financial	-	23,163,585	-	23,163,585
liabilities		13,297,404		13,297,404
	1,641,026	326,441,572	88,551	328,171,149

6.4 Transfer of Financial Assets

6.4.1 Transferred Financial Assets that are Derecognized in Their Entirety

The Group transferred loans and other financial assets that are derecognized in their entirety to SPEs, while the maximum exposure to loss (carrying amount) from its continuing involvement in the derecognized financial assets as at December 31, 2019 and 2018, are as follows:

2010

			2019	
	Type of continuing involvement	Classification of financial instruments	Carrying amount of continuing involvement in statement of financial position	Fair value of continuing involvement in statement of financial position
Discovery 2nd Securitization Specialty Co., Ltd.	Subordinated debt	Financial assets at fair value through profit or loss Financial assets at fair	5,596	5,596
FK 1411 ABS Ltd.	Subordinated debt	value through profit or loss Financial assets at fair	5,428	5,428
AP 3B ABS Ltd.	Subordinated debt	value through profit or loss Financial assets at fair	3,205	3,205
AP 4D ABS Ltd.	Subordinated debt	value through profit or loss	6,175 20,404	6,175 20,404

(In millions of Korean won)

			2018	
			Carrying amount of continuing	
	Type of continuing involvement	Classification of financial instruments	involvement in statement of financial position	Fair value of continuing involvement in statement of financial position
Discovery 2nd Securitization	Subordinated	Financial assets at fair	<u> </u>	<u> </u>
Specialty Co., Ltd.	Subordinated debt	value through profit or loss Financial assets at fair	6,205	6,205
FK 1411 ABS Ltd.	Subordinated debt	value through profit or loss Financial assets at fair	8,883	8,883
AP 3B ABS Ltd.	Subordinated debt	value through profit or loss Financial assets at fair	5,512	5,512
AP 4D ABS Ltd.	Subordinated debt	value through profit or loss	13,494	13,494
			34,094	34,094

¹ The recovered portion in excess of the consideration paid attributable to adjustments based on the agreement with the National Happiness Fund for non-performing loans amounts to ₩ 13,731 million as at December 31, 2018.

6.4.2 Securities under Repurchase Agreements and Loaned Securities

The Group continues to recognize the financial assets related to repurchase agreements and securities lending transactions on the statements of financial position since those transactions are not qualified for derecognition even though the Group transfers the financial assets. A financial asset is sold under a reverse repurchase agreement to repurchase the same asset at a fixed price, or loaned under a securities lending agreement to be returned as the same asset. Thus, the Group substantially retains all the risks and rewards of ownership of the financial asset. The amounts of transferred assets and related liabilities as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019		
	Carrying amount of transferred assets ¹	Carrying amount of related liabilities	
Securities under repurchase agreements	871,929	825,710	
Loaned securities	788,790	-	
Government and public bonds	788,790	-	
	1,660,719	825,710	
4			

¹ Securities borrowing included 44,988 million.

(In millions of Korean won)	2018			
	Carrying amount of transferred assets	Carrying amount of related liabilities		
Securities under repurchase agreements	452,487	436,471		
Loaned securities	674,431	-		
Government and public bonds	674,431	-		
	1,126,918	436,471		

6.5 Offsetting Financial Assets and Financial Liabilities

The Group enters into International Swaps and Derivatives Association ("ISDA") master netting agreements and other similar netting arrangements with the Group's derivative and spot exchange counterparties. Similar netting agreements are also entered into with the Group's reverse repurchase, securities and others. Pursuant to these agreements, in the event of default by one party, contracts are to be terminated and receivables and payables are to be offset. Further, as the law allows for the right to offset, domestic uncollected receivables balances and domestic accrued liabilities balances are shown in its net settlement balance in the statement of financial position. Account receivables and account payables related to listed securities and derivatives or OTC derivatives settled by the central counterparty are included in the other financial instruments. As the Group has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis, the net amounts of the other financial instruments balances are presented in the statement of financial position.

Details of financial assets subject to offsetting, enforceable master netting arrangements or similar agreements as at December 31, 2019 and 2018, are as follows:

2019

	2019						
	Gross	Gross amounts of recognized financial liabilities	Net amounts of financial assets presented in the	Related amounts not offset in the statement of financial position			
	amounts of recognized financial assets	offset in the statement of financial position	statement of financial position	Financial instruments	Cash collateral	Net amount	
Derivatives held for trading Derivatives held for	2,184,029	-	2,184,029				
hedging Receivable spot	133,327	-	133,327	(1,734,044)	(1,210)	582,102	
exchange	3,003,910	-	3,003,910	(3,002,566)	-	1,344	
Reverse repurchase Domestic exchange	6,173,038	-	6,173,038	(6,173,038)	-	-	
settlement debits Other financial	31,256,658	(30,733,476)	523,182	-	-	523,182	
instruments	14,827	(6,347)	8,480	-	-	8,480	
	42,765,789	(30,739,823)	12,025,966	(10,909,648)	(1,210)	1,115,108	

(In millions of Korean won)

(III IIIIIIIOIIS OI NOI eaii W	<i>(011)</i>		201	8		
			Net			
		Gross amounts of recognized financial	amounts of financial assets presented in		ounts not e statement al position	
	Gross amounts of recognized financial assets	liabilities offset in the statement of financial position	the statement of financial position	Financial instruments	Cash collateral	Net amount
Derivatives held for						
trading Derivatives held for	1,533,572	-	1,533,572			
hedging Receivable spot	80,321	-	80,321	(1,182,820)	(5,101)	425,972
exchange	1,879,572	-	1,879,572	(1,876,844)	-	2,728
Reverse repurchase Domestic exchange	3,021,400	-	3,021,400	(3,021,400)	-	-
settlement debits Other financial	27,413,384	(26,937,034)	476,350	-	-	476,350
instruments	3,261	(2,098)	1,163	-	-	1,163
	33,931,510	(26,939,132)	6,992,378	(6,081,064)	(5,101)	906,213

Details of financial liabilities subject to offsetting, enforceable master netting arrangements or similar agreements as at December 31, 2019 and 2018, are as follows:

	2019						
	Gross	Gross amounts of recognized financial assets offset in	Net amounts of financial liabilities	Related amounts not offset in the statement of financial position			
	amounts of recognized financial liabilities	the statement of financial position	presented in the statement of financial position	Financial instruments	Cash collateral	Net amount	
Derivatives held for							
trading Derivatives held for	2,132,286	-	2,132,286	(1,566,026)	-	602,472	
hedging Payable spot	36,212	-	36,212				
exchange	3,003,464	-	3,003,464	(3,002,566)	-	898	
Repurchase ¹ Domestic exchange	825,710	-	825,710	(825,710)	-	-	
settlement credits Other financial	32,806,739	(30,733,476)	2,073,263	(2,073,263)	-	-	
instruments	6,535	(6,347)	188	-	-	188	
	38,810,946	(30,739,823)	8,071,123	(7,467,565)	-	603,558	

(In millions of Korean won)

(III IIIIIIIOIIS OI NOICEA	2018					
	Gross amounts of recognized	Gross amounts of recognized financial assets offset in the statement	Net amounts of financial liabilities presented in the statement of	Related amount in the state financial p	ement of	
	financial liabilities	of financial position	financial position	Financial instruments	Cash collateral	Net amount
Derivatives held for		position	position		- Conditional	umount
trading Derivatives held for	1,553,072	-	1,553,072	(1,139,240)	(47,745)	454,638
hedging	88,551	-	88,551			
Payable spot						
exchange	1,877,400	-	1,877,400	(1,876,844)	-	556
Repurchase ¹	445,724	-	445,724	(445,724)	-	-
Domestic exchange	:					
settlement credits	28,616,949	(26,937,034)	1,679,915	(1,679,915)	-	-
Other financial						
instruments	5,154	(2,098)	3,056	-	-	3,056
	32,586,850	(26,939,132)	5,647,718	(5,141,723)	(47,745)	458,250

7. Due from Financial Institutions

Details of due from financial institutions as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		Interest			
		Financial Institution	rate (%)	2019	2018
Due from financial	Due from Bank of Korea	Bank of Korea	-	8,117,840	8,723,761
institutions in Korean	Due from banking institutions	KEB Hana Bank and others	0.00 ~ 2.75	187,638	268,222
won	Due from others	NH Securities Co., Ltd. and others	-	9,608	5,618
				8,315,086	8,997,601
Due from financial institutions	Due from banks in foreign currencies Time deposits in	Wells Fargo Bank, N.A. and others Industrial Bank	-	2,346,580	1,733,095
in foreign currencies	foreign currencies	Changsha Branch and others	0.69 ~ 7.80	920,240	876,596
	Due from others	Morganstanley Bank International and others	-	209,099	225,944
				3,475,919	2,835,635
				11,791,005	11,833,236

¹ Before netting of allowance

Restricted due from financial institutions as at December 31, 2019 and 2018, are as follows:

(In millions of Kor	ean won)	Financial Institution	2019	2018	Reason for restriction
Due from financial	Due from Bank of Korea	Bank of Korea	8,117,840	8,723,761	Bank of Korea Act
institutions in Korean won	Due from others	NH Securities Co., Ltd. and others	9,609	5,618	Derivatives margin account
			8,127,449	8,729,379	
Due from financial institutions in foreign	Due from banks in foreign currencies Time deposits in	Bank of Korea and others	490,013	375,130	Bank of Korea Act and others
currencies	foreign currencies	YORK	23,156	22,362	New York State Banking Law
	Due from others	Morganstanley Bank International			Derivative transaction
		and others	118,814	76,930	margin
			631,983	474,422	
			8,759,432	9,203,801	

Changes in the allowances for due from financial institutions losses

Changes in the allowances for due from financial institutions losses for the years ended December 31, 2019 and 2018 are as follows:

(In millions of Korean won)	2019			
	Financial instruments	Financial instruments applying lifetime expected credit losses		
	applying 12- month expected credit losses	Non-impaired	Impaired	
Beginning ¹	1,548			
Transfer between stages	-	-	-	
Reversal of credit losses	924	1,210	360	
Others(change of currency ratio, etc.)	30	(24)	-	
Ending	2,502	1,186	360	
(In millions of Korean won)		2018		
(In millions of Korean won)	Financial instruments	2018 Financial instruments expected cree		
(In millions of Korean won)		Financial instruments		
(In millions of Korean won)	instruments applying 12- month expected credit losses	Financial instruments		
(In millions of Korean won) Beginning ¹	instruments applying 12- month expected	Financial instruments expected cree	dit losses	
	instruments applying 12- month expected credit losses	Financial instruments expected cree	dit losses	
Beginning ¹	instruments applying 12- month expected credit losses	Financial instruments expected cree	dit losses	
Beginning ¹ Transfer between stages	instruments applying 12- month expected credit losses 1,530	Financial instruments expected cree	dit losses	
Beginning ¹ Transfer between stages Reversal of credit losses	instruments applying 12- month expected credit losses 1,530 - 10	Financial instruments expected cree	dit losses	

¹ Restated based on Korean IFRS 1109.

8. Assets Pledged as Collaterals

Details of assets pledged as collaterals as at December 31, 2019 and 2018, are as follows:

(In millions of Kore	ean won)	2019		
		Carrying		
Assets pledged	Pledgee	amount	Reason for the pledge	
Securities at fair	Korea Exchange and others	280,210	Repurchase agreements	
value through	Kyobo Securities and others	11,145	Derivatives transactions	
profit or loss		291,355		
Securities at fair	_		Borrowings from Bank of	
value through	Bank of Korea	1,212,021	Korea	
other	Balik of Rolea		Settlement risk of Bank of	
comprehensive		653,825	Korea	
income	DEUTSCHE BANK AG and			
	others	95,640	Derivatives transactions	
	_	1,961,486		
Securities at	Meritz Securities and others	581,268	Repurchase agreements	
amortized cost			Borrowings from Bank of	
	Bank of Korea	1,767,559	Korea	
	Burnt of Norca		Settlement risk of Bank of	
		3,077,151	Korea	
	KB Securities Co., Ltd.	- ,	Derivatives transactions	
	Korea Exchange and others	155,595	Others	
	_	5,849,366		
Mortgage loans	Others	6,487,022	Covered Bond	
Building / Land	Samsung Life Insurance Co.,			
	Ltd. and others	207,333	Others	
		14,796,562		
	•			

^(*) In addition to the foregoing, the Group provided \forall 44,988 million of securities borrowing as collateral for the securities under repurchase agreements.

(In millions of Kore	(In millions of Korean won)		2018		
Accete pladged	Diadaaa	Carrying	December the plades		
Assets pledged	Pledgee	amount	Reason for the pledge		
Securities at fair value through	Korea Exchange and others Korea Securities Finance Corp	210,345	Repurchase agreements		
profit or loss	and others Samsung Futures Inc. and	50,806	Securities lending transactions		
	others	20,535	Derivatives transactions		
		281,686			
Securities at fair			Borrowings from Bank of		
0	Bank of Korea	49,948	Korea		
other	Donk of Konso	470 704	Settlement risk of Bank of		
comprehensive income	Bank of Korea Korea Development Bank and	479,784	Korea		
liicome	others	337 315	Derivatives transactions		
	carore	867,047	Donvatives transactions		
Securities at	Meritz Securities and others	276,688	Repurchase agreements		
amortized cost			Borrowings from Bank of		
	Bank of Korea	1,911,160	Korea		
			Settlement risk of Bank of		
	Bank of Korea	1,474,529	Korea		
	Samsung Futures Inc. and				
	others	194,258	Derivatives transactions		
	Others	156,150	Others		
		4,012,785			
Mortgage loans	Others	4,060,863	Covered Bond		
Building / Land	Samsung Life Insurance Co.,				
	Ltd. and others	209,459	Others		
		9,431,840			

The fair value of collateral available to sell or repledge regardless of debtor's default as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019		
		Fair value of collateral	
	Fair value of collateral	sold or repledged	
Securities	6,503,655	-	
(In millions of Korean won)	2018		
		Fair value of collateral	
	Fair value of collateral	sold or repledged	
Securities	3,131,496	_	

9. Derivative Financial Instruments and Hedge Accounting

The Group engages in derivative trading activities to hedge the interest rate and foreign currency risk exposures arising from the Group's own assets and liabilities. In particular, the Group applies fair value hedge accounting to interest rate swaps that hedge the risk of changes in fair values due to the changes in interest rates of structured debentures denominated in Korean won, issued financial debentures, structured deposits denominated in foreign currencies and debt securities at fair value through other comprehensive income. Also, the Group applies cash flow hedge accounting to interest rate swaps that hedge cash flow risk of debentures denominated in foreign currencies and borrowings denominated in foreign currencies. In addition, the Group applies net investment hedge accounting by designating debentures denominated in foreign currencies and spot components of the currency forward as hedging instruments that hedge foreign exchange risks on net investments in foreign operations.

Details of derivative financial instruments for trading as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019				
	Notional amount	Assets	Liabilities		
Interest rate					
Futures ¹	837,568	-	-		
Swaps ²	148,405,496	416,866	485,464		
Options	15,502,000	266,863	363,369		
	164,745,064	683,729	848,833		
Currency					
Forwards	79,191,968	885,424	670,066		
Futures ¹	-	-	-		
Swaps	46,175,092	609,438	598,670		
Options	2,789,562	5,438	14,346		
	128,156,622	1,500,300	1,283,082		
Stock and index					
Futures ¹	2,185	-	-		
Options	22,014	70	371		
	24,199	70	371		
Others	768,980	-	484		
	293,694,865	2,184,099	2,132,770		

(In millions of Korean won)	2018				
	Notional amount	Assets	Liabilities		
Interest rate					
Futures ¹	857,748	-	-		
Swaps ²	126,608,935	370,004	351,607		
Options	13,259,000	158,295	252,243		
	140,725,683	528,299	603,850		
Currency					
Forwards	65,534,154	533,435	481,187		
Futures ¹	419,802	-	-		
Swaps	35,977,216	465,774	454,216		
Options	2,450,186	6,064	13,608		
	104,381,358	1,005,273	949,011		
Stock and index					
Futures ¹	2,006	-	-		
Options	51,282	78	211		
	53,288	78	211		
Others	745,160	-	786		
	245,905,489	1,533,650	1,553,858		

¹ Gains or losses arising from daily mark-to-market futures are reflected in the margin accounts.

The average price condition for future nominal cash flows of hedging instrument by type of hedge accounting as at December 31, 2019 and December 31, 2018, are as follows:

(III IIIIIIIOIIS OI NOICAII VI	(011)						
				2019			
						Over	
	1 year	2 years	3 years	4 years	5 years	5 years	Total
Fair value hedge							
The nominal amount							
of the hedging							
instrument	757,201	1,548,353	830,440	309,882	466,053	1,414,570	5,326,499
Average price							
condition(%), (CD							
and Libor)	2.29	2.70	2.29	3.16	2.50	3.92	2.91
Cash flow hedge							
The nominal amount							
of the hedging							
instrument	1,539,874	289,450	521,010	-	-	-	2,350,334
Average price							
condition(%), (Libor)	2.68	2.65	2.83	-	-	-	2.71
Net investment in							
a foreign operation							
hedges							
The nominal amount							
of the hedging							
instrument	190,342	-	-	-	-	-	190,342
Average price							
condition							
(KRW/USD)	1,175.97	-	-	-	-	-	1,175.97

² Notional amounts of ₩ 116,555,938 million and ₩93,837,816 million as at December 31, 2019 and December 31, 2018, respectively, were traded through the central counterparty clearing house.

(In millions of Korean won)

•	,			2018			
						Over	
	1 year	2 years	3 years	4 years	5 years	5 years	Total
Fair value hedge							
The nominal amount							
of the hedging							
instrument	69,134	686,513	1,347,597	567,030	195,392	979,889	3,845,555
Average price							
condition(%), (CD							
and Libor)	2.21	2.26	2.65	2.23	3.25	3.66	2.80
Cash flow hedge							
The nominal amount							
of the hedging	0.407.007	404.004		500 445			0.400.000
instrument	2,167,227	491,964	-	503,145	-	-	3,162,336
Average price	0.70	0.44		0.00			0.70
condition(%), (Libor)	2.70	3.11	-	2.83	-	-	2.78
Net investment in							
a foreign operation							
hedges The nominal amount							
of the hedging instrument	461,104						461,104
	401,104	-	-	-	-	-	401,104
Average price condition							
(KRW/USD)	1,126.45						1,126.45
(INIXVIOSD)	1,120.43	-	-	-	-	-	1,120.43

Fair value hedge

Details of fair value hedged items as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)			2019		
	Carrying	amount		ed adjusted ount	Changes in the fair
	Assets	Liabilities	Assets	Liabilities	value
Interest rate Debt securities in					
Korean won	549,526	-	5,485	-	5,502
Debt securities in					
foreign					
currencies	1,670,838	-	19,243	-	25,540
Deposits in					
foreign					
currencies	-	780,491	-	(18,391)	(62,439)
Debentures in					
Korean won	-	351,070	-	21,070	(1,818)
Debentures in					
foreign		0.067.556		44 406	(GE 400)
currencies		2,067,556		41,406	(65,480)
	2,220,364	3,199,117	24,728	44,085	(98,695)

		2018		
Carrying	amount		-	Changes in the fair
Assets	Liabilities	Assets	Liabilities	value
465,213	-	1,214	-	6,001
702,727	-	(9,790)	-	(1,233)
-	805,215	-	(89,265)	38,232
-	349,252	-	19,252	(2,308)
_	1,429,457		(24,073)	(1,868)
1,167,940	2,583,924	(8,576)	(94,086)	38,824
	Assets 465,213 702,727	465,213 - 702,727 - 805,215 - 349,252 - 1,429,457	Carrying amount Accumulate amount Assets Liabilities Assets 465,213 - 1,214 702,727 - (9,790) - 805,215 - - 349,252 - - 1,429,457 -	Accumulated adjusted amount Assets Liabilities Assets Liabilities 465,213 - 1,214 - 702,727 - (9,790) - - 805,215 - (89,265) - 349,252 - 19,252 - 1,429,457 - (24,073)

Details of derivative instruments designated as fair value hedge as at December 31, 2019 and 2018, are as follows:

2019				
Notional	Carrying	Changes in the		
amount	Assets	Liabilities	fair value	
5,326,500	129,084	29,675	101,448	
	20	18		
Notional	Carrying	amount	Changes in the	
amount	Assets	Liabilities	fair value	
3,845,555	58,934	88,017	(37,637)	
	amount 5,326,500 Notional amount	Notional Carrying amount Assets 5,326,500 129,084 Notional Carrying amount Assets	Notional Carrying amount amount Assets Liabilities 5,326,500 129,084 29,675 2018 Notional Carrying amount amount Assets Liabilities	

Details of the ineffective portion of changes in fair value of derivatives recognized in profit or loss for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
	Hedge	Hedge
	ineffectiveness	ineffectiveness
	recognized in profit	recognized in profit
	or loss	or loss
Interest rate	2,754	1,186

Gains and losses from fair value hedging instruments and hedged items attributable to the hedged risk for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Gains and losses on hedging instruments	108,442	(41,472)
Gains and losses on the hedged item attributable to the hedged risk	(105,788)	37,305

Kookmin Bank and Subsidiaries

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2,654	(4,167)
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Cash flow hedge

Details of cash flow hedged items as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	20	2019		
	Changes in fair value	Other comprehensive income for cash flow hedge		
Interest rate risk	18,365	(3,691)		
(In millions of Korean won)	20	18		
	Changes in fair value	Other comprehensive income for cash flow hedge		
Interest rate risk	(7,031)	11,539		

Details of derivative financial instruments designated as cash flow hedging instruments as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	9	
_	Notional amount	Assets	Liabilities	Changes in fair value
Swaps	2,350,334	835	6,537	(18,276)
(In millions of Korean won)		2018	8	
_	Notional			Changes in fair
	amount	Assets	Liabilities	value
Swaps	3,162,336	17,022	534	6,961

Gains and losses from cash flow hedging instruments and hedged items attributable to the hedged risk for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Gains and losses on hedging instruments	(18,276)	6,961
Effective gains and losses from cash flow hedging instruments		
(recognized in other comprehensive income or loss)	(18,108)	6,980
Ineffective gains and losses from cash flow hedging		
instruments (recognized in profit or loss)	(168)	(19)

Amounts recognized in other comprehensive income and reclassified from equity to profit or loss for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Other comprehensive income or loss	(18,108)	6,980
Reclassification to profit or loss	(2,899)	(1,755)

Income tax effect	5,777	(1,437)
	(15,230)	3,788

As at December 31, 2019, the hedged items subject to cash flow hedge are exposed to the risk of changes in cash flows until June 9, 2022.

Hedges of a net investment in a foreign operation

Details of net investment in a foreign operation as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019		
		Other comprehensive	
		income (loss) for	
		hedges of a net	
		investment	
	Changes in fair value	in a foreign operation	
Currency (foreign currency risk)	9,967	(37,226)	
	2018		
(In millions of Korean won)	201	18	
(In millions of Korean won)	20′	Other comprehensive	
(In millions of Korean won)	201		
(In millions of Korean won)	20′	Other comprehensive	
(In millions of Korean won)	20′	Other comprehensive income (loss) for	
(In millions of Korean won)	20° Changes in fair value	Other comprehensive income (loss) for hedges of a net	

Details of derivative financial instruments designated as hedging instruments in hedge of net investment in a foreign operation as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		201	9	
_	Notional	Carrying a	amount	Changes in the
_	amount	Assets	Liabilities	fair value
Forward exchange contract Debentures in foreign	190,342	3,407	-	(6,887)
currencies	97,255	-	97,255	(3,080)
_	287,597	3,407	97,255	(9,967)
(In millions of Korean won)		201	8	
_	Notional	Carrying amount		Changes in the
_	amount	Assets	Liabilities	fair value
Forward exchange contract Debentures in foreign	461,104	4,365	-	(19,466)
currencies	89,448	-	89,109	(3,321)
_	550,552	4,365	89,109	(22,787)

The fair value of non-derivative financial instruments designated as hedging instruments in hedge of net investment in a foreign operation as at December 31, 2019 and 2018, is as follows:

(In millions of Korean won)	2019	2018
Debentures in foreign currencies	97,737	88,785

Gains or losses from hedging instruments in hedge of net investment in a foreign operation and hedged items attributable to the hedged risk for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Gains and losses on hedging instruments	(9,967)	(35,015)
Effective gains and losses from cash flow hedging		
instruments (recognized in other comprehensive		
income or loss)	(9,967)	(35,015)
Ineffective gains and losses from cash flow hedging		
instruments (recognized in profit or loss)	-	-

Gains or losses on the hedging instruments in hedge of net investment in a foreign operation relating to the effective portion of the hedge recognized in other comprehensive income or loss for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Other comprehensive income or loss	(9,962)	(35,015)
Reclassification to profit or loss	1,317	-
Income tax effect	2,377	9,629
Other comprehensive income or loss after tax	(6,268)	(25,386)

10. Loans at Amortized Cost

Loans as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Loans	294,303,453	277,916,607
Deferred loan origination fees and costs	563,941	581,997
Allowances	(1,335,961)	(1,554,402)
Carrying amount	293,531,433	276,944,202

Loans to banks as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Loans	4,041,247	3,484,211
Allowances	(434)	(620)
Carrying amount	4,040,813	3,483,591

¹ Deferred loan origination fees and costs are included.

Loans to customers other than banks as at December 31, 2019 and 2018 are as follows:

(In millions of Korean won)		2019	
_	Retail	Corporate	Total
Loans in Korean won	148,609,480	121,449,552	270,059,032
Loans in foreign currencies	276,084	7,154,477	7,430,561
Domestic import usance bills	-	2,617,862	2,617,862
Off-shore funding loans	-	1,452,288	1,452,288
Call loans	-	610,000	610,000
Bills bought in Korean won	-	2,843	2,843
Bills bought in foreign currencies	_	2,158,877	2,158,877
Guarantee payments under		2,100,011	2,100,077
payment guarantee	-	3,312	3,312
Reverse repurchase		5.007.050	5 007 050
agreements	-	5,937,258	5,937,258
Privately placed bonds		554,114	554,114
5 (0/)	148,885,564	141,940,583	290,826,147
Proportion (%)	51.19	48.81	100.00
Allowances	(474,571)	(860,956)	(1,335,527)
-	148,410,993	141,079,627	289,490,620
(In millions of Korean won)		2018	
_	Retail	Corporate	Total
Loans in Korean won			
Loans in Notean won	142,003,442	116,673,099	258,676,541
Loans in foreign currencies	142,003,442 189,582	4,238,278	4,427,860
Loans in foreign currencies Domestic import usance bills		4,238,278 2,817,174	4,427,860 2,817,174
Loans in foreign currencies		4,238,278 2,817,174 899,741	4,427,860 2,817,174 899,741
Loans in foreign currencies Domestic import usance bills		4,238,278 2,817,174	4,427,860 2,817,174
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won		4,238,278 2,817,174 899,741	4,427,860 2,817,174 899,741
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies		4,238,278 2,817,174 899,741 1,473,397	4,427,860 2,817,174 899,741 1,473,397
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee		4,238,278 2,817,174 899,741 1,473,397 3,057	4,427,860 2,817,174 899,741 1,473,397 3,057
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under		4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee		4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee Reverse repurchase	189,582 - - - - -	4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee Reverse repurchase agreements Privately placed bonds	189,582 - - - - - - 142,193,024	4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 132,821,369	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 275,014,393
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee Reverse repurchase agreements	189,582 - - - - -	4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee Reverse repurchase agreements Privately placed bonds	189,582 - - - - - - 142,193,024	4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 132,821,369 48.30 (1,108,255)	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 275,014,393
Loans in foreign currencies Domestic import usance bills Off-shore funding loans Call loans Bills bought in Korean won Bills bought in foreign currencies Guarantee payments under payment guarantee Reverse repurchase agreements Privately placed bonds Proportion (%)	189,582 - - - - - - - 142,193,024 51.70	4,238,278 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 132,821,369 48.30	4,427,860 2,817,174 899,741 1,473,397 3,057 3,427,368 4,104 2,951,400 333,751 275,014,393 100.00

Changes in deferred loan origination fees and costs for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)			2019		
	Beginning	Increase	Decrease	Other	Ending
Deferred loan origination costs	S				
Loans in Korean won	592,175	313,847	(332,725)	-	573,297
Other origination costs	486	826	(398)	-	914
	592,661	314,673	(333,123)	-	574,211
Deferred loan origination fees					
Loans in Korean won	6,322	2,316	(2,503)	-	6,135
Other origination fees	4,342	2,499	(2,707)	1	4,135
	10,664	4,815	(5,210)	1	10,270
	581,997	309,858	(327,913)	(1)	563,941
(In millions of Korean won)			2018		
(In millions of Korean won)	Beginning ¹	Increase	2018 Decrease	Other	Ending
(In millions of Korean won) Deferred loan origination costs		Increase		Other	Ending
		Increase 333,833		Other _	Ending 592,175
Deferred loan origination costs	<u> </u>		Decrease	Other -	
Deferred loan origination costs Loans in Korean won	562,425	333,833	Decrease (304,083)	Other - 1 1	592,175
Deferred loan origination costs Loans in Korean won	562,425 456	333,833 528	(304,083) (499)	- 1	592,175 486
Deferred loan origination costs Loans in Korean won Other origination costs	562,425 456	333,833 528	(304,083) (499)	- 1	592,175 486
Deferred loan origination costs Loans in Korean won Other origination costs Deferred loan origination fees	562,425 456 562,881	333,833 528 334,361	(304,083) (499) (304,582)	- 1	592,175 486 592,661
Deferred loan origination costs Loans in Korean won Other origination costs Deferred loan origination fees Loans in Korean won	562,425 456 562,881 6,793	333,833 528 334,361 2,271	(304,083) (499) (304,582) (2,742)	- 1 1	592,175 486 592,661 6,322

¹ Restated based on Korean IFRS 1109.

11. Allowances for Loan Losses

Changes in the allowances for loan losses for the years ended December 31, 2019 and 2018, are as follows:

(III IIIIIIIOIIS OI IV	2019							
		Ref	ails		Corporates			
	Financial instrumen	trumen applying lifetime		Financial instruments applying 12-	Financial instruments applying lifetime expected credit losses		Financial instruments	
	12-month expected credit losses	Non- impaired	Impaired	s applying credit impaired approach	month expected credit losses	Non- impaired	Impaired	applying credit impaired approach
Beginning	170,571	157,214	117,742	_	197,866	295,928	615,081	-
Transfer								
Between								
stages								
Transfer to 12- month								
expected								
credit losses	157,691	(157,670)	(21)	-	60,005	(46,508)	(13,497)	-
Transfer to								
lifetime								
expected credit losses								
(Non-impaired)	(140,407)	149,809	(9,402)	_	(53,662)	136,473	(82,811)	
Transfer to	(140,407)	149,009	(9,402)	_	(33,002)	130,473	(02,011)	_
lifetime								
expected								
credit losses								
(Impaired)	(280)	(45,410)	45,690	-	(2,097)	(36,462)	38,559	-
Write-offs	(2)	24	(322,075)	-	-	2	(217,532)	-
Disposal	(467)	(4)	(766)	-	-	-	(8,909)	-
Provision								
(reversal) for								
loan losses ^{1,2}	(7,875)	72,715	288,956	-	(9,172)	(91,087)	100,381	-
Others (change								
of currency			/				(== 1==:	
ratio, etc.)	55	179	(1,696)		1,580	2,438	(25,186)	
Ending	179,286	176,857	118,428		194,520	260,784	406,086	

¹Provision (reversal) for credit losses in statement of comprehensive income also includes provision (reversal) for unused commitments and guarantees (Note 22.(2)), provision (reversal) for financial guarantee contracts (Note 22.(4)), provision (reversal) of allowance for other financial assets (Note 17.(2)), provision (reversal) of allowance for due from financial institutions (Note 7.(3)) and provision (reversal) of allowance for debt securities (Note 12.(5)).

²Recovery of written-off loans amounting to ₩ 241,372 million is included.

(In millions of Korean won)

(,	2018						
		Reta	ails			Corp	orates	
	Financial instruments applying 12-month expected	Fina instrument lifetime e credit	expected	Financial instruments applying credit	Financial instruments applying 12-month expected	instru applying expecte	ancial iments g lifetime ed credit ises	Financial instruments applying credit
	credit losses	Non- impaired	Impaired	impaired approach	credit losses	Non- impaired	Impaired	impaired approach
Beginning ¹ Transfer between stages Transfer to 12- month expected credit	162,111	155,623	133,002	-	193,359	263,721	759,367	_
losses Transfer to lifetime expected credit losses (Non-	101,441	(101,375)	(66)	-	37,149	(36,251)	(897)	-
impaired) Transfer to lifetime expected credit losses	(90,045)	102,159	(12,114)	-	(34,450)	44,741	(10,291)	-
(Impaired)	(753)	(43,126)	43,880	-	(2,289)	(30,694)	32,982	-
Write-offs	-	(2)	(297,228)	-	-	(5)	(228,900)	-
Disposal Provision (reversal)	(248)	(5)	(1,003)	-	(73)	-	(14,172)	-
for loan losses ^{2,3} Others (change of currency ratio,	(2,075)	43,621	250,848	-	3,438	53,762	51,051	-
etc.)	140	319	423	-	732	654	25,941	-
Ending	170,571	157,214	117,742		197,866	295,928	615,081	

¹Restated based on Korean IFRS 1109.

The loan which were written-off but the claims has not been forfeited (i.e. its extinctive prescription did not occur, and that are not collected) amounts to $\mbox{$W$}$ 9,149,486 million and $\mbox{$W$}$ 9,712,704 million as at December 31, 2019 and December 31, 2018.

² Provision (reversal) for credit losses in statement of comprehensive income also includes provision (reversal) for unused commitments and guarantees (Note 22.(2)), provision(reversal) for financial guarantee contracts (Note 22.(4)), provision(reversal) of allowance for other financial assets (Note 17.(2)), provision (reversal) of allowance for due from financial institutions (Note 7.(3)) and provision(reversal) of allowance for debt securities (Note 12.(5)).

³ Recovery of written-off loans amounting to ₩ 284,493 million is included.

Changes in the gross carrying amounts of loans

Changes in the gross carrying amounts of loans that significantly affect allowances for loan losses for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

(III IIIIIIIOIIS OI NOIGAII WOII)		2019)	
	Financial Financial instrument lifetime expected cre			Financial instruments
	applying 12- month expected credit losses	Non-impaired	Impaired	applying credit impaired approach
Beginning	255,870,341	21,239,153	1,389,110	
Transfer between stages Transfer to 12-month				
expected credit losses Transfer to lifetime expected credit losses	53,328,737	(53,214,637)	(114,100)	-
(Non-impaired) Transfer to lifetime expected credit losses	(56,105,075)	56,629,820	(524,745)	-
(Impaired)	(405,440)	(1,632,279)	2,037,719	-
Write-offs	(2)	26	(539,607)	-
Disposal	(888,511)	(12,223)	(186,250)	-
Net increase(decrease) (Execution, repayment				
and others)	22,657,035	(3,811,182)	(850,496)	-
Ending	274,457,085	19,198,678	1,211,631	

in millions of Norean won,		2018	3	
	Financial instruments	Financial instrum	nents applying	Financial instruments
	applying 12- month expected credit losses	Non-impaired	Impaired	applying credit impaired approach
Beginning ¹	229,155,046	22,264,683	1,536,734	
Transfer between stages				
Transfer to 12-month				
expected credit losses	7,505,305	(7,465,523)	(39,782)	-
Transfer to lifetime				
expected credit losses				
(Non-impaired)	(10,092,301)	10,144,226	(51,926)	-
Transfer to lifetime				
expected credit losses	(000,000)	(704.000)	4 400 570	
(Impaired)	(638,686)	(761,893)	1,400,579	-
Write-offs	-	(7)	(526,127)	-
Disposal	(484,646)	(3,817)	(190,401)	-
Net increase(decrease)				
(Execution, repayment				
and others)	30,425,623	(2,938,516)	(739,967)	-
Ending	255,870,341	21,239,153	1,389,110	-

¹Restated based on Korean IFRS 1109.

12. Financial Assets at Fair Value through Profit or Loss and Financial Investments

Details of financial assets at fair value through profit or loss and financial investments as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Financial assets at fair value through profit or loss		
Debt securities		
Government and public bonds	1,974,113	1,948,984
Financial bonds	6,368,442	4,933,859
Corporate bonds	1,772,550	1,897,070
Asset-backed securities	100,101	59,807
Beneficiary certificates	2,283,046	2,341,301
Equity investments	209,260	164,777
Derivative-linked securities	160,576	126,417
Other debt securities	578,751	410,810
Equity securities		
Stocks	151,526	82,576
Loans		
Private placed corporate bonds	150,276	179,714
Other loans	37,857	32,882
Others		
Financial instruments indexed to the price of gold	79,805	78,808
	13,866,303	12,257,005
Financial Investments		
Financial assets at fair value through other comprehensive	ve income	
Debt securities		
Government and public bonds	8,172,111	2,941,069
Financial bonds	18,110,228	16,902,114
Corporate bonds	9,218,759	6,971,282
Asset-backed securities	615,890	867,998
Equity securities		
Stocks	1,954,173	1,861,901
Equity investments	39,501	37,043
Loans		
Private placed corporate bonds	344,292	349,547
	38,454,954	29,930,954
Financial assets at amortized cost		
Debt securities		
Government and public bonds	538,968	544,926
Financial bonds	7,607,567	6,245,768
Corporate bonds	1,753,941	1,413,022
Asset-backed securities	4,065,105	4,590,107
Allowance	(1,242)	(1,297)
	13,964,339	12,792,526
	52,419,293	42,723,480
		, ==, :==

Dividend incomes from the equity securities designated at fair value through other comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		201	19
		From the financial asset derecognized	From the remaining financial asset
Stocks	Listed	-	26,121
	Unlisted	-	17,025
Equity investm	nents	-	-
		-	43,146
(In millions of	Korean won)	201	18
(In millions of	Korean won)	201 From the financial	From the remaining
(In millions of	Korean won)		
(In millions of Stocks	Korean won) Listed	From the financial	From the remaining
`	,	From the financial	From the remaining financial asset
`	Listed Unlisted	From the financial	From the remaining financial asset 22,173
Stocks	Listed Unlisted	From the financial	From the remaining financial asset 22,173 14,508

The derecognized equity securities at fair value through other comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		201	2019			
		Disposal price ¹	Accumulated OCI as at disposal date			
Stocks	Listed	18,342	(25,652)			
	Unlisted	1,671	169			
		20,013	(25,483)			
(In millions of Korean won)		2018				
		Disposal price ¹	Accumulated OCI as at disposal date			
Stocks	Listed	26,877	18,330			
	Unlisted	480	480			
		27,357	18,810			

¹ In accordance with the resolution of the creditor groups and the joint sales agreement, the Group disposed of stocks acquired by a debt to equity swap.

Provision, and reversal for the allowance of financial investments for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	
_	Impairment	Reversal of	
	losses	impairment	Total
Debt instruments at fair value through other comprehensive			
income	(1,330)	365	(965)
Loans at fair value through			
other comprehensive income	(170)	947	777
Securities at amortized cost	(216)	271	55
	(1,716)	1,583	(133)
(In millions of Korean won)		2018	
	Impairment	Reversal of	
	losses	impairment	Total
Debt instruments at fair value through other comprehensive			
income	(877)	342	(535)
Loans at fair value through other			
comprehensive income	(905)	825	(80)
Securities at amortized cost	(202)	282	80
	(1,984)	1,449	(535)

Changes in the allowances for financial investments for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019				
	Financial instruments applying 12-	Financial ins applying lifetime e losse	expected credit			
	month expected credit losses	Non-impaired	Impaired			
Beginning	3,758	193	-			
Transfer between stages	-	-	-			
Transfer to 12-month						
expected credit losses	189	(189)	-			
Transfer to lifetime						
expected credit losses	(669)	669	-			
Disposal	(329)	-	-			
Provision (reversal) for loan						
losses	834	(701)	-			
Others (change of currency						
ratio, etc.)	38	28	-			
Ending	3,821		-			

(In millions of Korean won)	2018						
	Financial instruments applying 12-	Financial instruments applying lifetime expected credit losses					
	month expected credit losses	Non-impaired	Impaired				
Beginning ¹ Transfer between stages Transfer to 12-month	3,042	482	-				
expected credit losses Transfer to lifetime	125	(125)	-				
expected credit losses	-	-	-				
Disposal Provision (reversal) for loan	(171)	-	-				
losses Others (change of currency	715	(180)	-				
ratio, etc.)	48	16	-				
Ending	3,759	193					

¹ Prepared in accordance with Korean IFRS 1109.

13. Investments in Associates

Investments in associates as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019									
			Share of							
	Ownership	Acquisition	net asset	Carrying						
	(%)	cost	amount	amount	Industry	Location				
Korea Credit Bureau Co., Ltd. ¹	9.00	4,500	5,991	5,991	Credit information	Korea				
Balhae Infrastructure Fund ¹	12.61	105,213	101,390	101,390	Investment finance	Korea				
KB GwS Private Securities Investment Trust	20.93	89,124	108,026	108,026	Investment finance	Korea				
Incheon Bridge Co., Ltd. ¹	14.99	9,159	(14,746)	-	Operation of highways and related facilities	Korea				
KB Sprott Renewables No.1. Private Equity Fund ¹	30.00	1,327	1,031	1,031	Investment finance	Korea				
KB Digital innovation & Growth New Technology Business Investment Fund ¹	45.00	2,250	2,030	2,030	Discovery of and investment in promising FinTech-business venture	Korea				
KB12-1 Venture Investment Partnership ²	80.00	14,000	53,535	53,535	Investment finance	Korea				
Future Planning KB Start-up Creation Fund ²	50.00	9,900	15,021	15,021	Investment finance	Korea				
KoFC POSCO HANWHA KB Shared Growth No.2.	20.00	10,376	10,892	10,892	Investment finance	Korea				
KB High-tech Company Investment Fund ²	50.00	13,350	31,904	31,904	Investment finance	Korea				
Aju Good Technology Venture Fund	38.46	19,998	23,016	23,016	Investment finance	Korea				
KB-KDBC New Technology Business Investment Fund ²	33.33	10,000	9,494	9,494	Investment finance	Korea				
KB-TS Technology Venture Private Equity Fund ²	30.00	10,620	10,570	10,570	Investment finance	Korea				
KB Intellectual Property Fund	37.50	9,000	8,514	8,514	Investment finance	Korea				

2 ² KB Digital Innovation	25.74	32,200	31,371	31,371	Investment finance	Korea
Investment Fund Limited partnership ²		0-,-00	.,,	,		
KB-Brain KOSDAQ Scale-up Fund ²	21.28	11,000	10,252	10,252	Investment finance	Korea
KB Global Platform Fund ²	22.73	19,500	18,779	18,779	Investment finance	Korea
KB-UTC Inno-Tech Venture Fund ²	29.53	300	278	278	Investment finance	Korea
Shinla Construction Co., Ltd. ³	20.17	-	(551)	-	Specialty construction	Korea
Terra Corporation ³	24.06	-	2	-	Manufacture of fabricated and processed metal products	Korea
MJT&I Corp. ³	22.89	-	(613)	116	Wholesale of other merchandise	Korea
Jungdong Steel Co., Ltd. ³	42.65	-	(433)	-	Wholesale of primary metal	Korea
Doosung Metal Co., Ltd ³	26.49	-	(62)	_	Manufacture of metal	Korea
3			(- /		door, windows, shutter and relevant products	
Shinhwa Underwear Co., Ltd.	26.05	-	16	256	Manufacture of underwear	Korea
					and sleepwear	
DPAPS Co., Ltd. ³	38.62	-	(550)	-	Wholesale of paper	Korea
Jaeyang Industry Co., Ltd. ³	20.86	-	(552)	-	Manufacture of pouches, cases, and bags	Korea
Kendae Co., Ltd. ³	41.01	-	(252)	98	Screen Printing	Korea
Jinseung Tech Co., Ltd. ³	30.04	-	(194)	-	Manufacture of other general-purpose machinery n.e.c.	Korea
Dongjo Co., Ltd. ³	29.29	_	806	115	Wholesale of agricultural	Korea
20.19,0 00.1, 214.	20.20				and forestry machinery and equipment	.10.00
Korea NM Tech Co., Ltd. ³	22.41	-	552	-	Manufacture of motor vehicles, trailers and semitrailers	Korea
Jungdo Co., Ltd. ³	25.34	-	1,492	-	Office, commercial and institutional building construction	Korea
Dae-A Leisure Co., Ltd. ³	49.36	_	1,613	578	Earth works	Korea
Chong Il Machine & Tools	20.40	-	(126)	-	Wholesale machinery	Korea
Co., Ltd. ³			, ,	2	and equipment	
Imt Technology Co., Ltd. ³	25.29	-	22	3	Computer Peripherals distribution	Korea
Iwon Alloy Co., Ltd. ³	23.20	-	394	-	Manufacture of smelting, refining and alloys	Korea
Carlife Co., Ltd. ³	24.39	-	(75)	-	Publishing of magazines and periodicals (publishing industry)	Korea
Computerlife Co., Ltd. ³	45.71	-	(260)	69	Publishing of magazines and periodicals (publishing industry)	Korea
SKYDIGITAL INC.3	20.40	-	(248)	-	Manufacture of Multimedia machine	Korea
Jo Yang Industrial Co., Ltd. ³	22.77	-	75	-	Manufacture of Special Glasses	Korea
IL-KWANG ELECTRONIC MATERIALS CO., LTD ³	29.06	-	(398)	-	Manufacture of electronic parts	Korea
SO-MYUNG RECYCLING CO., LTD. ³	20.23	-	184	-	Manufacture of nonferrous metal	Korea
IDTECK CO., LTD ³	32.80	-	(103)	-	Other manufacturing of wireless	Korea

Seyoon Development Company ³	26.95	-	2	-	Civil engineering facility construction industry	Korea
PIP System CO., LTD ³	20.72	-	27	-	Print equipment	Korea
PT Bank Bukopin TBK ^{4,5}	22.00	116,422	115,321	121,382	Bank, foreign currency work	Indonesia
		488,239	543,987	564,711		
(In millions of Korean won)				2018		
	Ownership (%)	Acquisition cost	Share of net asset amount	Carrying amount	Industry	Location
Korea Credit Bureau Co., Ltd. ¹	9.00	4,500	5,941	5,941	Credit information	Korea
Balhae Infrastructure Fund ¹ KB GwS Private Securities Investment Trust	12.61 20.93	104,621 89,124	108,050 106,613	108,050 106,613	Investment finance Investment finance	Korea Korea
Incheon Bridge Co., Ltd. 1	14.99	9,159	(16,689)	-	Operation of highways and related facilities	Korea
KB Digital innovation & Growth New Technology Business Investment Fund ¹	45.00	1,125	1,079	1,079	Discovery of and investment in promising FinTech-business venture	Korea
KB12-1 Venture Investment Partnership ²	80.00	17,400	49,912	49,912	Investment finance	Korea
Future Planning KB Start-up Creation Fund ²	50.00	14,300	18,069	18,069	Investment finance	Korea
KoFC KBIC Frontier Champ 2010-5(PEF)	30.00	90	140	140	Investment finance	Korea
KoFC POSCO HANWHA KB Shared Growth No.2. Private Equity Fund	20.00	10,376	11,681	11,681	Investment finance	Korea
KB High-tech Company Investment Fund ²	50.00	20,300	22,563	22,563	Investment finance	Korea
Aju Good Technology Venture Fund	38.46	18,038	18,134	18,134	Investment finance	Korea
KB-KDBC New Technology Business Investment Fund ²	33.33	7,500	7,297	7,297	Investment finance	Korea
KBTS Technology Venture Private Equity Fund ²	30.00	7,620	7,381	7,381	Investment finance	Korea
KB IP Investment Fund $\ensuremath{\mathbb{I}}^2$	37.50	3,000	2,942	2,942	Investment finance	Korea
KB Digital Innovation Investment Fund Limited partnership ²	25.74	7,700	7,617	7,617	Investment finance	Korea
KB-Brain KOSDAQ Scale-up Fund ²	21.28	4,000	3,966	3,966	Investment finance	Korea
KB Star office private real estate Investment Trust No.1	21.05	20,000	20,252	20,252	Investment finance	Korea
Shinla Construction Co., Ltd. ³ Terra Corporation ³	20.17 24.06	-	(551) 2	-	Specialty construction Manufacture of fabricated and processed metal products	Korea Korea
MJT&I Corp. ³	22.89	-	(606)	122	Wholesale of other merchandise	Korea
Jungdong Steel Co., Ltd. ³	42.65	-	(433)	-	Wholesale of primary metal	Korea
Doosung Metal Co., Ltd ³	26.49	-	(16)	-	Manufacture of metal door, windows, shutter and relevant products	Korea

Shinhwa Underwear Co., Ltd.	26.05	-	(57)	182	Manufacture of underwear and sleepwear	Korea
DPAPS Co., Ltd. 3	38.62	_	14	_	Wholesale of paper	Korea
Jaeyang Industry Co., Ltd. ³	20.86	-	(552)	-	Manufacture of pouches, cases, and bags	Korea
Kendae Co., Ltd. ³	41.01	-	(252)	98	Screen Printing	Korea
Jinseung Tech Co., Ltd. ³	30.04	-	(176)	-	Manufacture of other general-purpose machinery n.e.c.	Korea
Dongjo Co., Ltd. ³	29.29	-	806	115	Wholesale of agricultural and forestry machinery and equipment	Korea
Korea NM Tech Co., Ltd. ³	22.41	-	552	-	Manufacture of motor vehicles, trailers and semitrailers	Korea
Jungdo Co., Ltd. ³	25.34	-	1,492	-	Office, commercial and institutional building construction	Korea
Dae-A Leisure Co., Ltd. ³	49.36	-	1,613	578	Earth works	Korea
Chong II Machine & Tools Co., Ltd. ³	20.40	-	(107)	-	Wholesale machinery and equipment	Korea
Imt Technology Co., Ltd. ³	25.29	-	18	-	Computer Peripherals distribution	Korea
Iwon Alloy Co., Ltd. ³	23.20	-	394	-	Manufacture of smelting, refining and alloys	Korea
Carlife Co., Ltd. ³	24.39	-	(75)	-	Publishing of magazines and periodicals (publishing industry)	Korea
Computerlife Co., Ltd. ³	45.71	-	(329)	-	Publishing of magazines and periodicals (publishing industry)	Korea
SKYDIGITAL INC.3	20.40	-	(142)	-	Manufacture of Multimedia machine	Korea
Jo Yang Industrial Co., Ltd. ³	22.77	-	75	-	Manufacture of Special Glasses	Korea
PT Bank Bukopin TBK ^{4,5}	22.00	116,422	106,484	113,932	Bank, foreign currency work	Indonesia
		455,275	483,102	506,664		

¹ As at December 31, 2019 and December 31, 2018, the Group is represented in the governing bodies of its associates. Therefore, the Group has significant influence over the decision-making process relating to their financial and business policies.

Although the Group holds more than 20% of ownership in many investment trusts including Hanbando BTL Private Special Asset Fund, those investment trusts are not recognized as associates of the Group because the Bank's influence to those trust is limited according to the trust agreement. In addition, the Group holds more than 20% of its ownership in nine companies including Orient shipyard Co., Ltd., but those companies are not recognized as associates of the Bank bacause the Group's influence to those companies is limited due to the status of those companies such as bankruptcy and rehabilitation.

² As at December 31, 2019 and December 31 2018, the Group is a partner in a limited partnership and does not have the right to control over these entities.

³ The investment in associates was reclassified from financial assets at fair value through other comprehensive income due to termination of rehabilitation procedures.

⁴The Group has entered into an agreement with PT Bosowa Corporindo, the major shareholder of PT Bank Bukopin TBK. Under this agreement, both parties have a right of first refusal, a tag-along right and a drag-along right. The Group additionally has the drag-along right that can be exercised for the duration of two years after three-years from acquisition date (July 27, 2018), subject to the occurrence of certain situations as defined in the agreement.

⁵ The fair value of PT Bank Bukopin TBK's common stock based on its quoted market price is ₩47,709 million and ₩53,540 million as at December 31, 2019 and December 31, 2018.

Summarized financial information on the main associates, the carrying amount of the Group's interest in the main associates and dividends received from the main associates is as follows:

•	,	2019 ¹						
	Total assets	Total liabilities	Paid-in capital	Equity	Share of net asset amount	Unrealized gains and losses and others	Carrying amount	
Korea Credit Bureau Co., Ltd.	96,855	30,289	10,000	66,566	5,991	-	5,991	
Balhae Infrastructure Fund KB GwS Private Securities	806,218	1,854		804,364	101,390	-	101,390	
Investment Trust Incheon Bridge Co., Ltd.	522,865 609,194	741 707,563	425,814 61,096	522,124 (98,369)	108,026 (14,746)	- 14,746	108,026	
KB Sprott Renewables No.1. Private Equity Fund	3,686	249	9,640	3,437	1,031	_	1,031	
KB Digital Innovation & Growth New Technology Business Investment								
Fund KB12-1 Venture	4,510	-	5,000	4,510	2,030	-	2,030	
Investment Partnership Future Planning KB Start-	67,896	977	17,500	66,919	53,535	-	53,535	
up Creation Fund KoFC POSCO HANWHA KB Shared Growth No.2.	32,704	2,662	19,800	30,042	15,021	-	15,021	
Private Equity Fund KB High-tech Company	55,524	1,063	51,880	54,461	10,892	-	10,892	
Investment Fund Aju Good Technology	64,125	317	26,700	63,808	31,904	-	31,904	
Venture Fund KB-KDBC New Technology Business Investment	60,675	828	52,000	59,847	23,016	-	23,016	
Fund KBTS Technology Venture	29,086	603	30,000	28,483	9,494	-	9,494	
Private Equity Fund	36,445	1,212	35,400	35,233	10,570	-	10,570	
KB IP Investment Fund Ⅱ	22,708	4	24,000	22,704	8,514	-	8,514	
KB Digital Innovation Investment Fund Limited partnership	122,153	255	125,120	121,898	31,371	-	31,371	
KB-Brain KOSDAQ Scale- up Fund	48,369	185	51,700	48,184	10,252	_	10,252	
KB Global Platform Fund KB-UTC Inno-Tech	85,314	2,686	85,800	82,628	18,779	-	18,779	
Venture Fund	1,016	75	1,016	941	278	-	278	
PT Bank Bukopin TBK ²	8,148,013	7,623,829	106,536	524,184	115,321	6,061	121,382	

			2019 ¹		
			Other	Comprehen-	
	Operating	Profit	comprehen-	sive income	
	revenues	(Loss)	sive income	(loss)	Dividends
Korea Credit Bureau Co., Ltd.	91,200	1,480		1,480	135
Balhae Infrastructure Fund	62,113	(3,153)	-	(3,153)	6,855
KB GwS Private Securities					
Investment Trust	42,503	41,524	-	41,524	7,276
Incheon Bridge Co., Ltd.	107,178	9,127	-	9,127	-
KB Sprott Renewables No.1.					
Private Equity Fund	1	(986)	-	(986)	-
KB Digital Innovation & Growth					
New Technology Business					
Investment Fund	8	(388)	-	(388)	-
KB12-1 Venture					
Investment Partnership	15,082	8,778	-	8,778	-
Future Planning KB Start-					
up Creation Fund	5,831	2,704	-	2,704	-
KoFC POSCO HANWHA KB					
Shared Growth No.2. Private					
Equity Fund	4,077	(3,911)	-	(3,911)	-
KB High-tech Company					
Investment Fund	35,565	32,581	-	32,581	-
Aju Good Technology Venture					
Fund	9,288	7,734	-	7,734	-
KB-KDBC New Technology					
Business Investment Fund	371	(638)	-	(638)	-
KBTS Technology Venture					
Private Equity Fund	1,643	632	-	632	-
KB IP Investment FundⅡ	70	(1,141)		(1,141)	
KB Digital Innovation	70	(1,141)	-	(1,141)	-
Investment Fund Limited					
	2 564	(2.000)		(2,000)	
partnership	2,564	(2,900)	-	(2,900)	-
KB-Brain KOSDAQ Scale-up	400	(0.055)		(2.255)	
Fund	138	(3,355)	-	(3,355)	-
KB Global Platform Fund	250	(3,172)	-	(3,172)	-
KB-UTC Inno-Tech Venture		/ 7 E\		/ 7 5\	
Fund	704 400	(75)	45 700	(75)	-
PT Bank Bukopin TBK	721,169	(5,612)	45,780	40,168	-

(III IIIIIIIOIIS OI NOI eari Wori)	,			2018 ¹			
	Total assets	Total liabilities	Paid-in capital	Equity	Share of net asset amount	Unrealized gains and losses and others	Carrying amount
Korea Credit Bureau Co.,	00.707	00.700	10.000	00,000	E 0.44		E 044
Ltd.	88,797	22,788	10,000	66,009	5,941	-	5,941
Balhae Infrastructure Fund KB GwS Private Securities	859,040	1,843	829,995	857,197	108,050	-	108,050
Investment Trust	516,115	741	425,814	515,374	106,613		106,613
Incheon Bridge Co., Ltd.	617,560	728,896	61,096	(111,336)	(16,689)	16,689	100,013
KB Digital Innovation & Growth New Technology		720,090			(10,009)	10,009	-
Business Investment Fund	2,398	-	2,500	2,398	1,079	-	1,079
KB12-1 Venture Investment							
Partnership	63,628	1,238	21,750	62,390	49,912	-	49,912
Future Planning KB Start-up							
Creation Fund	38,889	2,751	28,600	36,138	18,069	-	18,069
KoFC KBIC Frontier Champ	400			400	4.40		
2010-5(PEF)	469	3	300	466	140	-	140
KoFC POSCO HANWHA KB Shared Growth No.2.							
Private Equity Fund	59,464	1,061	51,880	58,403	11,681	_	11,681
KB High-tech Company	39,404	1,001	31,000	30,403	11,001	-	11,001
Investment Fund	45,402	276	40,600	45,126	22,563	_	22,563
Aju Good Technology	40,402	210	40,000	40,120	22,000	_	22,000
Venture Fund	47,216	66	46,900	47,150	18,134	_	18,134
KB-KDBC New Technology	,=.0		.0,000	,	.0,.0.		. 5, . 5 .
Business Investment Fund	22,492	602	22,500	21,890	7,297	-	7,297
KBTS Technology Venture	,		•	,	•		,
Private Equity Fund	24,810	208	25,400	24,602	7,381	-	7,381
KB IP Investment Fund Ⅱ	7,848	3	8,000	7,845	2,942		2,942
KB Digital Innovation Investment Fund Limited	7,040	3	8,000	7,045	2,942	-	2,942
partnership	29,601	3	29,920	29,598	7,617	-	7,617
KB-Brain KOSDAQ Scale-up							
Fund	18,820	181	18,800	18,639	3,966	-	3,966
KB Star office private real estate Investment Trust							
No.1	218,025	121,828	95,000	96,197	20,252		20,252
PT Bank Bukopin TBK ²	7,195,249	6,711,233	106,536	484,016	106,484	7,448	113,932

			2018 ¹		
			Other	Comprehen-	
	Operating	Profit	comprehen-	sive income	
	revenues	(Loss)	sive income	(loss)	Dividends
Korea Credit Bureau Co., Ltd.	78,018	9,901	_	9,901	113
Balhae Infrastructure Fund	61,525	54,241	-	54,241	6,804
KB GwS Private Securities					
Investment Trust	42,502	41,524	-	41,524	6,385
Incheon Bridge Co., Ltd.	94,373	(2,757)	-	(2,757)	-
KB Digital Innovation & Growth					
New Technology Business					
Investment Fund	7	(82)	(21)	(103)	-
KB12-1 Venture					
Investment Partnership	38,942	35,556	-	35,556	10,640
Future Planning KB Start-					
up Creation Fund	6,826	5,467	-	5,467	2,600
KoFC KBIC Frontier Champ					
2010-5(PEF)	1,460	1,453	-	1,453	999
KoFC POSCO HANWHA KB					
Shared Growth No.2. Private					
Equity Fund	2,401	(12,313)	-	(12,313)	-
KB High-tech Company					
Investment Fund	5,025	86	-	86	-
Aju Good Technology Venture					
Fund	2,491	1,356	-	1,356	-
KB-KDBC New Technology					
Business Investment Fund	39	(568)	-	(568)	-
KBTS Technology Venture					
Private Equity Fund	-	(798)	-	(798)	-
KB IP Investment FundⅡ	9	(155)	-	(155)	_
KB Digital Innovation		,		` ,	
Investment Fund Limited					
partnership	24	(322)	-	(322)	-
KB-Brain KOSDAQ Scale-up		, ,		, ,	
Fund	20	(161)	-	(161)	-
KB Star office private real		, ,		, ,	
estate Investment Trust No.1	14,092	6,135	-	6,135	1,162
PT Bank Bukopin TBK	148,793	(8,843)	(2,325)	(11,168)	-
•		` '	, ,	. ,	

¹ The amounts included in the financial information of the associates are adjusted to reflect adjustments made by the Group, such as fair value adjustments made at the time of acquisition and adjustments for differences in accounting policies.

² The goodwill of PT Bank Bukopin TBK as at December 31, 2019 and 2018, are ₩ 4,437 million and ₩ 4,101 million, respectively.

Changes in investments in associates for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean	won)				2040			
		Acquisit	Disposal		Gains (losses)	Other comprehe	Impairme	
	Beginning	ion and others	and others	Dividends	from using equ method	nsive income	nt loss	Ending
Korea Credit Bureau Co., Ltd.	5,941			(135)	185		-	5,991
Balhae Infrastructure Fund KB GwS Private Securities	108,050	593	-	(6,855)	(398)		-	101,390
Investment Trust KB Sprott Renewables No.1.	106,613	-	-	(7,276)	8,689	-	-	108,026
Private Equity Fund KB Digital Innovation & Growth	-	1,327	-	-	(296)	-	-	1,031
New Technology Business Investment Fund	1,079	1,125	_	-	(174)	_	-	2,030
KB12-1 Venture Investment Partnership	49,912	_	(3,400)	_	7,023	_	_	53,535
Future Planning KB Start-up								
Creation Fund KoFC KBIC Frontier Champ	18,069	-	(4,400)	-	1,352	-	-	15,021
2010-5(PEF) KoFC POSCO HANWHA KB Shared Growth No.2. Private	140	-	(140)	-	-	-	-	-
Equity Fund KB High-tech Company	11,681	-	-	-	(789)	-	-	10,892
Investment Fund	22,563	-	(6,950)	-	16,291	-	-	31,904
Aju Good Technology Venture Fund	18,134	1,960	-	-	2,922	-	-	23,016
KB-KDBC New Technology Business Investment Fund	7,297	2,500	-	-	(303)	-	-	9,494
KBTS Technology Venture Private Equity Fund	7,381	4,200	(1,200)	-	189	_	-	10,570
KB Intellectual Property Fund 2 KB Digital Innovation Investment	2,942	6,000	-	-	(428)	-	-	8,514
Fund Limited Partnership KB-Brain KOSDAQ Scale-up	7,617	24,500	-	-	(746)	-	-	31,371
Fund	3,966	7,000	-	_	(714)	_	_	10,252
KB Global Platform Fund KB-UTC Inno-Tech Venture	-	19,500	-	-	(721)	-	-	18,779
Fund KB Star office private real estate	-	300	-	-	(22)	-	-	278
Investment Trust No.1	20,252	_	(20,252)	_	_	_	_	_
MJT&I Corp.	122	_	(20,232)	_	(6)	_	_	116
Shinhwa Underwear Co., Ltd.	182	_	_	_	74	_	_	256
Kendae Co.,Ltd.	98	_	_	_	-	_	_	98
Dongjo Co., Ltd.	115	_	_	_	_	_	_	115
Dae-A Leisure Co., Ltd.	578	_	_	_	_	_	_	578
Imt Technology Co., Ltd.	-	_	_	_	3	_	_	3
Computerlife Co., Ltd	_	_	_	_	69	_	_	69
IL-KWANG ELECTRONIC	_	_		_	03	_	_	03
MATERIALS CO., LTD.	-	-	_	-	-	_	-	-
SO-MYUNG RECYCLING CO.,								
LTD.	_	_	_	_	_	_	_	_
IDTECK CO., LTD	_	_	_	_	_	_	-	_
Seyoon	_	-	_	_	_	_	-	_
Development Company	-	-	-	-	-	-	-	-
PIP System CO., LTD	-	-	-	-	-	-	-	-
PT Bank Bukopin TBK	113,932				(1,235)	10,408	(1,723)	121,382
	506,664	69,005	(36,342)	(14,266)	30,965	10,408	(1,723)	564,711

				2018			
	Beginning ¹	Acquisitio n and others	Disposal and others	Dividends	Gains (losses) from using equity method	Other comprehen sive income	Ending
Korea Credit Bureau Co., Ltd.	5,056	-	-	(113)	998	-	5,941
Balhae Infrastructure Fund KB GwS Private Securities	105,190	4,645	(1,818)	(6,804)	6,837	-	108,050
Investment Trust KB Digital Innovation & Growth New Technology Business Investment	104,310	-	-	(6,386)	8,689	-	106,613
Fund KB12-1 Venture	-	1,125	-	-	(37)	(9)	1,079
Investment Partnership Future Planning KB Start-	37,507	-	(5,400)	(10,640)	28,445	-	49,912
up Creation Fund KoFC KBIC Frontier	18,336	-	(400)	(2,600)	2,733	-	18,069
Champ 2010-5(PEF) KoFC POSCO HANWHA KB Shared Growth No.2.	4,137	-	(3,138)	(999)	140	-	140
Private Equity Fund KB High-tech Company	14,171	-	-	-	(1,498)	(992)	11,681
Investment Fund Aju Good Technology	27,220	-	(4,700)	-	43	-	22,563
Venture Fund KB-KDBC New Technology Business	8,230	9,808	-	-	96	-	18,134
Investment Fund KBTS Technology Venture Private Equity	2,486	5,000	-	-	(189)	-	7,297
Fund	-	7,620	-	-	(239)	-	7,381
KB IP Investment Fund Ⅱ KB Digital Innovation Investment Fund Limited	-	3,000	-	-	(58)	-	2,942
Partnership KB-Brain KOSDAQ Scale-	-	7,700	-	-	(83)	-	7,617
up Fund KB Star office private real estate Investment Trust	-	4,000	-	-	(34)	-	3,966
No.1	20,122	-	-	(1,162)	1,292	-	20,252
Terra Corporation	20	-	-	-	(20)	-	-
MJT&I Corp. Shinhwa Underwear Co.,	127	-	-	-	(5)	-	122
Ltd.	138	-	-	-	44	-	182
Kendae Co.,Ltd.	127	-	-	-	(29)	-	98
Dongjo Co., Ltd.	-	-	-	-	115	-	115
Dae-A Leisure Co., Ltd. PT Bank Bukopin TBK		116,422			3,698 (1,946)	(3,120)	578 113,932
	347,177	159,320	(15,456)	(28,704)	48,992	(4,665)	506,664

¹Restated based on Korean IFRS 1109.

The tables below provide unrecognized share of losses of associates, both for the reporting period and cumulatively, because the Group has stopped recognizing its share of losses of associates when applying the equity method.

(In millions of Korean won)	20	19	2018		
	Unrecognized loss (gain)	Accumulated unrecognized loss	Unrecognized loss (gain)	Accumulated unrecognized loss	
Incheon Bridge Co., Ltd.	(1,944)	14,746	487	16,689	
Shinla Construction Co., Ltd.	-	183	-	183	
Doosung Metal Co., Ltd	46	65	(4)	19	
Jungdong Steel Co., Ltd	-	487	-	487	
DPAPS Co., Ltd.	14	339	141	325	
Jinseung Tech Co., Ltd.	18	21	3	3	
Korea NM Tech Co., Ltd.	-	28	28	28	
Jungdo Co., Ltd.	-	160	160	160	
Jaeyang Industry Co., Ltd.	-	30	30	30	
Terra Corporation	-	14	14	14	
Chong Il Machine & Tools					
Co., Ltd.	19	19	-	-	
SKYDIGITAL INC	106	106	-	-	

14. Property and Equipment, and Investment Properties

Details of property and equipment as at December 31, 2019 and 2018, are as follows:

|--|

			Accumulated	
	Acquisition cost	Accumulated depreciation	impairment losses	Carrying amount
Land	1,985,370	-	(1,018)	1,984,352
Buildings	1,478,343	(476,154)	(5,859)	996,330
Leasehold improvements	788,586	(697,387)	-	91,199
Equipment and vehicles	1,262,759	(1,001,033)	-	261,726
Construction in-progress	85,953	-	-	85,953
Right-of-use assets	597,267	(232,453)	-	364,814
	6,198,278	(2,407,027)	(6,877)	3,784,374

2019

(In millions of Korean won) 2018

		Accumulated	
Acquisition cost	Accumulated depreciation	impairment losses	Carrying amount
1,979,811	-	(1,018)	1,978,793
1,256,234	(442,318)	(5,859)	808,057
794,814	(700,046)	-	94,768
1,147,644	(993,785)	-	153,859
81,268	-	-	81,268
32,709	(21,788)	-	10,921
5,292,480	(2,157,937)	(6,877)	3,127,666
	1,979,811 1,256,234 794,814 1,147,644 81,268 32,709	cost depreciation 1,979,811 - 1,256,234 (442,318) 794,814 (700,046) 1,147,644 (993,785) 81,268 - 32,709 (21,788)	Acquisition cost Accumulated depreciation impairment losses 1,979,811 - (1,018) 1,256,234 (442,318) (5,859) 794,814 (700,046) - 1,147,644 (993,785) - 81,268 - - 32,709 (21,788) -

Changes in property and equipment for the years ended December 31, 2019 and 2018, are as follows:

				2019			
	Beginning ¹	Acquisition	Transfers ²	Disposal	Depreciation	Others	Ending
Land	1,978,793	185	5,483	(124)	-	15	1,984,352
Buildings	808,057	67	224,748	(3,095)	(33,481)	34	996,330
Leasehold							
improvements	89,709	2,707	62,263	-	(63,576)	96	91,199
Equipment							
and vehicles	153,859	229,793	-	(234)	(121,820)	128	261,726
Construction							
in-progress	81,268	292,852	(288,119)	-	-	(48)	85,953
Right-of-use							
assets	376,606	328,623	<u> </u>	(138,642)	(218,565)	16,792	364,814
	3,488,292	854,227	4,375	(142,095)	(437,442)	17,017	3,784,374

(In millions of Korean won)

				2018			
	Beginning	Acquisition	Transfers ²	Disposal	Depreciation	Others	Ending
Land	1,972,212	124	7,129	(691)	-	19	1,978,793
Buildings	801,064	-	40,956	(4,079)	(29,928)	44	808,057
Leasehold							
improvements	76,076	1,086	69,646	(242)	(62,035)	10,237	94,768
Equipment							
and vehicles	148,826	102,974	246	(795)	(97,423)	31	153,859
Construction							
in-progress	12,187	229,765	(160,684)	-	-	-	81,268
Finance							
lease assets	5,229	9,640			(3,948)		10,921
	3,015,594	343,589	(42,707)	(5,807)	(193,334)	10,331	3,127,666

¹ Restated based on Korean IFRS 1116.

Changes in accumulated impairment losses of property and equipment for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

Beginning	Impairment	Reversal	Others	Ending
(6,877)			-	(6,877)

(In millions of Korean won)

2018

Beginning	Impairment	Reversal	Others	Ending
(6,877)	-	-	-	(6,877)

Details of investment properties as at December 31, 2019 and 2018, are as follows:

		Accumulated	
	Acquisition cost	depreciation	Carrying amount
Land	328,587	-	328,587
Buildings	164,774	(17,393)	147,381
	493,361	(17,393)	475,968

2018

		Accumulated	
	Acquisition cost	depreciation	Carrying amount
Land	166,737		166,737
Buildings	107,554	(16,367)	91,187
	274,291	(16,367)	257,924

² Including transfers from investment properties and assets held for sale.

The valuation technique and input variables that are used to measure the fair value of investment property as at December 31, 2019, are as follows:

(In millions of Korean won)		2019	
	Fair Value	Valuation technique	Inputs
	47,623	Cost approach value	- Price per square meter - Replacement cost
Land and Buildings	465,684	Income approach	Discount rateCapitalization rateVacancy rate

Rental income from the above investment properties for the years ended December 31, 2019 and 2018, amounts to \forall 15,663 million and \forall 18,162 million, respectively.

Changes in investment properties for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

				2019		
	Beginning	Acquisitions	Transfers	Disposal	Depreciation	Ending
Land	166,737	167,333	(5,483)	-	-	328,587
Buildings	91,187	63,251	(4,195)	-	(2,862)	147,381
	257,924	230,584	(9,678)	-	(2,862)	475,968

(In millions of Korean won)

				2010		
	Beginning	Acquisitions	Transfers	Disposal	Depreciation	Ending
Land	205,723	-	17,069	(56,055)	-	166,737
Buildings	131,777	179	13,349	(50,872)	(3,246)	91,187
	337,500	179	30,418	(106,927)	(3,246)	257,924
3					(-, -,	

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15. Intangible Assets

Details of intangible assets as at December 31, 2019 and 2018, are as follows:

arrying
mount
65,288
203,443
268,731
arrying
mount
65,288
158,920
224,208
r

Details of goodwill as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	201	19	2018		
	Acquisition cost	Carrying amount	Acquisition cost	Carrying amount	
Housing & Commercial Bank	65,288	65,288	65,288	65,288	
KB Cambodia Bank	1,202	-	1,202	-	
	66,490	65,288	66,490	65,288	

The goodwill arose from the merger of Housing & Commercial Bank ("H&CB"), and there is no change in goodwill for the years ended December 31, 2019 and 2018.

Changes in accumulated impairment losses for the years ended December 31, 2019 and 2018, are as follows:

		2019		
Beginning	Impairment	Reversal	Others	Ending
(1,202)			-	(1,202)
		2018		
Beginning	Impairment	Reversal	Others	Ending
(1,202)			_	(1,202)
	(1,202) Beginning	(1,202) - Beginning Impairment	Beginning Impairment Reversal (1,202) 2018 Beginning Impairment Reversal	Beginning Impairment Reversal Others (1,202) 2018 Beginning Impairment Reversal Others

Details of allocation of goodwill to cash-generating units and related information for impairment testing as at December 31, 2019 is as follows:

(In millions of Korean won)		2019	
	Retail	Corporate	
	Banking	Banking	Total
Carrying amounts Recoverable amount exceeded	49,315	15,973	65,288
carrying amount	3,424,398	3,142,439	6,566,837
Discount rate (%)	13.02	13.09	
Permanent growth rate (%)	1.00	1.00	

Goodwill is allocated to cash-generating units that are expected to benefit from the synergies of the combination for impairment testing, and cash-generating units consist of an operating segment or units which are not larger than an operating segment. The Group recognized the amount of $\mbox{$W$}$ 65,288 million related to goodwill acquired in the merger of Housing & Commercial Bank. Of this amount, the amounts of $\mbox{$W$}$ 49,315 million and $\mbox{$W$}$ 15,973 million were allocated to the Retail Banking and Corporate Banking, respectively. Cash-generating units, to which goodwill has been allocated, is tested for impairment annually and whenever there is an indication that the unit may be impaired, by comparing the carrying amount of the unit, including the goodwill, with the recoverable amount of the unit.

The recoverable amount of a cash-generating unit is measured at the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell is the amount obtainable from the sale in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. If it is difficult to measure the amount obtainable from the sale of the cash-generating unit, the Group measures the fair value less costs to sell by reflecting the characteristics of the measured cash-generating unit. If it is not possible to obtain the reliable information to measure the fair value less costs to sell, the Group uses the asset's value in use as its recoverable amount. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit. The projections of the future cash flows are based on the most recent financial budget approved by management and generally cover a period of five years. The future cash flows after projection period are estimated on the assumption that the future cash flows will increase by 1.0% annually for Retail Banking, Corporate Banking. The key assumptions used for the estimation of the future cash flows are the market size and the Group's market share. The discount rate is a pre-tax rate that reflects assumptions regarding risk-free interest rate, market risk premium and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

Details of intangible assets, excluding goodwill, as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

2019

Accumulated							
Acquisition cost	Accumulated amortization	impairment losses	Carrying amount				
2,020	(1,727)	-	293				
853,867	(719,890)	-	133,977				
149,628	(87,928)	(2,166)	59,534				
35,127	(25,488)	-	9,639				
1,040,642	(835,033)	(2,166)	203,443				
	2,020 853,867 149,628 35,127	cost amortization 2,020 (1,727) 853,867 (719,890) 149,628 (87,928) 35,127 (25,488)	Acquisition cost Accumulated amortization impairment losses 2,020 (1,727) - 853,867 (719,890) - 149,628 (87,928) (2,166) 35,127 (25,488) -				

(In millions of Korean won)

2018

	Acquisition cost	Accumulated amortization	Accumulated impairment losses	Carrying amount
Industrial property rights	1,858	(1,608)		250
Software	769,244	(673,475)	-	95,769
Other intangible assets	129,975	(77,129)	(5,106)	47,740
Finance leases assets	34,131	(18,970)	-	15,161
	935,208	(771,182)	(5,106)	158,920

Changes in intangible assets, excluding goodwill, for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

2019

	Beginning	Acquisition	Disposal	Amortization	Others	Ending
Industrial property						
rights	250	149	-	(106)	-	293
Software	95,769	88,896	-	(50,949)	261 ⁻	133,977
Other intangible						
assets	47,740	30,283	(7,126)	(11,469)	106	59,534
Right-of-use assets	15,161	996	-	(6,518)	-	9,639
	158,920	120,324	(7,126)	(69,042)	367	203,443

(In millions of Korean won)

2018					
Beginning	Acquisition	Disposal	Amortization	Others	Ending
281	58	-	(89)	-	250
88,635	45,839	-	(38,707)	2	95,769
50,865	7,160	(2,825)	(5,710)	(1,750)	47,740
12,539	8,024		(5,402)		15,161
152,320	61,081	(2,825)	(49,908)	(1,748)	158,920
	281 88,635 50,865 12,539	281 58 88,635 45,839 50,865 7,160 12,539 8,024	Beginning Acquisition Disposal 281 58 - 88,635 45,839 - 50,865 7,160 (2,825) 12,539 8,024 -	281 58 - (89) 88,635 45,839 - (38,707) 50,865 7,160 (2,825) (5,710) 12,539 8,024 - (5,402)	Beginning Acquisition Disposal Amortization Others 281 58 - (89) - 88,635 45,839 - (38,707) 2 50,865 7,160 (2,825) (5,710) (1,750) 12,539 8,024 - (5,402) -

Changes in accumulated impairment losses on other intangible assets for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019					
	Beginning	Impairment	Reversal	Others	Ending	
Accumulated impairment losses on other intangible assets	(5,106)	(50)	112	2.878	(2,166)	
assets	(5,100)	(50)	112	2,070	(2,100)	
(In millions of Korean won)			2018			
	Beginning	Impairment	Reversal	Others	Ending	
Accumulated impairment losses on other intangible						
assets	(3,597)	(1,806)	31	266	(5,106)	

16. Deferred Income Tax Assets and Liabilities

Details of deferred income tax assets and liabilities as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	
- -	Assets	Liabilities	Net amount
Other provisions	60,244	-	60,244
Impairment losses on property and equipment	2,656	-	2,656
Share-based payments	12,114	-	12,114
Provisions for guarantees	20,959	-	20,959
Gains on valuation of derivatives	-	(59,827)	(59,827)
Present value discount	-	(118)	(118)
Losses on fair value hedged item	12,123	-	12,123
Accrued interest	-	(48,979)	(48,979)
Deferred loan origination fees and costs	-	(136,178)	(136,178)
Gains on revaluation	-	(286,269)	(286,269)
Investments in subsidiaries and associates	31,509	(88,492)	(56,983)
Gains on valuation of security investment	-	(100,400)	(100,400)
Defined benefit liabilities	422,800	-	422,800
Accrued expenses	173,023	-	173,023
Retirement insurance expense	-	(375,300)	(375,300)

Others		(22,897)	(22,897)
	250,358	(113,715)	136,643
_	985,786	(1,232,175)	(246,389)
Offsetting of deferred income tax assets and			
liabilities	(983,523)	983,523	
-	2,263	(248,652)	(246,389)
(In millions of Korean won)		2018	
	Assets	Liabilities	Net amount
Other provisions	62,179	_	62,179
Impairment losses on property and equipment	4,132	-	4,132
Share-based payments	11,868	-	11,868
Provisions for guarantees	20,298	-	20,298
Gains on valuation of derivatives	-	(13,188)	(13,188)
Present value discount	-	(34)	(34)
Gains on fair value hedged item	-	(25,873)	(25,873)
Accrued interest	-	(41,687)	(41,687)
Deferred loan origination fees and costs	-	(139,697)	(139,697)
Gains on revaluation	-	(286,739)	(286,739)
Investments in subsidiaries and associates	29,410	(67,358)	(37,948)
Gains on valuation of security investment	-	(53,384)	(53,384)
Defined benefit liabilities	387,667	-	387,667
Accrued expenses	202,220	-	202,220
Retirement insurance expense	-	(343,176)	(343,176)
Adjustments to the prepaid contributions	-	(19,033)	(19,033)
Others	183,561	(28,902)	154,659
	901,335	(1,019,071)	(117,736)
Offsetting of deferred income tax assets and			
liabilities	(898,204)	898,204	
_	3,131	(120,867)	(117,736)

Unrecognized deferred income tax liabilities

No deferred income tax liabilities have been recognized for the taxable temporary difference of $\mbox{$W$}$ 33,487 million and 42,404 million associated with investments in subsidiaries and associates as at December 31, 2019, due to the following reasons:

- The Group is able to control the timing of the reversal of the temporary difference.
- It is probable that the temporary difference will not be reversed in the foreseeable future.

As at December 31, 2019 and 2018, no deferred income tax liabilities have been recognized for the taxable temporary difference of \forall 65,288 million arising from the initial recognition of goodwill from the merger of Housing and Commercial Bank in 2001.

Unrecognized deferred income tax assets

No deferred income tax assets have been recognized for the deductible temporary difference of \forall 7,716 million and \forall 8,938 million associated with investments in subsidiaries and associates as at

December 31, 2019 and 2018, because it is not probable that the temporary differences will be reversed in the foreseeable future.

No deferred income tax assets have been recognized for deductible temporary differences of $\forall 19,388$ million associated with others as at December 31, 2019 ($\forall 363$ million and $\forall 15,030$ million associated with accrued expenses and others respectively as at December 31, 2018), due to the uncertainty that these will be realized in the future.

Changes in cumulative temporary differences for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019			
	Beginning	Decrease	Increase	Ending
Deductible temporary differences	;			
Gains and Losses on fair value				
hedged item	-	-	44,085	44,085
Other provisions	226,103	226,103	219,069	219,069
Impairment losses on property				
and equipment	15,027	15,027	9,659	9,659
Share-based payments	43,156	43,156	44,049	44,049
Provisions for guarantees	73,809	73,809	76,214	76,214
Investment in subsidiaries and				
associates	115,883	21,567	27,976	122,292
Retirement insurance expense	1,409,700	112,517	240,272	1,537,455
Accrued expenses	735,712	735,712	629,175	629,175
Others	682,521	133,335	380,595	929,781
	3,301,911	1,361,226	1,671,094	3,611,779
Unrecognized deferred income				_
tax assets				
Accrued expenses	363			-
Investment in subsidiaries and				
associates	8,938			7,716
Others	15,030			19,388
	3,277,580			3,584,675
Tax rate (%)	27.50		_	27.50
Total deferred income tax assets			-	
from deductible temporary				
differences	901,335			985,786
•			-	

(In millions of Korean won)		20	19	
-	Beginning	Decrease	Increase	Ending
Taxable temporary differences				
Gain and Losses from fair value				
hedge	(94,085)	(94,085)	-	-
Accrued interest	(151,588)	(102,728)	(129,247)	(178,107)
Deferred loan origination				
fees and costs	(507,988)	(507,988)	(495,193)	(495,193)
Gains on valuation of derivatives	(47,956)	(47,956)	(217,552)	(217,552)
Present value discount	(124)	(124)	(429)	(429)
Goodwill from merger	(65,288)	-	-	(65,288)
Gains on revaluation	(1,042,687)	(1,711)	-	(1,040,976)
Investment in subsidiaries and				
associates	(287,344)	(1,572)	(69,503)	(355,275)
Gains on valuation of security				
investment	(194,124)	(194,124)	(365,092)	(365,092)
Retirement insurance expense	(1,247,911)	(112,517)	(229,333)	(1,364,727)
Adjustments to the prepaid				
contributions	(69,212)	(69,212)	(83,262)	(83,262)
Others	(105,098)	(38,594)	(347,006)	(413,510)
	(3,813,405)	(1,170,611)	(1,936,617)	(4,579,411)
Unrecognized deferred income tax liabilities				
Goodwill from merger Investments in subsidiaries and	(65,288)			(65,288)
associates	(42,404)			(33,487)
-	(3,705,713)		•	(4,480,636)
Tax rate (%)	27.50			27.50
Total deferred income tax			•	
liabilities from taxable				
temporary differences	(1,019,071)		_	(1,232,175)

(In millions of Korean won)		2018			
-	Beginning ¹	Decrease	Increase	Ending	
Deductible temporary differences					
Other provisions	256,282	256,282	226,103	226,103	
Impairment losses on property	,		, , , ,	-,	
and equipment	19,678	19,678	15,027	15,027	
Interest on equity index-linked					
deposits	155	155	-	-	
Share-based payments	61,870	61,870	43,156	43,156	
Provisions for guarantees	98,294	98,294	73,809	73,809	
Loss on SPE repurchase	80,204	80,204	-	-	
Investment in subsidiaries and					
associates	81,336	13,835	48,382	115,883	
Gains on valuation of security					
investment	75,642	75,642	-	-	
Defined benefit liabilities	1,210,654	114,562	313,608	1,409,700	
Accrued expenses	467,999	467,999	735,712	735,712	
Others	881,600	353,386	154,307	682,521	
	3,233,714	1,541,907	1,610,104	3,301,911	
Unrecognized deferred income					
tax assets					
Accrued expenses	-			363	
Loss on SPE repurchase	80,204			-	
Investment in subsidiaries and					
associates	18,084			8,938	
Others	12,500		_	15,030	
	3,122,926			3,277,580	
Tax rate (%) ²	27.50			27.50	
Total deferred income tax assets			_		
from deductible temporary					
differences	858,805		_	901,335	

(In millions of Korean won)		20	18	
	Beginning ¹	Decrease	Increase	Ending
Taxable temporary differences				
Losses from fair value hedge	(57,083)	(57,083)	(94,085)	(94,085)
Accrued interest	(157,556)	(116,532)	(110,564)	(151,588)
Deferred loan origination				
fees and costs	(479,671)	(479,671)	(507,988)	(507,988)
Gains on valuation of derivatives	(52,764)	(52,764)	(47,956)	(47,956)
Present value discount	(209)	(209)	(124)	(124)
Goodwill from merger	(65,288)	-	-	(65,288)
Gains on revaluation	(1,113,979)	(71,292)	-	(1,042,687)
Investment in subsidiaries and				
associates	(370,348)	(130,476)	(47,472)	(287,344)
Gains on valuation of security				
investment	-	-	(194,124)	(194,124)
Retirement insurance expense	(1,095,495)	(82,468)	(234,884)	(1,247,911)
Adjustments to the prepaid				
contributions	(59,040)	(59,040)	(69,212)	(69,212)
Others	(72,737)	(12,708)	(45,069)	(105,098)
	(3,524,170)	(1,062,243)	(1,351,478)	(3,813,405)
Unrecognized deferred income				
tax liabilities				
Goodwill from merger	(65,288)			(65,288)
Investments in subsidiaries and				
associates	(4,901)			(42,404)
	(3,453,981)			(3,705,713)
Tax rate (%) ²	27.50			27.50
Total deferred income tax				
liabilities from taxable				
temporary differences	(949,845)		_	(1,019,071)

¹ Restated based on Korean IFRS 1109.

17. Other Assets

Details of other assets as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018	
Other financial assets			
Other receivables	3,059,196	1,921,593	
Accrued income	867,534	793,340	
Guarantee deposits	995,678	1,019,169	
Domestic exchange settlement debits	523,182	476,349	
Others	32,329	11,843	
Allowances for loan losses	(11,461)	(21,775)	
Present value discount	(1,754)	(1,322)	
	5,464,704	4,199,197	

² As the corporate tax rate was changed due to the revision of the tax law at the end of 2017, deferred tax assets (liabilities) expected to be realized after 2018 are calculated using 27.5%.

(In millions of Korean won)	2019	2018	
Other non-financial assets			
Other receivables	86	61	
Prepaid expenses	120,873	130,432	
Guarantee deposits	3,047	3,061	
Others	120,201	74,649	
Allowances on other assets	(16,528)	(16,992)	
	227,679	191,211	
	5,692,383	4,390,408	

Changes in allowances for loan losses on other assets for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	
	Other financial	Other non-	
	assets	financial assets	Total
Beginning	21,775	16,992	38,767
Provision	(7,758)	(312)	(8,070)
Written-off	(3,367)	(152)	(3,519)
Others	811	-	811
Ending	11,461	16,528	27,989

(In millions of Korean won)	2018			
	Other financial	Other non-		
	assets	financial assets	Total	
Beginning ¹	54,190	22,575	76,765	
Provision	1,179	(3,720)	(2,541)	
Written-off	(34,773)	(1,863)	(36,636)	
Others	1,179	-	1,179	
Ending	21,775	16,992	38,767	

¹ Restated based on Korean IFRS 1109.

18. Assets Held for Sale

Details of assets held for sale as at December 31, 2019 and 2018, are as follows:

	n	millio	ns c	of K	orean	won)	
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(In millions of Korean won)	2019			
		Accumulated		
	Acquisition	impairment	Carrying	Fair value less
	cost ¹	losses	amount	costs to sell
Land	7,210	(1,530)	5,680	6,467
Buildings	2,513	(1,252)	1,261	1,261
	9,723	(2,782)	6,941	7,728

(In millions of Korean won)	2018			
		Accumulated		
	Acquisition	impairment	Carrying	Fair value less
	cost ¹	losses	amount	costs to sell
Land	16,048	(3,442)	12,606	16,552
Buildings	9,054	(4,708)	4,346	4,403
	25,102	(8,150)	16,952	20,955

¹ Acquisition cost of buildings held for sale is net of accumulated depreciation before classified as assets held for sale.

The valuation technique and input variables that are used to measure the fair value of assets held for sale as at December 31, 2019, are as follows:

(In millions of Korean won)

			2019		
	Fair value	Valuation technique ¹	Unobservable inputs ²	Estimated range of unobservable inputs(%)	Effect of unobservable inputs on fair value
Land and buildings	7,728	Market comparison approach model and others	Adjustment index	0.44 ~ 1.36	Fair value increases as the adjustment index rises

¹ The appraisal value is adjusted by the adjustment ratio in the event the public sale is unsuccessful.

Among assets held for sale, real estates were measured by an independent evaluator who has recently assessed similar properties in the area of the qualifying real estates. All of assets held for sale are included in level 3 in accordance with Note 6-1. (2).

Changes in accumulated impairment losses of assets held for sale for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

2019					
Beginning	Provision	Reversal	Others	Ending	
(8,150)	(333)	-	5,701	(2,782)	

(In millions of Korean won)

2018					
Beginning	Provision	Reversal	Others	Ending	
(12,801)	(5,281)	286	9,646	(8,150)	

As at December 31, 2019, assets held for sale consist of three real estates of closed offices, which were committed to sell by the management, but not yet sold as at December 31, 2019. Negotiation with buyers is in process for the one asset and the remaining two assets are also being actively marketed.

² Adjustment index is calculated by using the time factor correction, regional factors or individual factors.

19. Deposits

Details of deposits as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Demand deposits		
Demand deposits in Korean won	124,457,990	112,746,957
Demand deposits in foreign currencies	7,937,663	6,242,996
	132,395,653	118,989,953
Time deposits		
Time deposits in Korean won	156,738,952	144,387,450
Time deposits in foreign currencies	7,561,299	5,664,671
Fair value adjustments on fair value hedged time		
deposits in foreign currencies	(18,391)	(89,265)
	164,281,860	149,962,856
Certificates of deposits	4,239,969	3,531,719
	300,917,482	272,484,528

20. Debts

Details of debts as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Borrowings	18,043,380	16,689,574
Bonds sold under repurchase agreements and others	830,095	444,066
Call money	267,787	362,415
Total	19,141,262	17,496,055

Details of borrowings as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)			Annual interest		
		Lenders	rate (%)	2019	2018
Borrowings in Korean won	Borrowings from the Bank of Korea	Bank of Korea	0.50 ~ 0.75	2,649,851	1,672,714
	Borrowings from the government	SEMAS and others	0.00 ~ 3.00	1,658,810	1,745,939
	Borrowings from non- banking financial	Korea Development Bank		.,,	
	institutions Other borrowings	Korea Development	0.20 ~ 2.20	408,042	372,853
	Other borrowings	Bank and others	0.00 ~ 4.90	4,344,937	3,965,534
				9,061,640	7,757,040
Borrowings in	Due to banks	KEB Hana Bank and			
foreign		others	-	4,682	13,353
currencies	Borrowings from	Central Bank of			
	banking institutions	Uzbekistan and others	$0.00 \sim 3.53$	7,450,947	7,110,028
	Borrowings from other financial	Export Import Bank of Korea and			
	institutions	others	2.28 ~ 3.08	7,081	18,725
	Other borrowings in	Standard Chartered			
	foreign currencies	Bank and others	0.00 ~ 2.63	1,519,030	1,790,428
				8,981,740	8,932,534
				18,043,380	16,689,574

Details of bonds sold under repurchase agreements and others as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

		Annual interest rate		
	Lenders	(%)	2019	2018
Bonds sold under	Individuals, groups,			
Repurchase agreements	corporations	0.91 ~ 1.18	825,710	436,471
Bills sold	Counter sale	0.70 ~ 1.05	4,385	7,595
			830,095	444,066

Details of call money as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

		Annual interest rate		
	Lenders	(%)	2019	2018
Call money in foreign	Central Bank of Uzbekistan and others			
currencies		2.91 ~ 4.30	267,787	362,415

21. Debentures

Details of debentures as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	Annual interest rate		
	(%)	2019	2018
Debentures in Korean won			
Structured debentures	5.65 ~ 5.86	33,310	34,320
Subordinated fixed rate debentures	2.96 ~ 4.35	3,416,590	3,422,729
Fixed rate debentures	1.47 ~ 2.44	10,787,614	15,024,545
Floating rate debentures	1.54	300,000	640,000
	_	14,537,514	19,121,594
Fair value adjustments on fair value	_		
hedged debentures in Korean won		21,070	19,252
Discount on debentures in Korean won		(3,588)	(11,792)
	_	14,554,996	19,129,054
Debentures in foreign currencies			
Floating rate debentures	2.31 ~ 2.84	1,301,367	1,344,628
Fixed rate debentures	2.13 ~ 4.50	2,857,545	2,725,700
	_	4,158,912	4,070,328
Fair value adjustments on fair value hedged debentures in foreign	_		
currencies		41,406	(24,073)
Discount on debentures in foreign			
currencies		(15,322)	(11,724)
		4,184,996	4,034,531
		18,739,992	23,163,585
	_		

Changes in debentures based on face value for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019				
	Beginning	Issues	Repayments	Others	Ending
Debentures in Korean won					
Structured debentures	34,320	-	(1,010)	-	33,310
Subordinated fixed rate					
debentures	3,422,729	-	(6,139)	-	3,416,590
Fixed rate debentures	15,024,545	8,597,400	(12,834,331)	-	10,787,614
Floating rate debentures	640,000	300,000	(640,000)	-	300,000
	19,121,594	8,897,400	(13,481,480)	-	14,537,514
Debentures in foreign					
currencies					
Floating rate debentures	1,344,628	60,780	(33,199)	(70,842)	1,301,367
Fixed rate debentures	2,725,699	595,490	(590,950)	127,306	2,857,545
	4,070,327	656,270	(624,149)	56,464	4,158,912
	23,191,921	9,553,670	(14,105,629)	56,464	18,696,426

(In millions of Korean won)			2018		
	Beginning	Issues	Repayments	Others	Ending
Debentures in Korean won					
Structured debentures Subordinated fixed rate	135,800	-	(101,480)	-	34,320
debentures	2,888,411	600,000	(65,682)	-	3,422,729
Fixed rate debentures	13,236,365	11,761,400	(9,973,220)	-	15,024,545
Floating rate debentures	-	640,000	-	-	640,000
	16,260,576	13,001,400	(10,140,382)	-	19,121,594
Debentures in foreign currencies					
Floating rate debentures	835,692	725,638	(274,130)	57,428	1,344,628
Fixed rate debentures	2,142,800	493,022	-	89,877	2,725,699
	2,978,492	1,218,660	(274,130)	147,305	4,070,327
	19,239,068	14,220,060	(10,414,512)	147,305	23,191,921

22. Provisions

Details of provisions as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Provisions for unused loan commitments	95,755	103,882
Provisions for acceptances and guarantees	76,256	73,897
Provisions for asset retirement obligation	106,269	95,396
Others	32,860	35,199
	311,140	308,374

Changes in provisions for unused loan commitments, acceptances and guarantees for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

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	Provisions for unused loan commitments			Provisions for acceptances and guarantees		
	12-month expected	Lifetime e credit l	•	12-month expected	Lifetime e credit l	•
	credit losses	Non- impaired	Impaired	credit losses	Non- impaired	Impaired
Beginning Transfer between stages Transfer to 12- month expected	74,987	28,895	-	26,291	29,625	17,981
credit losses Transfer to lifetime expected credit	15,262	(15,235)	(27)	365	(365)	-
losses	(13,691)	13,749	(58)	(976)	1,705	(729)
Impairment Provision (reversal)	(118)	(800)	918	(24)	(280)	304
for loan losses Others (effects of changes in foreign	(15,676)	7,824	(833)	(1,971)	4,643	(892)
exchange rate, etc.)	321	237	-	196	260	123
Ending	61,085	34,670		23,881	35,588	16,787

(In millions of Korean won)

2018

	Provisions for unused loan commitments			Provisions for acceptances and guarantees		
	12-month expected	Lifetime e credit l	•	12-month expected	Lifetime expected credit losses	
	credit losses	Non- impaired	Impaired	credit losses	Non- impaired	Impaired
Beginning ¹ Transfer between stages Transfer to 12-month expected credit	74,885	27,178		40,277	39,628	18,744
losses Transfer to lifetime expected credit	10,001	(9,935)	(66)	661	(661)	-
losses	(7,701)	7,784	(83)	(534)	676	(142)
Impairment Provision (reversal) for	(201)	(667)	867	(6)	(87)	93
loan losses Others (effects of changes in foreign	(2,204)	4,377	(718)	(14,515)	(10,174)	(898)
exchange rate, etc.)	207	158	-	408	243	184
Ending	74,987	28,895	-	26,291	29,625	17,981

¹ Restated based on Korean IFRS 1109.

Changes in provisions for asset retirement obligation for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Beginning	95,396	85,575
Increase	3,584	1,780
Reversal	(6,054)	(154)
Used	(3,658)	(2,534)
Unwinding of discount	1,981	2,305
Effects of changes in foreign exchange rate	15,020	8,424
Ending	106,269	95,396

Provisions for asset retirement obligation are present value of estimated costs to be incurred for restoration of the leased properties. Actual expenses are expected to be incurred at the end of each lease contract. Three-year historical data of expired leases were used to estimate the average lease year. Also, the average restoration expense based on actual three-year historical data and the three-year historical average inflation rate were used to estimate the present value of estimated costs.

Changes in other provisions for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

2019

	Membership			Financial		
	rewards	Dormant		guarantee		
	program	accounts	Litigations	liabilities	Others	Total
Beginning	61	4,375	6,478	2,391	21,894	35,199
Provision	61	2,296	8,160	3,020	710	14,247
Used and						
Others	(69)	(3,093)	(3,976)	-	(9,448)	(16,586)
Ending	53	3,578	10,662	5,411	13,156	32,860

(In millions of Korean won)

2018

	Greenhouse						
	Membership			Financial	Gas		
	rewards	Dormant		guarantee	Emission		
	program	accounts	Litigations	liabilities ¹	liabilities	Others	Total
Beginning	138	5,050	7,482	2,218	177	62,137	77,202
Provision							
(Reversal)	111	2,657	184	173	(177)	(10,620)	(7,672)
Used and							
Others	(188)	(3,332)	(1,188)			(29,623)	(34,331)
Ending	61	4,375	6,478	2,391	-	21,894	35,199

¹ Restated based on Korean IFRS 1109.

23. Net Defined Benefit Liabilities

Defined benefit plan

The Group operates defined benefit plans which have the following characteristics:

- The Group has the obligation to pay the agreed benefits to all its current and former employees.
- Actuarial risk (that benefits will cost more than expected) and investment risk fall, in substance, on the Group.

The net defined benefit liability recognized in the statements of financial position is calculated in accordance with actuarial valuation methods. Data such as discount rates, future salary growth rates, and mortality rates based on market data and historical data are used. Actuarial assumptions may differ from actual results, due to changes in the market, economic trends and mortality trends.

Changes in the net defined benefit liabilities(assets) for the years ended December 31, 2019 and 2018, are as follows:

2019			
Present value of		Net defined	
defined benefit	Fair value of	benefit	
obligation	plan assets	liabilities(assets)	
1,549,092	(1,382,487)	166,605	
151,846	-	151,846	
2,276	-	2,276	
35,227	(31,403)	3,824	
10,219	-	10,219	
(5,128)	-	(5,128)	
42,426	-	42,426	
-	8,165	8,165	
-	(196,100)	(196,100)	
(112,516)	(112,516)	-	
(5,323)	-	(5,323)	
4,406	(4,102)	304	
(2,558)	2,558	-	
(4)	-	(4)	
1,669,963	(1,490,853)	179,110	
	defined benefit obligation 1,549,092 151,846 2,276 35,227 10,219 (5,128) 42,426 - (112,516) (5,323) 4,406 (2,558) (4)	Present value of defined benefit obligation Fair value of plan assets 1,549,092 (1,382,487) 151,846 - 2,276 - 35,227 (31,403) 10,219 - (5,128) - 42,426 - - (196,100) (112,516) (112,516) (5,323) - 4,406 (4,102) (2,558) 2,558 (4) -	

(In millions of Korean won)	2018		
·	Present value of		Net defined
	defined benefit	Fair value of	benefit
	obligation	plan assets	liabilities
Beginning	1,318,665	(1,310,097)	8,568
Current service cost	136,279	-	136,279
Past service cost ¹	26,663	-	26,663
Interest expense (income)	37,568	(37,327)	241
Remeasurements :			
-Actuarial loss arising from			
experience adjustment	26,780	-	26,780
-Actuarial loss arising from			
changes in demographic assumptions	9,775	-	9,775
-Actuarial loss arising from changes			
in financial assumptions	77,611	-	77,611
-Return on plan assets (excluding amounts			
included in interest income)	-	17,967	17,967
Contributions	-	(133,000)	(133,000)
Payments from plans (benefit payments)	(77,785)	77,785	-
Payments from the Group	(4,476)	-	(4,476)
Transfer in	2,677	(2,497)	180
Transfer out	(4,682)	4,682	-
Effects of changes in foreign exchange rate	17	-	17
Ending	1,549,092	(1,382,487)	166,605

¹ Other provisions of ₩22,306 million were transferred to the account as at December 31, 2017.

Details of the net defined benefit liabilities as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Present value of defined benefit obligation	1,669,963	1,549,092
Fair value of plan assets	(1,490,853)	(1,382,487)
Net defined benefit liabilities	179,110	166,605

Details of post-employment benefits recognized in profit or loss as employee compensation and benefits for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Current service cost	151,846	136,279
Past service cost	2,276	4,357
Interest expenses of net defined benefit liabilities	3,824	241
Total	157,946	140,877

Remeasurements of net defined benefit liabilities recognized as other comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Remeasurements:		
- Actuarial gain arising from		
changes in demographic assumptions	5,128	(9,775)
- Actuarial loss arising from experience adjustment	(10,219)	(26,780)
 Actuarial gain arising from changes 		
in financial assumptions	(42,426)	(77,611)
- Return on plan assets (excluding amounts included		
in interest income)	(8,165)	(17,967)
Income tax effects	15,313	36,336
Remeasurements after income tax	(40,369)	(95,797)

Details of fair value of plan assets as at December 31, 2019 and 2018, are as follows:

	2019	
Assets quoted	Assets not quoted	
in an active market	in an active market	Total
-	1,490,590	1,490,590
-	263	263
	1,490,853	1,490,853
	2018	
Assets quoted	Assets not quoted	
in an active market	in an active market	Total
	1,382,487	1,382,487
	in an active market	Assets quoted in an active market - 1,490,590 - 263 - 1,490,853 - 2018 Assets quoted in an active market in an active market

Key actuarial assumptions used as at December 31, 2019 and 2018, are as follows:

	Ratio (%)		
	2019	2018	
Discount rate	2.00	2.30	
Salary growth rate	3.75	3.75	
Turnover	1.00	1.00	

Expected mortality assumptions are based on the experience-based mortality table of Korea Insurance Development Institute of 2019.

The sensitivity of the defined benefit obligation to changes in the principal assumptions as at December 31, 2019, is as follows:

	Effect on defined benefit obligation			
	Changes in principal assumption	Increase in principal assumption	Decrease in principal assumption	
Discount rate	0.5%p	4.20% decrease	4.51% increase	
Salary growth rate Turnover	0.5%p 0.5%p	4.12% increase 0.49% decrease	3.88% decrease 0.52% increase	

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to significant actuarial assumptions is calculated using the projected unit credit method which is used to calculate the defined benefit obligation.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2019, is as follows:

(In millions of Korean won)

		Between	Between	Between		
	Less than	1 and 2	2 and 5	5 and 10	Over	
	1 year	years	years	years	10 years	Total
Pension benefits	43,470	112,459	484,102	992,573	2,672,924	4,305,528

The weighted average duration of the defined benefit obligations is 8.88 and 8.86 years as at December 31, 2019 and December 31, 2018, respectively.

Expected contributions to plan assets for the period after December 31, 2019, are estimated to be approximately \forall 156,000 million.

24. Other Liabilities

Details of other liabilities as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Other financial liabilities		
Other payables	3,422,209	2,253,535
Prepaid card and debit cards	2,038	2,351
Accrued expenses	2,748,242	2,679,685
Financial guarantee liabilities	41,008	29,867
Deposits for letter of guarantees and others	286,946	156,364
Domestic exchange settlement credits	2,073,263	1,679,914
Foreign exchanges settlement credits	114,316	102,187
Borrowings from other business accounts	256	13,166
Payables to trust accounts	5,216,460	5,285,108
Liabilities incurred from agency relationship	771,609	605,076
Account for agency businesses	407,475	460,949
Lease liabilities	344,417	-
Others	18,265	29,202
	15,446,504	13,297,404
Other non-financial liabilities		
Other payables	557,775	847,347
Unearned revenue	47,932	48,188
Accrued expenses	389,976	450,493
Withholding taxes	118,057	93,856
Others	65,368	78,776
_	1,179,108	1,518,660
	16,625,612	14,816,064

25. Equity

25.1 Capital Stock

Details of outstanding shares as at December 31, 2019 and 2018, are as follows:

	Ordinary sha	ares
	2019	2018
Number of shares authorized	1,000,000,000	1,000,000,000
Face value per share ¹	5,000	5,000
Number of shares	404,379,116	404,379,116
Capital stock ²	2,021,896	2,021,896

¹ In Korean won.

24.2 Hybrid Security

Details of hybrid security classified as equity as at December 31, 2019 and December 31, 2018, are as follows:

(In millions of Korean won)	Issuance date	Maturity	Interest rate (%)	2019	2018
Amortized Conditional Capital	July 2,				
Securities	2019	Permanent	4.35	574,523	-

Above securities are redeemable at the option of the Group on July 2, 2024 and each interest payment date thereafter.

25.3 Capital Surplus

Details of capital surplus as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Paid-in capital in excess of face value	4,604,417	4,604,417
Gain on business combination	397,669	397,669
Revaluation increment	177,229	177,229
Other capital surplus	40,389	39,473
	5,219,704	5,218,788

The gain on business combination is a gain from a bargain purchase related to the merger with Korea Long Term Credit Bank on December 31, 1998, in accordance with previous Korean GAAP.

² In millions of Korean won.

25.4 Accumulated Other Comprehensive Income

Details of accumulated other comprehensive income as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Remeasurements of net defined benefit liabilities	(216,067)	(175,698)
Currency translation differences	15,943	(10,328)
Net gains on debt instruments at fair value through other comprehensive income Net gains on equity instruments at fair value	56,750	22,475
through other comprehensive income	303,338	302,014
Share of other comprehensive income of associates	4,287	(3,259)
Gains and losses on cash flow hedging	(0.00.1)	
instruments Losses on hedges of	(3,691)	11,539
a net investment in a foreign operations	(37,226)	(30,959)
	123,334	115,784

25.5 Retained Earnings

Retained earnings as at December 31, 2019 and 2018, consist of:

(In millions of Korean won)	2019	2018
Legal reserves	2,041,898	2,034,015
Regulatory reserve for credit losses	2,291,019	2,150,772
Voluntary reserves	14,257,527	12,522,628
Retained earnings before appropriation	2,474,332	2,603,983
	21,064,776	19,311,398

With respect to the allocation of net profit earned in a fiscal term, the Bank must set aside in its legal reserve an amount equal to at least 10% of its net income after tax as reported in the statement of comprehensive income each time it pays dividends on its net profits earned until its legal reserve reaches at least the aggregate amount of its paid-in capital in accordance with Article 40 of the Banking Act. This reserve is not available for the payment of cash dividends, but may be transferred to share capital, or used to reduce accumulated deficit. The Group is reserving other reserves (legal reserves) in accordance with local regulation in oversea.

Regulatory Reserve for Credit Losses

Measurement and Disclosure of Regulatory Reserve for Credit Losses are required in accordance with Articles 29.1 through 29.2 of Regulation on Supervision of Banking Business.

Details of the regulatory reserve for credit losses as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Beginning	2,291,019	2,150,772

Amounts estimated to be appropriated	150,856	140,247
Ending	2,441,875	2,291,019

Adjustments to the regulatory reserve for credit losses for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Provision of regulatory reserve		
for credit losses ¹	150,856	247,207
Adjusted profit after provision of regulatory reserve		
for credit losses ²	2,288,223	2,011,991

¹ The previous amount expected to be appropriated is the amount required to reserve for credit losses, calculated based on the beginning balance of regulatory reserve for credit losses (including unearned reserves) that reflects the effect of adoption of Korean IFRS 1109 retrospectively.

26. Interest Income and Expense

Details of interest income, expense, and net interest income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Interest income		
Securities at fair value through profit or loss	202,244	214,455
Loans at fair value through profit or loss	9,686	7,850
Securities at fair value through other comprehensive income	602,042	502,093
Loans at fair value through other comprehensive income	13,670	2,138
Due from financial institutions at amortized cost	64,653	68,029
Securities at amortized cost	302,329	320,361
Loans at amortized cost	9,451,056	8,798,656
Others	134,268	106,306
	10,779,948	10,019,888
Interest expense		
Deposits	3,452,860	3,019,866
Debts	344,285	319,017
Debentures	517,311	501,892
Others	101,705	78,391
	4,416,161	3,919,166
Net interest income	6,363,787	6,100,722

Interest income recognized on impaired loans is $\mbox{$W$}$ 23,672 million (December 31, 2018: $\mbox{$W$}$ 23,355 million) for the year ended December 31, 2019.

² Adjusted profit after provision of regulatory reserve for credit losses is calculated on the assumption that expected provision of regulatory reserve for credit losses which is measured in accordance with Banking Supervision Regulations would be reflected in net profit for the periods without consideration of income tax effect.

27. Net Fee and Commission Income

Details of fee and commission income, and fee and commission expense for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Fee and commission income		
Banking activity fees	221,600	209,499
Lending activity fees	76,481	73,005
Credit card related fees	920	1,030
Debit card related fees and commissions	594	554
Agent activity fees	321,452	312,497
Trust and other fiduciary fees	308,084	287,385
Guarantee fees	39,170	32,423
Foreign currency related fees	100,499	92,140
Security activity commissions	128,891	146,883
Other business account commission on consignment	36,813	36,947
Others	248,858	230,428
	1,483,362	1,422,791
Fee and commission expense		
Trading activity related fees ¹	12,898	12,427
Lending activity fees	31,613	30,661
Credit card related fees	29,303	18,478
Outsourcing related fees	95,988	78,986
Foreign currency related fees	24,140	21,402
Management fees of written-off loans	15,181	12,680
Contributions to external institutions	24,558	23,949
Others	116,385	101,460
	350,066	300,043
Net fee and commission income	1,133,296	1,122,748

¹ Fees from financial assets/liabilities at fair value through profit or loss.

28. Net Gains or Losses from Financial Assets/Liabilities at Fair Value through Profit or Loss

Net gains or losses from financial assets/liabilities at fair value through profit or loss are composed of dividend income and gains or losses arising from changes in the fair values, sales and redemptions.

Details for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Revenue from financial instruments at fair value through profit or loss		
Financial assets at fair value through profit or loss		
Debt instruments	265,422	249,860
Equity instruments	27,946	31,327
	293,368	281,187
Derivatives held for trading		
Interest rate	1,692,513	1,509,811
Currency	4,995,524	3,463,934
Stock or stock index	254	7,048
Others	1,224	987
	6,689,515	4,981,780
Financial liabilities at fair value through profit or loss	394	377
Other financial instruments	5,810	22
	6,989,087	5,263,366
Expense from financial instruments at fair value through profit or loss Financial assets at fair value through profit or loss		
Debt instruments	47,850	169,248
Equity instruments	3,637	37,844
• •	51,487	207,092
Derivatives held for trading	· · · · · · · · · · · · · · · · · · ·	
Interest rate	1,774,890	1,554,325
Currency	4,732,495	3,169,608
Stock or stock index	937	4,473
Others	484	1,210
	6,508,806	4,729,616
Financial liabilities at fair value through profit or loss	466	203
Other financial instruments	5,704	60
	6,566,463	4,936,971
Net gains or losses from financial assets/liabilities at fair		
value through profit or loss	422,624	326,395

29. Other Operating Income and Expenses

Details of other operating income and expenses for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Other operating income		
Revenue related to financial assets at fair value through		
other comprehensive income		
Gains on redemption of the securities		
at fair value through other comprehensive		
income	524	230
Gains on sale of the securities		
at fair value through other comprehensive		
income	99,195	94,984
Revenue related to financial assets at amortized cost		
Gains on sale of loans at amortized cost	19,346	15,691
Gains on foreign exchange transactions	1,554,311	1,147,691
Dividend income	43,146	38,937
Others	198,049	86,307
•	1,914,571	1,383,840
Other operating expense		
Expenses related to financial assets at fair value through other comprehensive income		
Losses on sale of the securities		
at fair value through other comprehensive income	4,195	7,135
Expenses related to financial assets at amortized cost		
Losses on sale of loans at amortized cost	15,015	6,674
Losses on foreign exchanges transactions	1,515,382	1,211,920
Others	980,618	854,597
Not other energing evenence	2,515,210	2,080,326
Net other operating expense	(600,639)	(696,486)

30. General and Administrative Expenses

30.1 General and Administrative Expenses

Details of general and administrative expenses for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Employee Benefits Salaries and short-term employee benefits - salaries Salaries and short-term employee benefits - welfare	1,489,102	1,522,003
expense	638,184	652,781
Post-employment benefits - defined benefit plans	157,946	140,877
Post-employment benefits - defined contribution plans	7,220	6,719
Termination benefits	213,749	209,737
Share-based payments	15,173	4,051
	2,521,374	2,536,168
Depreciation and amortization	509,346	246,488
Other general and administrative expenses		
Rental expense	62,277	259,194
Tax and dues	126,975	108,389
Communication	26,035	23,163
Electricity and utilities	22,435	21,641
Publication	8,977	9,771
Repairs and maintenance	12,037	11,263
Vehicle	6,878	7,367
Travel	5,163	4,096
Training	19,078	17,521
Service fees	123,425	107,678
Others	443,419	414,256
	856,699	984,339
	3,887,419	3,766,995

30.2 Share-based Payments

30.2.1 Share Grants

The Group changed the scheme of share-based payment from share option to share grants in November 2007. The share grant award program is an incentive plan that sets, on grant date, the maximum number of shares that can be awarded. Actual shares to be granted is determined in accordance with achievement of performance targets over the vesting period.

Details of the share grants as at December 31, 2019, are as follows:

(In number of shares)

		Number of granted	
Share grants	Grant date	shares ^{1, 2}	Vesting conditions
Series 72	2017.08.28	6,742	Services fulfillment,
			TSR 30~50%, Company and work
			performance 50~70%
Series 73	2017.11.21	27,786	Services fulfillment,
			TSR 30%, EPS and Asset Quality 70%
Series 74	2018.01.01	134,465	Services fulfillment,
			TSR 30~50%, Company and work
			performance 50~70%
Series 75	2019.01.01	192,170	Services fulfillment,
			TSR 30~50%, Company and work
			performance 50~70%
Series 76	2019.04.01	5,380	Services fulfillment,
			TSR 30~50%, Company and work
			performance 50~70%
Series 77	2019.05.27	5,569	Services fulfillment,
			TSR 30~50%, Company and work
			performance 50~70%
Series 78	2019.11.21	36,443	Services fulfillment,
			TSR 30%, EPS and Asset Quality 70%
Deferred grant in 2015	-	4,756	
Deferred grant in 2016	-	65,419	
Deferred grant in 2017	-	95,697	
Deferred grant in 2018	-	97,244	
		671,671	

¹ Granted shares in relation to Series 72 ~ 78 represent the total number of shares granted to directors and employees but not vested at the end of reporting period. The number of deferred grants represents residual shares that have been vested at the end of reporting period.

² Certain percentages among the granted shares are deferred for over five years from the time of initial exercising. Accordingly, a certain percentage of the granted amount is deferred for up to five years after the date of retirement after the deferred grant has been confirmed.

Details of share grants linked to short-term performance as at December 31, 2019, are as follows:

		Number of	Vesting
	Share grants ¹	vested shares	conditions
_	Granted shares for 2015	15,831	Vested
	Granted shares for 2016	52,855	Vested
	Granted shares for 2017	55,490	Vested
	Granted shares for 2018	109,296	Vested
	Granted shares for 2019	112,445	Proportion to service period

¹ Executives and employees were given the option of deferred payment of the granted shares (after the date of retirement), payment ratio, and payment period. Accordingly, a certain percentage of the granted amount is deferred for up to five years after the date of retirement after the deferred grant has been confirmed.

Share grants are measured at fair value using the Monte Carlo Simulation Model and assumptions used in determining the fair value as at December 31, 2019, are as follows:

(In Korean won)	Expected exercise period (Years)	Risk free rate (%)	Fair value (Market performance condition)	Fair value (Non-market performance condition)
Linked to long-term perform	rmance			
Series 72	0.00~3.00	1.34%	43,659~47,631	43,659~47,631
Series 73	0.00~2.89	1.34%	41,253~43,741	43,803~46,445
Series 74	0.00~3.00	1.34%	41,279~45,035	43,659~47,631
Series 75	0.00~4.00	1.34%	41,506~46,021	42,336~47,631
Series 76	1.25~5.01	1.34%	41,070~44,926	41,070~44,926
Series 77	1.40~5.01	1.34%	41,070~44,926	41,070~44,926
Series 78	1.89~5.01	1.34%	38,303~41,900	41,070~44,926
Grant deferred in 2015	0.00~2.00	1.34%	-	44,926~47,631
Grant deferred in 2016	0.00~4.00	1.34%	-	42,336~47,631
Grant deferred in 2017	0.00~4.00	1.34%	-	42,336~47,631
Grant deferred in 2018	0.00~4.00	1.34%	-	42,336~47,631
Share granted in 2015	0.00~4.00	1.34%	-	42,336~47,631
Share granted in 2016	0.00~5.01	1.34%	-	41,070~47,631
Share granted in 2017	0.00~4.00	1.34%	-	42,336~47,631
Share granted in 2018	0.00~4.00	1.34%	-	42,336~47,631
Share granted in 2019	1.00~3.00	1.34%	-	43,659~46,281

The Group used the volatility of the stock price over the previous year as the expected volatility and used the dividend yield as the arithmetic mean of the dividend rate of one year before, two years before, and three years before the base year, in order to calculate fair value. Fair value is calculated based on 1 year-KTB rate.

As at December 31, 2019 and 2018, the accrued expenses related to share-based payments, including share grants, amounted to \pm 41,344 million and \pm 40,873 million, respectively, and the compensation costs from share grants amounting to \pm 15,173 million and \pm 4,051 million were incurred during the years ended December 31, 2019 and 2018, respectively.

30.2.2 Mileage Stock

Details of Mileage Stock as at December 31, 2019, are as follows:

(In number of shares)		Number of granted	Expected exercise period	Number of exercisable
	Grant date	shares ¹	(Years) ²	shares
-	2017-01-09	28,925	0.00~0.02	11,365
	2017-02-03	43	0.00~0.09	28
	2017-04-03	82	0.00~0.25	61
	2017-05-22	20	0.00~0.39	20
	2017-07-03	52	0.00~0.50	52
	2017-08-07	29	0.00~0.60	19
	2017-08-08	5	0.00~0.60	2
Share granted in	2017-08-16	204	0.00~0.62	151
2017	2017-08-17	40	0.00~0.63	24
	2017-08-24	387	0.00~0.65	288
	2017-09-08	83	0.00~0.69	73
	2017-11-01	120	0.00~0.84	103
	2017-11-06	106	0.00~0.85	101
	2017-12-06	105	0.00~0.93	83
	2017-12-26	255	0.00~0.99	175
	2017-12-29	114	0.00~0.99	58
	2018-01-10	19,197	0.00~1.03	15,430
	2018-02-12	9	0.00~1.12	7
	2018-04-02	115	0.00~1.25	99
	2018-04-30	86	0.00~1.33	62
	2018-05-08	170	0.00~1.35	150
	2018-06-01	140	0.00~1.42	121
	2018-07-02	180	0.00~1.50	123
	2018-08-07	194	0.00~1.60	175
	2018-08-09	47	0.00~1.61	38
	2018-08-14	30	0.00~1.62	30
Share granted in	2018-08-16	130	0.00~1.62	112
2018	2018-09-07	106	0.00~1.68	82
	2018-10-04	129	0.00~1.76	106
	2018-11-01	258	0.00~1.84	248
	2018-11-06	236	0.00~1.85	206
	2018-12-03	132	0.00~1.92	132
	2018-12-04	21	0.00~1.93	21
	2018-12-07	91	0.00~1.93	91
	2018-12-12	64	0.00~1.95	57
	2018-12-18	271	0.00~1.96	271
	2018-12-19	42	0.00~1.97	42
	2018-12-31	127	0.00~2.00	127
	2019-01-11	26,580	0.00~2.03	25,563
	2019-02-01	12	0.00~2.09	12
	2019-04-01	167	0.00~2.25	167
	2019-04-18	105	0.00~2.30	105

	2019-04-22	33	0.00~2.31	33
Share granted in	2019-07-01	109	0.00~2.50	109
2019	2019-08-29	39	0.00~2.66	39
	2019-09-02	50	0.00~2.67	50
	2019-11-01	119	0.00~2.84	119
	2019-11-08	14	0.00~2.85	14
	2019-12-05	56	0.00~2.93	56
	2019-12-06	84	0.00~2.93	84
	2019-12-31	87	0.00~3.00	87
		79,800		56,771

¹ Mileage stock is exercisable for two years after one year from the grant date. When the mileage stock is exercised, the closing price of prior month is applied. However, in case of transfer or retirement during the vesting period, mileage stock is exercisable at the closing price of the last month prior to transfer or retirement.

The accrued expenses for share-based payments in regard to mileage stock as at December 31, 2019 and 2018, are $\mbox{$W2,705$}$ million and $\mbox{$W2,283$}$ million, respectively. The compensation costs amounting to $\mbox{$W1,334$}$ million and $\mbox{$W1,350$}$ million were recognized as an expense for the years ended December 31, 2019 and 2018, respectively.

31. Non-operating Income and Expenses

Details of non-operating income and expenses for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Non-operating income	 -	
Gains on disposal in property and equipment and		
assets held for sale	3,343	152,852
Rental income	24,640	26,429
Others	57,634	17,515
	85,617	196,796
Non-operating expenses		
Losses on disposal in property and equipment and		
assets held for sale	4,591	5,590
Donation	84,211	91,943
Restoration cost	3,017	1,854
Others	32,685	53,237
	124,504	152,624
Net non-operating income (expenses)	(38,887)	44,172

² The exercisable shares are assessed based on the stock price as at December 31, 2019. These shares are vested immediately at grant date.

32. Income Tax Expense

Income tax expense for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Tax payable		
Current tax expense	793,937	806,618
Adjustments recognized in the period for current tax of		
prior years	(24,034)	(4,856)
	769,903	801,762
Changes in deferred income tax assets (liabilities)	128,653	26,696
Income tax expense of overseas branches	8,615	6,863
Income tax recognized directly in equity		
Net losses on equity instruments at fair value through other		
comprehensive income	(502)	13,660
Net losses on debt instruments at fair value through other		
comprehensive income	(12,709)	(21,703)
Exchange difference in foreign operation	(4,488)	(9,346)
Remeasurements of net defined benefit liabilities	15,313	36,336
Gains on hedges of a net investment in a foreign operations	2,378	9,629
Gains on cash flow hedging instruments	5,777	(1,437)
Share of other comprehensive income of associates	(2,862)	1,283
	2,907	28,422
Reclassification of sale of securities at fair value through other		
comprehensive income	7,007	(5,172)
Consolidated tax effect	(37,692)	(31,431)
Tax expense	879,393	827,140

An analysis of the net profit before income tax and income tax expense for the years ended December 31, 2019 and 2018, follows:

(In millions of Korean won)	2019	2018
Profit before income tax	3,318,472	3,086,338
Tax at the applicable tax rate ¹	902,218	838,381
Non-taxable income	(4,035)	(2,967)
Non-deductible expense	12,174	12,964
Tax credit and tax exemption	(381)	(275)
Temporary difference for which no deferred tax is		
recognized	1,253	1,112
Tax supplementary pay (rebate) for tax of prior years	(9,938)	(2,771)
Income tax expense of overseas branch	8,615	6,863
Tax effect of investments in subsidiaries	81	1,878
Foreign subsidiary tax rate difference effect	(774)	(1,470)
Consolidated tax effect	(37,692)	(31,431)
Others	7,872	4,856
Tax expense	879,393	827,140
Tax expense / Profit before income tax (%)	26.50	26.80

Details of current tax liabilities (income tax payables) and current tax assets (income tax refund receivables) before offsetting, as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Tax payables after offsetting ^{1, 2}	405,894	623,867
Adjustment on consolidated tax payable and others ³	(37,692)	(31,431)
Accounts payables ⁴	(359,864)	(586,699)
Current tax payable	8,338	5,737

¹ Current tax assets of ₩ 9,692 million (December 31, 2018: ₩ 486 million) and current tax assets of ₩ 4,212 million (December 31, 2018: ₩ 4,152 million) for overseas branches were excluded due to an uncertain tax position which does not qualify for offsetting.

33. Dividends

The dividend to the shareholder of the Bank in respect of the year ended December 31, 2019, of \forall 1,810 per share, amounting to total dividends of \forall 731,926 million, is to be proposed at the annual general shareholder's meeting on March 19, 2020. The Bank's financial statements as at December 31, 2019, do not reflect this dividend payable.

¹ Applicable income tax rate for ₩200 million and below is 11%, for over ₩200 million to ₩20 billion is 22%, and for over ₩20 billion to ₩300 billion is 24.2%, for over ₩300 billion is 27.5% as at December 31. 2019 and 2018.

² Includes income tax payable of ₩ 8,338 million (December 31, 2018: ₩ 5,737 million) under current tax liabilities as at December 31, 2019, which are not to be offset against any income tax refund receivables, such as those of overseas branches.

³ Tax expense reduced due to the adoption of consolidated tax return was recognized as tax benefit.

⁴ The amount of income tax payable by the Bank is reclassified as accounts payable, not to the tax authority, but to KB Financial Group Inc. due to the adoption of consolidated tax return.

34. Accumulated Other Comprehensive Income

Details of accumulated other comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

(III IIIIIII on Corcuit won)			201	9		
	Beginning	Changes (excluding reclassifica- tion)	Reclassification to profit or loss	Tax effect	Transfer to retained earnings	Ending
Remeasurements of net	(475,000)	/FF COO\		45.040		(040 007)
defined benefit liabilities Currency translation	(175,698)	(55,682)	-	15,313	-	(216,067)
differences	(10,328)	25,406	5,353	(4,488)	-	15,943
Net gains (losses) on debt instruments at fair value through other comprehensive income Net gains (losses) on equity instruments at fair value	22,475	98,224	(51,240)	(12,709)	-	56,750
through other comprehensive income Share of other	302,014	(23,657)	-	(502)	25,483	303,338
comprehensive income of associates	(3,259)	10,408	-	(2,862)	-	4,287
Gains(losses) on cash flow hedging instruments Gains (losses) on hedges of	11,539	(18,108)	(2,899)	5,777	-	(3,691)
a net investment in a foreign operations	(30,959)	(9,962)	1,317	2,378	_	(37,226)
	115,784	26,629	(47,469)	2,907	25,483	123,334

(In millions of Korean won)

			2010	0		
	Beginning ¹	Changes (excluding reclassifica- tion)	Reclassification to profit or loss	Tax effect	Transfer to retained earnings	Ending
Remeasurements of net	(70,002)	(122 122)		26 226		(175 600)
defined benefit liabilities Currency translation	(79,902)	(132,132)	-	36,336	-	(175,698)
differences Net gains (losses) on debt instruments at fair value	(37,711)	21,672	15,057	(9,346)	-	(10,328)
through other comprehensive income Net gains (losses) on equity instruments at fair value	(34,713)	72,415	6,476	(21,703)	-	22,475
through other comprehensive income Share of other	338,027	(30,863)	-	13,660	(18,810)	302,014
comprehensive income of associates	124	(4,666)	-	1,283	-	(3,259)
Gains(losses) on cash flow hedging instruments Gains (losses) on hedges of	7,751	6,980	(1,755)	(1,437)	-	11,539
a net investment in a foreign operations	(5,573)	(22,685)	(12,330)	9,629	-	(30,959)
	188,003	(89,279)	7,448	28,422	(18,810)	115,784
1 Postated based on Korean	IEDS 1100					

2018

¹ Restated based on Korean IFRS 1109.

35. Trust Accounts

Financial information of the trust segments the Group manages as at December 31, 2019 and 2018, and for the years ended December 31, 2019 and 2018, is as follows:

(In millions of Korean won)	Total as	ssets	Operating	revenues
	2019	2018	2019	2018
Consolidated	4,384,959	4,259,441	137,017	127,994
Unconsolidated	51,685,885	47,644,193	2,206,184	1,609,587
	56,070,844	51,903,634	2,343,201	1,737,581

¹ Financial information of the trust accounts has been prepared in accordance with the Statement of Korea Accounting Standard 5004, *Trust Accounts*, and enforcement regulations of Financial Investment Services under the Financial Investment Services and Capital Markets Act.

Significant receivables and payables related to the Group's trust accounts as at December 31, 2019 and 2018, are as follows:

(In millions of K	orean won)	2019	2018
Trust	Assets		
Segment	Accrued trust fees	37,340	36,172
	Other accrued income	23,976	23,658
	_	61,316	59,830
	Liabilities		
	Due to trust accounts	1,268,401	1,160,152
	Accrued interest on due to trust		
	accounts	7,081	6,267
	Deposits	278,975	345,873
	Accrued interest on deposits	2,481	24,867
	_	1,556,938	1,537,159
Custody	Assets		
Segment	Accrued trust fees	6,387	5,549
	Liabilities		
	Due to trust accounts	3,948,059	4,124,955
	Accrued interest on due to trust		
	accounts	3,055	4,280
	_	3,951,114	4,129,235

Significant revenue and expenses related to the Group's trust accounts for the years ended December 31, 2019 and 2018, are as follows:

(In millions of I	Korean won)	2019	2018
Trust	Revenues		
Segment	Fees and commissions		
	from trust accounts	276,985	259,170
	Management fees and		
	commissions from		
	retirement pension	25,741	25,321
	Commissions from early		
	termination in trust accounts	119	88
	_	302,845	284,579
	Expenses		
	Interest expenses on		
	due to trust accounts	20,515	17,842
	Interest expenses on deposits	12,926	21,389
		33,441	39,231
Custody	Revenues		<u>, </u>
Segment	Fees and commissions		
	from trust accounts	31,099	28,215
	Expenses		
	Interest expenses on due to trust		
	accounts	45,191	43,612

36. Supplemental Cash Flow Information

Cash and cash equivalents as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Cash	2,310,852	2,185,156
Checks with other banks	383,501	872,166
Due from Bank of Korea	8,336,097	8,911,607
Due from other financial institutions	3,450,859	2,920,081
	14,481,309	14,889,010
Restricted due from financial institutions	(8,759,432)	(9,203,801)
Due from financial institutions with original maturities		
over three months	(842,565)	(828,714)
	(9,601,997)	(10,032,515)
	4,879,312	4,856,495

Significant non-cash transactions for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019	2018
Decrease in loans due to the write-offs	539,584	526,134
Changes in accumulated other comprehensive income		
due to gains and losses on debt instruments at fair value		
through other comprehensive income	34,275	57,188
Changes in accumulated other comprehensive income due to		
investment in associates	7,546	(4,665)
Changes in financial investments due to debt-for-equity swap	88,958	22,286

Cash inflows and outflows from income tax, interest and dividends for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	Activities	2019	2018
Income tax paid	Operating	961,615	396,072
Interest received	Operating	10,968,984	10,162,987
Interest paid	Operating	4,325,880	3,483,064
Dividends received	Operating	101,657	97,440
Dividends paid	Financing	667,226	640,132

Changes in liabilities arising from financial activities for the years ended December 31, 2019 and 2018 are as follows:

2019

(In millions of Korean won)

					•			
	Derivative financial instrument for hedging purposes ¹	Debts	Debentures	Payables to trust accounts	Lease liabilities	Deposits for letter of guarantees and others	Other payable	Total
Beginning	14,643	17,496,056	23,163,585	5,285,107	340,522	156,364	104,184	46,560,461
Cash flow	(28,631)	1,290,505	(4,561,661)	(68,647)	(164,201)	130,566	(32,864)	(3,434,933)
Lease newly acquired and disposal Exchange differences	-	- 355,151	- 56,463	-	160,451	-	-	160,451 411,614
	-	333,131	30,403	_	_	_	_	411,014
Changes in fair values	(108,220)	-	67,297	-	-	-	-	(40,923)
Changes from business combination	-	-	-	-	-	-	93,277	93,277
Other changes from non- cash	7.640	(450)	44.200		7.645	16	(402.242)	(74.476)
transactions	7,618	(450)	14,308		7,645	16	(103,313)	(74,176)
Ending	(114,590)	19,141,262	18,739,992	5,216,460	344,417	286,946	61,284	43,675,771

14,643 17,496,056

(In millions of Korean won)

Ending

•	,			2018	3			
	Derivative financial instrument for hedging purposes ¹	Debts	Debentures	Payables to trust accounts	Finance lease liabilities	Deposits for letter of guarantees and others	Other payable	Total
Beginning	(3,659)	15,810,753	19,183,798	5,018,031	1,642	351,455	144,636	40,506,656
Cash flow	(17,698)	1,517,014	3,795,428	267,076	(11,242)	(205,302)	(3,170)	5,342,106
Lease newly acquired	-	-	-	_	17,555	-	_	17,555
Exchange differences	-	169,122	147,306	_	-	-	_	316,428
Changes in fair values	30,679	-	4,019	_	-	-	_	34,698
Changes from business combination	-	_	-	-	-	-	(48,711)	(48,711)
Other changes from non-cash								(
transactions	5,321	(833)	33,034		110	10,211	11,429	59,272

¹ Derivative financial instruments held for hedging are shown at net amounts of liabilities and assets.

23,163,585 5,285,107

8,065

156,364

104,184 46,228,004

37. Contingent Liabilities and Commitments

Acceptances and guarantees as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

	2019	2018
Confirmed acceptances and guarantees		
Confirmed acceptances and guarantees in Korean won		
Acceptances and guarantees for KB purchasing loan	161,314	196,517
Performance bond	3,686	-
Refund guarantees	28,021	-
Others	715,116	597,636
	908,137	794,153
Confirmed acceptances and guarantees in foreign currencies		
Acceptances of letter of credit	155,151	208,926
Letter of guarantees	49,754	53,210
Bid bond	37,765	51,528
Performance bond	718,097	604,311
Refund guarantees	1,022,646	592,925
Others	2,935,939	2,539,900
_	4,919,352	4,050,800
Financial guarantees		
Acceptances and guarantees for mortgage	47,384	50,497
Overseas debt guarantees	406,680	311,796
International financing guarantees in foreign currencies	231,685	110,070
Others	230,000	270,000
_	915,749	742,363
_	6,743,238	5,587,316
Unconfirmed acceptances and guarantees		
Guarantees of letter of credit	1,845,509	1,745,340
Refund guarantees	654,496	686,843
_	2,500,005	2,432,183
_	9,243,243	8,019,499
-		

Guarantee exposure by credit ratings

The credit quality of the guarantees exposure as at December 31, 2019 and 2018 can be categorized as follows:

(In millions of Korean won)

	2019		
Financial instruments applying 12-month expected credit	Financial ins applying lifetim	e expected	
losses	Non-impaired	Impaired	Total
and guarantees			
4,220,046	696	-	4,220,742
2,105,637	38,271	-	2,143,908
93,074	81,317	-	174,391
18,773	172,440	-	191,213
-	2,873	10,111	12,984
6,437,530	295,597	10,111	6,743,238
s and guarantees			
1,228,258	1,289	-	1,229,547
1,121,159	32,413	-	1,153,572
17,091	20,957	-	38,048
4,236		-	67,200
-	170	11,468	11,638
2,370,744	117,793	11,468	2,500,005
8,808,274	413,390	21,579	9,243,243
<u> </u>			
	2018		
Financial			
		-	
	credit lo	sses	
=	Non impaired	Impaired	Total
	Non-impaired	IIIIpaireu	IOtal
3,726,259	470		
		_	3 726 /38
	179 29 03 <i>4</i>	-	
1,571,258	29,034	-	1,600,292
1,571,258 84,251	29,034 13,585	- - - 420	1,600,292 97,836
1,571,258	29,034 13,585 117,166	- - - 420 14 550	1,600,292 97,836 148,029
1,571,258 84,251 30,443	29,034 13,585 117,166 171	14,550	1,600,292 97,836 148,029 14,721
1,571,258 84,251 30,443 - 5,412,211	29,034 13,585 117,166		1,600,292 97,836 148,029 14,721
1,571,258 84,251 30,443 - 5,412,211 s and guarantees	29,034 13,585 117,166 171 160,135	14,550	1,600,292 97,836 148,029 14,721 5,587,316
1,571,258 84,251 30,443 - 5,412,211 s and guarantees 1,102,478	29,034 13,585 117,166 171 160,135	14,550	1,600,292 97,836 148,029 14,721 5,587,316 1,104,225
1,571,258 84,251 30,443 - 5,412,211 es and guarantees 1,102,478 1,180,137	29,034 13,585 117,166 171 160,135 1,747 17,795	14,550	1,600,292 97,836 148,029 14,721 5,587,316 1,104,225 1,197,932
1,571,258 84,251 30,443 - 5,412,211 s and guarantees 1,102,478 1,180,137 25,749	29,034 13,585 117,166 171 160,135 1,747 17,795 16,225	14,550	1,600,292 97,836 148,029 14,721 5,587,316 1,104,225 1,197,932 41,974
1,571,258 84,251 30,443 - 5,412,211 es and guarantees 1,102,478 1,180,137	29,034 13,585 117,166 171 160,135 1,747 17,795	14,550	1,600,292 97,836 148,029 14,721 5,587,316 1,104,225 1,197,932 41,974 75,813
1,571,258 84,251 30,443 - 5,412,211 s and guarantees 1,102,478 1,180,137 25,749	29,034 13,585 117,166 171 160,135 1,747 17,795 16,225 66,186	14,550 14,970 - - -	3,726,438 1,600,292 97,836 148,029 14,721 5,587,316 1,104,225 1,197,932 41,974 75,813 12,239 2,432,183
	instruments applying 12-month expected credit losses and guarantees 4,220,046 2,105,637 93,074 18,773	Financial instruments applying 12-month expected credit losses Non-impaired	Financial instruments Applying 12-month expected credit losses Non-impaired Impaired

Acceptances and guarantees by counterparty as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

	Confirmed guarantees	Unconfirmed guarantees	Total	Proportion (%)
Large companies Small and medium	5,962,004	1,904,346	7,866,350	85.10
sized companies	650,612	397,539	1,048,151	11.34
Public and others	130,622	198,120	328,742	3.56
	6,743,238	2,500,005	9,243,243	100.00

(In millions of Korean won)

2018

	Confirmed	Unconfirmed		
	guarantees	guarantees	Total	Proportion (%)
Large companies	4,775,838	1,901,951	6,677,789	83.27
Small and medium sized companies	617,458	423,947	1,041,405	12.99
Public and others	194,020	106,285	300,305	3.74
	5,587,316	2,432,183	8,019,499	100.00

Acceptances and guarantees by industry as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

2019

	Confirmed	Unconfirmed		
	guarantees	guarantees	Total	Proportion (%)
Financial institutions	260,974	23,999	284,973	3.08
Manufacturing	3,373,220	1,627,840	5,001,060	54.11
Service	1,187,516	88,158	1,275,674	13.80
Wholesale and retail	1,126,976	597,998	1,724,974	18.66
Construction	467,114	20,590	487,704	5.28
Public	107,481	81,895	189,376	2.05
Others	219,957	59,525	279,482	3.02
	6,743,238	2,500,005	9,243,243	100.00

(In millions of Korean won)

2018

	Confirmed	Unconfirmed		
	guarantees	guarantees	Total	Proportion (%)
Financial institutions	72,071	3,736	75,807	0.95
Manufacturing	2,981,245	1,451,657	4,432,902	55.27
Service	931,680	84,586	1,016,266	12.67
Wholesale and retail	998,333	723,367	1,721,700	21.47
Construction	280,146	40,988	321,134	4.00
Public	165,571	36,256	201,827	2.52
Others	158,270	91,593	249,863	3.12
	5,587,316	2,432,183	8,019,499	100.00

Commitments as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

	2019	2018
Commitments		
Corporate loan commitments	41,340,286	36,929,404
Retail loan commitments	42,492,182	41,283,734
Other acceptance and guarantees	1,300,000	
in Korean won		1,300,000
Purchase of securities	2,733,757	1,765,445
	87,866,225	81,278,583
Financial Guarantees		
Credit line	1,797,802	1,956,426
Purchase of securities	591,500	436,800
	2,389,302	2,393,226
	90,255,527	83,671,809

Other Matters (including litigation)

- a) The Group has filed 58 lawsuits (excluding minor lawsuits in relation to the collection or management of loans), as the plaintiff, involving aggregate claims of \forall 293,254 million, and faces 97 lawsuits as the defendant (excluding minor lawsuits in relation to the collection or management of loans) involving aggregate damages of \forall 156,914 million, which arose in the normal course of the business and are still pending as at December 31, 2019.
- b) As at December 31, 2019, the Group has entered into construction contracts amounting to $\mbox{$W$}$ 155,546 million related to the construction of integrated headquarters building and payments made up to December 31, 2019 amount to $\mbox{$W$}$ 41,598 million.
- c) As at December 31, 2019, the Group has entered into construction contracts amounting to orall 250,458 million related to the construction of The K Project(IT infrastructure construction business needed KB's Digital Transformation to cope with change of IT technology and finance environment), and payments made until December 31, 2019 amount to orall 60,462 million.
- d) The Group has entered into a share purchase agreement to acquire a 70% shares in PRASAC(PRASAC Microfinance Institution Limited), a microfinance deposit taking institution in Cambodia, for US\$ 603 million from the existing shareholders on January 6, 2020. The consummation of the acquisition is subject to approvals by the domestic and foreign financial authorities.

The Group has signed a shareholders' agreement with the existing shareholders of PRASAC. Each of the existing shareholders has a put option to sell the remaining 30% shares to the Group at the exercise price calculated on the basis of the adjusted book value as of December 31, 2021. The put option will expire within six months following the finalization of the audited financial statements for the period ending December 31, 2021 and the confirmation of the adjusted book value. If the put option is not exercised until its expiry, the Group may exercise a call option during the six months following the expiry of such put option. All shareholders are restricted from selling shares or additional pledge before exercising the put option and call option.

d) The face values of the securities sold to general customers through tellers' sale amount to \forall 372 million and \forall 372 million as at December 31, 2019 and 2018, respectively.

38. Subsidiaries

Details of subsidiaries as at December 31, 2019, are as follows:

Investor	Investee	Ownership (%)	Location	Industry
Kookmin Bank	Kookmin Bank Int'l Ltd.(London) ¹	100.00	United Kingdom	Banking and foreign exchange transaction
Kookmin Bank	Kookmin Bank Cambodia PLC.	100.00	Cambodia	Banking and foreign exchange transaction
Kookmin Bank	Kookmin Bank (China) Ltd.	100.00	China	Banking and foreign exchange transaction
Kookmin Bank	KB Microfinance Myanmar Co., Ltd	100.00	Myanmar	Micro finance services
Kookmin Bank	Personal pension trust and 10 others ²	0.00	Korea	Trust
Kookmin Bank	KH the 2nd L.L.C. and 39 others ³	0.00	Korea	Asset-backed securitization and others
Kookmin Bank	KB Wise Star Private Real Estate Feeder Fund 13	86.00	Korea	Investment Trust
KB Wise Star Private Real Estate Feeder Fund 1	KB Star Office Private Real Estate Master Fund 2 ³	44.44	Korea	Investment Trust
Kookmin Bank	KB Haeorum Private Securities 83 ³	99.94	Korea	Investment Trust
Kookmin Bank	Kiwoom Frontier Private placement fund 10[Bond] ³	99.90	Korea	Investment Trust
Kookmin Bank	Woori Safe Plus Qualified Private Trust S-8(Bond) ³	99.96	Korea	Investment Trust
Kookmin Bank	Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1 ³	99.92	Korea	Investment Trust
Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1	Mirae Asset Triumph Global Privately placed Master Investment Trust 1	100.00	Korea	Investment Trust
Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1	Mirae Asset Triumph Global Privately placed Master Investment Trust 2	100.00	Korea	Investment Trust
Kookmin Bank	NH-Amundi Global Private Securities Investment Trust 1(BOND) ³	77.78	Korea	Investment Trust
Kookmin Bank	Meritz Private Real Estate fund No.9-2 ³	99.98	Korea	Investment Trust
Kookmin Bank	AIP US Red Private Real Estate Trust NO.10 ³	99.97	Korea	Investment Trust
Kookmin Bank	KB Leaders Private placement fund 10[Bond] ³	87.53	Korea	Investment Trust
Kookmin Bank	Samsung KODEX 10Y F-SKTB Inverse ETF(Bond-Derivatives) ³	98.56	Korea	Investment Trust
Kookmin Bank	KB Core Blind Private Estate Fund 1st ³	90.09	Korea	Investment Trust
KB Core Blind Private Estate Fund 1st	Wise Star Private Real Estate Feeder Fund 3rd ³	46.65	Korea	Investment Trust
Kookmin Bank	KB Global Private Real Estate Debt Fund 3 rd (USD) ³	99.50	Korea	Investment Trust

- ¹ The Bank converted Kookmin Bank Int'l Ltd.(London) into a London branch as at May 16, 2018, which is considered to be a merger transaction between subsidiaries under common control. The Bank accounted for the transaction by applying carrying amount method and measured the transferred assets and liabilities at carrying amounts included in the consolidated financial statements. The amounts of the transferred assets and liabilities resulting from the business combination were ₩ 480,161 million and ₩ 480,023 million, respectively as at the acquisition date.
- ² The Bank controls the trust because it has power that determines the management performance over the trust, and is exposed to variable returns to absorb losses through the guarantees of payment of principal or payment of principal and fixed rate of return.
- ³ The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has ability to affect those returns through its power.

KB Western Inland highway Private Special Asset Fund(SOC) and Koratevien Specialist Private Equity Fund 1 as structured companies that hold more than half of their ownership percentage but do not have the strength to related activities in accordance with agreements with trust and other sharerholders are excluded from the consolidation.

The condensed financial information of major subsidiaries as at December 31, 2019 and 2018, and for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)			2019		
_	Assets	Liabilities	Equity	Operating revenue	Profit (loss) for the period
Kookmin Bank Int'l Ltd.(London)	37,404	887	36,517	558	293
Kookmin Bank Cambodia PLC.	307,604	208,670	98,934	15,815	2,851
Kookmin Bank (China) Ltd.	3,032,642	2,599,516	433,126	135,117	12,462
KB Microfinance Myanmar Co., Ltd	24,188	2,559	21,629	4,349	(149)
Personal pension trust and 10 others	4,413,755	4,299,288	114,467	141,162	3,515
(In millions of Korean won)			2018		
	Assets	Liabilities	Equity	Operating revenue	Profit (loss) for the period
Kookmin Bank Int'l Ltd.(London) Kookmin Bank Hongkong	35,923	940	34,983	7,330	1,331

Kookmin Bank Int'l Ltd.(London)	35,923	940	34,983	7,330	1,331
Kookmin Bank Hongkong Ltd. ¹	-	-	_	5,716	5,434
Kookmin Bank Cambodia					
PLC.	197,135	104,328	92,807	10,307	1,621
Kookmin Bank (China) Ltd.	2,605,033	2,192,469	412,564	138,453	14,819
KB Microfinance Myanmar					
Co., Ltd	20,941	879	20,062	2,783	538
Personal pension trust and					
10 others	4,284,440	4,173,488	110,952	144,767	3,966

¹ Liquidation was completed during the year ended December 31, 2018.

Nature of the risks associated with interests in consolidated structured entities

Terms of contractual arrangements that provide financial support to a consolidated structured entity are as follows:

- The Bank provides the capital commitments of ₩ 172,000 million to KB Wise Star Private Real Estate

Feeder Fund 1st, of which $\mbox{$W$}$ 817 million has not been utilized, of $\mbox{$W$}$ 57,878 million to Meritz Private Real Estate fund No.9-2, of which $\mbox{$W$}$ 24,258 million has not been utilized, and of $\mbox{$W$}$ 100,000 million to KB Core Blind Private Estate Fund 1st, of which $\mbox{$W$}$ 66,842 million has not been utilized. Based on the investment agreement, the Bnak is subject to increase its investment upon the request of the asset management company or agreement among existing investors.

- The Bank has provided purchase commitment and grant of credit to the structured entities that are considered as subsidiaries. The Bank should purchase unsold commercial paper securities if there is a shortage of the investors for the commercial paper securities issued by the structured entity. If events causing the cessation of the issuance of commercial paper securities occur or if the structured entities become insolvent, the Bank should provide loans to the structured entities under certain conditions.

(In millions of Korean won)	2019
KH the 2nd L.L.C.	41,309
Silver Investment 2nd Inc.	50,000
KH the 3rd L.L.C.	30,100
KBH the 1st L.L.C.	8,070
HLD the 3rd L.L.C.	111,600
KBH the 3rd L.L.C.	30,217
KBC the 2nd L.L.C.	30,186
KLD the 1st L.L.C	13,100
LOG the 3rd L.L.C.	24,300
KBL Incheon 1st L.L.C.	101,000
KB DTower 1st L.L.C.	50,151
KB Display 1st L.L.C.	100,303
KB Firstpark L.L.C	48,450
KB Alminium 1st L.L.C	50,236
KB INO 2nd L.L.C.	30,131
KBH the 5th L.L.C	25,072
KB Happy 1st L.L.C	50,138
KL Industrial 2nd L.L.C	30,164
KB Socio the 1st L.L.C.	30,187
KB Industry the 1st L.L.C.	30,158
KBST the 1st L.L.C	30,078
KBH the 4th L.L.C	30,168
KB Geumjeong Hill L.L.C	65,130
KBM the 1st L.L.C	45,220
KB Future the 1st L.L.C	30,127
Great Forest the 1st L.L.C	25,149
KBC the 3rd L.L.C.	35,074
KBH the 6th L.L.C	50,064
KB industry 2nd L.L.C	30,151
Beomuh Landmark the 2nd L.L.C	60,216
KB Firstville the 1st L.L.C	19,081
KB Handok the 1st L.L.C.	30,029
KB Heracles the 1st L.L.C.	25,131
KB World Vista the 1st L.L.C.	19,790
SLT Gamsam Co., Ltd.	24,300
K plus the 1st L.L.C.	200,369

- The Bank provides the guarantees of payment of principal or principal and fixed rate of return, in case the operating results of the trusts are less than the guaranteed principal or principal and a fixed rate of return.

Changes in subsidiaries

KBH the 5th L.L.C and 26 other subsidiaries were newly included in the consolidation scope, and KL the 1st L.L.C. and 19 other subsidiaries were excluded from the scope of consolidation due to redemption and others during the nine-month periods ended December 31, 2019.

Net cash flow from change in subsidiaries

The net cash inflow from subsidiaries newly consolidated and de-consolidated is amounting to $\pm 174,559$ million and $\pm 37,720$ million, respectively for the year ended December 31, 2019.

39. Unconsolidated Structured Entity

The nature, purpose and activities of the unconsolidated structured entities and how the structured entities are financed, are as follows:

Nature	Purpose	Activities	Methods of Financing
Asset-backed securitization	Early cash generation through transfer of securitization assets Fees earned as services to SPC, such as providing lines of credit and ABCP purchase commitments	Fulfillment of Asset-backed securitization plan Purchase and collection securitization assets Issuance and repayment of ABS	Issuance of ABS and ABCP based on securitization assets
Structured finance	Granting PF loans related to SOC and real property Granting loans to ships/aircrafts SPC Project finance to M&A and others	and ABCP Construction of SOC and real property Building ships/ Construction and purchase of aircrafts M&A	Loan commitments through Credit Line, providing lines of credit and investment agreements
Investment funds	Investment in beneficiary certificates Investment in PEF and partnerships	Management of fund assets Payment of fund fees and allocation of fund profits	Sales of beneficiary certificate instruments Investment of general partners and limited partners

As at December 31, 2019 and 2018, the size of the unconsolidated structured entities and the risks associated with its interests in unconsolidated structured entities are as follows:

(In millions of Korean won)

	2019			
	Asset-backed securitization	Structured finance	Investment funds	Total
Total assets of the				
unconsolidated structured entities	69,638,263	39,608,941	44,867,926	154,115,130
Carrying amount on	09,030,203	39,000,941	44,007,920	134,113,130
financial statements				
Assets				
Financial assets at fair				
value through profit or loss	228,848	21,778	2,153,921	2,404,547
Derivative financial	220,010	21,770	2,100,021	2, 10 1,0 17
assets	1,367	-	-	1,367
Loans at amortized cost	124,054	2,686,643	-	2,810,697
Financial investments	4,680,995	-	-	4,680,995
Investments in			224 742	224 742
associates	-	-	334,713	334,713
Other assets				- 40,000,040
	5,035,264	2,708,421	2,488,634	10,232,319
Liabilities	400.040	F00 70F	444.000	4 044 050
Deposits	409,246	523,705	111,908	1,044,859
Other liabilities	1,072	654	- 111 000	1,726
Maximum avaaaura ta	410,318	524,359	111,908	1,046,585
Maximum exposure to loss				
Asset ¹	5,035,264	2,708,421	2,488,634	10,232,319
Purchase and capital	3,000,204	2,700,721	2,400,004	10,202,010
commitments	-	-	2,142,836	2,142,836
Acceptances and				
guarantees and Loan commitments	2,398,467	1,798,208	_	4,196,675
	7,433,731	4,506,629	4,631,470	16,571,830
	.,	.,000,020	.,00.,	, ,
Methods of determining the maximum exposure to loss	Providing lines of credit / Purchase commitments/ Acceptances and guarantees and Loan commitments	Loan commitments / Capital commitments / Purchase commitments and Acceptances and guarantees	Capital commitments	

(In millions of Korean won)

		201	8	
	Asset-backed securitization	Structured finance	Investment funds	Total
Total assets of the				
unconsolidated structured entities	81,464,276	29,714,246	28,470,016	139,648,538
Carrying amount on financial statements	01,101,210		23,170,010	
Assets Financial assets at fair value through profit or		40.00		
loss Derivative financial	213,279	19,985	2,241,304	2,474,568
assets	4,034	-	22,250	26,284
Loans at amortized cost	60,404	2,456,843	-	2,517,247
Financial investments Investments in	5,458,105	-	-	5,458,105
associates	-	-	277,645	277,645
Other assets				
	5,735,822	2,476,828	2,541,199	10,753,849
Liabilities				
Deposits Derivative financial	291,465	970,890	62,319	1,324,674
liabilities	331	-	-	331
Other liabilities	893	1,200	58_	2,151
	292,689	972,090	62,377	1,327,156
Maximum exposure to loss				
Asset ¹	5,735,822	2,476,828	2,541,199	10,753,849
Purchase and capital commitments Acceptances and	-	20,000	1,664,461	1,684,461
guarantees and Loan				
commitments	2,476,060	1,562,943	-	4,093,003
	8,211,882	4,059,771	4,205,660	16,477,313
Methods of determining the maximum exposure to loss	Providing lines of credit / Purchase commitments/ Acceptances and guarantees and	Loan commitments / Capital commitments / Purchase commitments and	Capital commitments	
	Loan commitments	Acceptances and guarantees		

¹ Maximum exposure to loss includes the asset amounts, after deducting loss (provision for assets, impairment losses and others), recognized in the consolidated financial statements of the Group.

40. Leases

The amounts recognized in the consolidated statements of financial position

The consolidated statement of financial position shows the following amounts relating to leases:

(In millions of Korean won)

	December 31, 2019	January 1, 2019
Right-of-use property and equipment ¹		
Real estate	341,288	354,473
Vehicles	8,207	11,181
Others	15,319	10,952
	364,814	376,606
Right-of-use intangible assets ¹	9,639	15,162
	9,639	15,162
	374,453	391,768
Lease liabilities ¹	344,417	340,522

¹ It is included in property and equipment, intangible assets and other liabilities.

The amounts recognized in the consolidated statements of comprehensive income

The amounts related to lease recognized in the consolidated statements of comprehensive income for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

_	2019	2018
Depreciation and amortization of right-of-use assets		
Real estate	197,909	-
Vehicles	13,684	-
Others	6,972	-
Intangible asset	6,519	
_	225,084	
Interest expenses on the lease liabilities (Included in finance charges)	7.645	_
Expense relating to short-term leases (Included in administrative expenses)	1,996	-
Expense relating to leases of low-value assets that are not short-term leases (Included in administrative expenses)	1,034	-

The total cash outflow for leases in 2019 was ₩ 167,442 million.

Finance lease - 2018

The future minimum lease payments classified as a finance lease as at December 31, 2018 is as follows:

(In millions of Korean won)	2018
Net carrying amount of finance lease assets	26,083
Minimum lease payments	
Within 1 year	5,824
1-5 years	2,406
	8,230
Present value of minimum lease payments	
Within 1 year	5,716
1-5 years	2,349
	8,065

Operating Lease - 2018

The Group as an Operating Lessee

The future minimum lease payments arising from the non-cancellable lease contracts as at December 31, 2018 is as follows:

(In millions of Korean won)	2018
Minimum lease payments	
Within 1 year	135,474
1-5 years	192,148
Over 5 years	16,675
	344,297
Minimum sublease payments	(2,323)

The lease payments reflected in profit or loss for the year ended December 31, 2018 is as follows:

(In millions of Korean won)	2018
Lease payments reflected in profit or loss	
Minimum lease payments	161,936
Sublease payments	(1,769)
	160,167

The Group as an Operating Lessor

The future minimum lease receipts arising from the non-cancellable lease contracts as at December 31, 2018 is as follows:

(In millions of Korean won)	2019	2018	
Minimum lease receipts			
Within 1 year	23,796	17,376	
1-5 years	41,193	23,984	
Over 5 years	4,366	-	
	69,355	41,360	

41. Related Party Transactions

Profit or loss arising from transactions with related parties for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won) Parent		2019	2018
KB Financial Group Inc.	Fee and commission income	5,355	4,644
	Other non-operating income	932	808
	Interest expense	1,574	5,178
	Fee and commission expense	1	-
	Other operating expense	69	-
	General and administrative expenses	841	778
Parent's subsidiaries			
KB Securities Co., Ltd.	Interest expense Fee and commission income	1,325 14,298	459 15,770
	Gains on financial instruments at fair value through profit or loss	39,373	8,583
	Reversal of credit losses	6	-
	Other non-operating income	8,849	10,371
	Interest expense	6,307	3,771
	Fee and commission expense	726	1,079
	Losses on financial instruments at fair value through profit or loss	13,616	8,448
	Other operating expense	134	-
	Provision for credit	-	21
	General and administrative expenses	-	8,361
KB Asset Management Co., Ltd.	Fee and commission income	1,201	1,085
	Other non-operating income	4	4
	Interest expense	90	95
	Fee and commission	986	3,157

	expense		
	Other operating	15	-
	expense		
	General and	500	458
	administrative		
	expenses		
KB Real Estate Trust Co., Ltd.	Fee and commission income	211	134
	Other non-operating income	45	42
	Interest expense	328	197
	Fee and commission	1,899	2,282
	expense	1,000	2,202
KB Investment Co., Ltd.	Fee and commission income	42	23
	Interest expense	1,019	376
KB Credit Information Co., Ltd.	Fee and commission	64	58
ND Credit information Co., Ltd.	income	04	50
	Other non-operating	232	205
	income	202	200
	Interest expense	134	85
	Fee and commission	20,508	16,780
	expense	20,300	10,700
KB Data System Co., Ltd.	Fee and commission income	225	202
	Other non-operating income	92	98
	Interest expense	309	250
	General and	50,074	50,803
	administrative		
	expenses		
KB Life Insurance Co., Ltd.	Fee and commission income	14,075	12,471
	Gains on financial	14,612	14,064
	instruments at fair		
	value through profit or loss		
	Other non-operating income	2,898	4,284
	Interest expense	1,062	983
	Fee and commission	8	12
	expense		
	Losses on financial instruments at fair value through profit or	2,853	3,421
	loss		
	Other operating	11	-
	expense		
	General and	1,286	1,582
	administrative		

	expenses		
KB Kookmin Card Co., Ltd.	Interest income	4,054	3,855
	Fee and commission	211,806	211,328
	income	ŕ	,
	Gains on financial	2,348	2,730
	instruments at fair		
	value through profit or		
	loss		
	Reversal of credit losses	54	7
	Other non-operating income	1,314	983
	Interest expense	1,073	870
	Fee and commission expense	1,732	1,587
	Losses on financial	38	400
	instruments at fair		
	value through profit or		
	loss		
	Provision for credit	-	4
	losses General and	153	216
	administrative	100	210
	expenses		
KB Savings Bank Co., Ltd.	Fee and commission income	736	379
	Other non-operating income	50	44
	Interest expense	6	2
	Fee and commission	17	24
	expense		
KB Capital Co., Ltd.	Interest income	2,907	1,989
	Fee and commission	2,968	2,311
	income		
	Other non-operating income	167	208
	Interest expense	670	1,138
	Fee and commission expense	44	61
	Other operating expense	-	5
	Provision for credit losses	46	163
	General and	-	16
	administrative		
	expenses		
KB Insurance Co., Ltd.	Interest income	79	45
	Fee and commission income	23,458	22,948
	Gains on financial	74,576	24,999
	instruments at fair		

	value through profit or		
	loss		
	Other non-operating income	361	363
	Interest expense	1,806	2,112
	Fee and commission expense	1	967
	Losses on financial instruments at fair value through profit or loss	7,468	4,328
	Other operating expense	-	16
	Provision for credit losses	6	-
	General and administrative expenses	15,576	15,667
Hanbando BTL Private Special Asset Fund	Fee and commission income	149	160
KB Senior Loan Private Fund No.1	Fee and commission income	8	20
KB Evergreen Private Securities Fund 98(Bond) ¹	Fee and commission income	-	5
KB AMP Infra Private Special Asset Fund 1 (FoFs)		11	5
KB Onkookmin 2020 TDF Fund (FoFs) ¹	Fee and commission income	-	1
KB Onkookmin 2025 TDF Fund (FoFs) ¹	Fee and commission income	2	1
KB Onkookmin 2030 TDF Fund (FoFs)	Fee and commission income	2	1
KB Onkookmin 2035 TDF Fund (FoFs) ¹	Fee and commission income	-	2
KB Onkookmin 2040 TDF Fund (FoFs) ¹	Fee and commission income	-	1
KB Onkookmin 2045 TDF Fund (FoFs)	Fee and commission income	1	1
KB Onkookmin 2050 TDF Fund (FoFs) ¹	Fee and commission income	-	1
KB Muni bond Private Securities Fund 1 (USD)(bond)	Fee and commission income	11	10
KB Global Private Real Estate Debt Fund 1	Fee and commission income	10	5
KB Na Compass Energy Private Special Asset Fund	Fee and commission income	8	5
KB Star Office Private Real Estate Investment	Interest income	619	433
Trust No.3	Interest expense	110	48
KB Star Office Private Real Estate Investment	Interest income	760	396
Trust No.4	Fee and commission	19	10

•			
	income		
	Interest expense	33	13
KB Korea Short Term Premium	Fee and commission	2	-
Private Securities 4(USD)(Bond) ¹	income		
	Losses on financial	2,931	-
	instruments at fair value		
	through profit or loss		
KB Korea Short Term Premium	Fee and commission	9	2
Private Securities 5(USD)(Bond) ¹	income		
	Gains on financial	1,347	-
	instruments at fair value		
	through profit or loss	40.404	
	Losses on financial	12,104	-
	instruments at fair value		
KB Korea Short Term Premium	through profit or loss Fee and commission	4	
Private Securities 10(USD)(Bond) ¹	income	1	-
KB Global Core Bond Securities	Fee and commission	23	2
Master Fund(Bond)	income	23	2
Waster Fund(Bond)	Gains on financial	1,276	_
	instruments at fair value	1,270	
	through profit or loss		
	Losses on financial	28	_
	instruments at fair value		
	through profit or loss		
KB AU Infigen Energy Private Special Asset Fund	Fee and commission	4	-
	income		
KB AU Infigen Energy Private Special Asset Fund	Fee and commission	6	-
2rd	income		
KB NA Loan Specialty Private Real Estate	Fee and commission	1	-
Investment Trust 1	income		
	Gains on financial	4	-
	instruments at fair value		
	through profit or loss	225	
	Losses on financial instruments at fair value	335	-
	through profit or loss		
KB NA Loan Specialty Private Real Estate	Fee and commission	1	_
Investment Trust 3	income	1	-
investment must 5	Gains on financial	209	_
	instruments at fair value	200	
	through profit or loss		
	Losses on financial	14	_
	instruments at fair value		
	through profit or loss		
ssociates	÷ ·		
	Fee and commission	_	4
Korea Credit Bureau Co., Ltd.	i ee and commission		
Korea Credit Bureau Co., Ltd.	income		
Korea Credit Bureau Co., Ltd.		21	127

	expense		
Incheon Bridge Co., Ltd.	Interest income	8,612	9,426
	Fee and commission	-	9
	income	4.075	0.055
	Gains on financial	4,975	2,655
	instruments at fair value through profit or loss		
	Reversal of credit losses	5	_
	Interest expense	483	296
	Fee and commission	7	2
	expense Provision for credit losses	-	1
Dongjo Co., Ltd.	Reversal of credit losses	_	31
Dae-A Leisure Co., Ltd.	Interest expense	8	9
KB12-1 Venture Investment	interest expense	3	24
Partnership	Interest expense	Ü	2-
Future Planning KB Start-up		_	18
Creation Fund	Interest expense		
KB High-tech Company	·	26	27
Investment Fund	Interest expense		
Aju Good Technology Venture Fund	Interest expense	22	30
KB-KDBC New Technology		58	39
Business Investment Fund	Interest expense		
KB Digital Innovation & Growth		8	7
New Technology Business	Intonest company		
Investment Fund	Interest expense	89	21
KB-Brain KOSDAQ Scale-up Fund	Interest expense		21
KB Global Platform Fund	Interest expense	193	-
Associate of parent			
KB Star office private real estate Investment		208	93
Trust No.1	Interest expense		
Associates of parent's subsidiaries			
SY Auto Capital Co., Ltd.	Interest income	191	189
	Fee and commission income	-	1
	Reversal of credit losses	13	-
	Interest expense	1	-
	Provision for credit losses	-	14
KB No.8 Special Purpose Acquisition Company ¹	Interest expense	-	17
KB No.9 Special Purpose Acquisition Company ¹	Interest expense	(23)	43
KB No.10 Special Purpose Acquisition Company ¹	Interest expense	18	30
KB No.11 Special Purpose Acquisition Company ¹	Interest expense	9	12
KB No.17 Special Purpose Acquisition Company	Interest expense	28	-
KB No.18 Special Purpose Acquisition Company	Interest expense	28	-
KB No.19 Special Purpose Acquisition Company	Interest expense	8	-
KB No.20 Special Purpose Acquisition Company	Interest expense	3	-

RAND Bio Science Co., Ltd.	Interest expense	5	3
Wise Asset Management Co., Ltd.	Interest expense	2	9
Food Factory Co., Ltd.	Interest income	41	9
	Fee and commission expense	12	1
	Provision for credit losses	1	1
Acts Co., Ltd.	Interest income	1	-
APRO CO.,LTD.	Interest income	19	-
	Interest expense	4	1
	Fee and commission expense	17	-
JLK Inspection Inc. ¹	Interest expense	1	-
Rainist Co., Ltd.	Fee and commission income	39	-
	Interest expense	-	2
Spark Biopharma Inc. ¹	Interest expense	59	25
Stratio, Inc.	Interest expense	1	-
Nexelon Co.,Ltd ¹	Interest expense	2	-
CellinCells Co., Ltd	Interest expense	19	-
Bomap Inc	Interest expense	1	-
BNF Corporation Ltd.	Provision for credit losses	1	-
KB Pre IPO Secondary Venture Fund 1st	Interest expense	7	27
POSCO-KB Shipbuilding Fund	Interest expense	-	81
Inolanding Lab Inc. ¹	Fee and commission income	-	1
Other			
Retirement pension	Fee and commission income	939	876
	Interest expense	4	3

¹ Excluded from the Group's related party as of December 31, 2019.

Details of receivables and payables, and related allowances for loan losses arising from the related party transactions as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won) Parent	-	2019	2018
KB Financial Group Inc.	Other assets	35	4,545
No i manoiai Group ino.	Deposits	18,537	69,621
	Other liabilities	418,286	643,010
Parent's subsidiaries	Caror maximuse	,200	0.10,0.10
KB Securities Co., Ltd.	Cash and cash equivalents	1,387	5,286
· · · · · · · · · · · · · · · · · · ·	Derivative assets	9,424	3,935
	Loans at amortized cost	•,	2,222
	(Gross amount)	65,289	25,617
	Allowances	23	21
	Other assets	18,320	8,644
	Derivative liabilities	3,979	1,412
	Deposits	423,053	334,470
	Provisions	30	37
	Other liabilities ²	23,330	23,076
KB Asset Management Co., Ltd.	Other assets	260	209
	Deposits	6,929	3,284
	Other liabilities ³	607	316
KB Real Estate Trust Co., Ltd.	Other assets	2	-
	Deposits	49,708	27,321
	Other liabilities ⁴	3,964	3,050
KB Investment Co., Ltd.	Other assets	41	-
	Deposits	62,686	20,784
	Other liabilities	53	17
KB Credit Information Co., Ltd.	Deposits	4,047	4,240
	Other liabilities	6,022	5,659
KB Data System Co., Ltd.	Other assets	886	322
	Deposits	21,642	18,059
	Other liabilities	5,372	4,397
KB Life Insurance Co., Ltd.	Derivative assets	-	270
	Other assets	3,804	1,827
	Derivative liabilities	1,532	1,197
	Deposits	571	1,576
	Debts	25,000	25,000
	Other liabilities ⁵	22,771	16,671
KB Kookmin Card Co., Ltd.	Derivative assets	676	-
	Loans at amortized cost		
	(Gross amount)	19,683	3,354
	Allowances	8	2
	Other assets	30,938	24,582
	Derivative liabilities	-	612
	Deposits	74,800	84,089
	Provisions	238	298

	Other liabilities	59,277	59,748
KB Savings Bank Co., Ltd.	Other assets	144	2
	Other liabilities	389	391
KB Capital Co., Ltd.	Loans at amortized cost		
	(Gross amount)	64,489	54,787
	Allowances	269	227
	Other assets	1,804	574
	Deposits	126,878	64,283
	Provisions	12	-
	Other liabilities	1,337	57
KB Insurance Co., Ltd.	Derivative assets	15,612	7,034
	Other assets	8,549	12,143
	Derivative liabilities	6,453	5,265
	Deposits	5,485	5,188
	Debts	20,000	20,000
	Debentures	29,991	30,002
	Provisions	6	-
	Other liabilities ⁶	4,794	31,863
Hanbando BTL Private Special	Other habilities	4,734	31,003
Asset Fund	Other assets	36	39
KB Senior Loan Private Fund		00	00
No.1	Other assets	1	3
KB AMP Infra Private Special		•	•
Asset Fund 1	Other assets	1	1
KB KBSTAR Mid-Long Term			
KTB Active ETF(Bond)	Other assets	500	-
KB Onkookmin 2030 TDF			
Fund(FoFs)	Other assets	1	-
KB Muni bond Private Securities			
Fund 1 (USD)	Other assets	2	2
KB Global Private Real Estate			
Debt Fund 1	Other assets	2	2
KB Na Compass Energy Private			
Special Asset Fund	Other assets	1	1
KB Star Office Private Real	Loans at amortized cost		
Estate Master Fund 3	(Gross amount)	-	24,000
	Other assets	-	12
	Deposits	7,364	5,361
	Other liabilities	58	48
KB Star Office Private Real	Loans at amortized cost		
Estate Master Fund 4	(Gross amount)	20,000	20,000
	Other assets	13	13
	Deposits	1,983	1,629
	Other liabilities	16	13
KB Korea Short Term Premium			
Private Securities 51	Other assets	-	2
KB Korea Short Term Premium			
Private Securities 10	Other assets	1	-
KB Global Core Bond Securities	Other assets	2	2

Master Fund(Bond)			
KB AU Infigen Energy Private			
Special Asset Fund	Other assets	1	-
KB AU Infigen Energy Private			
Special Asset Fund 2	Other assets	1	-
KB NA Loan Specialty Private	Other assets	1	-
Real Estate Investment Trust 1	Derivative liabilities	335	-
KB NA Loan Specialty Private	Other assets	1	-
Real Estate Investment Trust 3	Derivative liabilities	6	-
Associates			
Korea Credit Bureau Co., Ltd.	Deposits	17,966	15,674
	Other liabilities	-	33
Incheon Bridge Co., Ltd.	Financial assets at fair value		
	through profit or loss	37,857	32,882
	Loans at amortized cost	4.47.700	450.000
	(Gross amount)	147,700	158,200
	Allowances	11	14
	Other assets	520	736
	Deposits	45,447	43,666
	Provisions	6	7
December Metal Co., 14d	Other liabilities	346	24
Doosung Metal Co., Ltd.	Deposits	-	3
Jungdo Steel Co., Ltd.	Deposits	4	4
Dae-A Leisure Co., Ltd.	Deposits	753	1,229
	Other liabilities	14	7
Carlife Co., Ltd.	Deposits	-	2
Computerlife Co., Ltd.	Deposits	1	1
Skydigital INC.	Deposits	25	16
Jo Yang Industrial Co., Ltd.	Deposits	2	-
KB12-1 Venture Investment	Deposits	440	245
Partnership	Other liabilities	-	1
KB High-tech Company	Deposits	11,755	275
Investment Fund	Other liabilities	2	-
Aju Good Technology Venture	Deposits	5,456	6,439
Fund	Other liabilities	2	2
KB-KDBC Pre-IPO New Technology Business	Deposits	7,054	7,088
Investment Fund	Other liabilities	4	3
KB Digital Innovation & Growth			
New Technology Business			
Investment Fund	Deposits	12	618
KB-Brain KOSDAQ Scale-up	Deposits	13,118	18,813
Fund	Other liabilities	4	7
KB Global Platform Fund	Deposits	17,928	-
	Other liabilities	9	-
Associate of Parent			
KB Star Office Private Real	Deposits	8,293	7,946
Estate Investment Trust No.1	Other liabilities	66	58

Associates of Parent's subsidia	ries		
SY Auto Capital Co., Ltd.	Loans at amortized cost		
	(Gross amount)	1,900	8,300
	Allowances	4	18
	Other assets	-	9
	Deposits	8	5
	Provisions	13	11
	Other liabilities	2	2
KB No.9 Special Purpose	Deposits	_	2,275
Acquisition Company ¹	Other liabilities	_	42
KB No.10 Special Purpose	Deposits	-	1,666
Acquisition Company ¹	Other liabilities	_	11
KB No.11 Special Purpose	Deposits	_	658
Acquisition Company ¹	Other liabilities	_	2
KB No.17 Special Purpose	Deposits	1,742	_
Acquisition Company	Other liabilities	27	_
KB No.18 Special Purpose	Deposits	2,140	_
Acquisition Company	Other liabilities	28	_
KB No.19 Special Purpose	Deposits	1,093	_
Acquisition Company	Other liabilities	7	_
KB No.20 Special Purpose	Deposits	1,984	_
Acquisition Company	Other liabilities	3	_
RAND Bio Science Co., Ltd.	Deposits	4,452	232
Wise Asset Management Co.,	Deposits	21	696
Ltd.	Other liabilities	-	2
Built On Co., Ltd. 1	Deposits	_	7
Food Factory Co., Ltd.	Loans at amortized cost		
•	(Gross amount)	1,987	200
	Allowances	2	1
	Other assets	1	1
	Deposits	1,073	68
	Other liabilities	1	_
Acts Co., Ltd.	Deposits	1	29
Paycoms Co., Ltd.	Deposits	1	1
Big Dipper Co., Ltd.	Deposits	6	182
APRO Co.,Ltd.	Loans at amortized cost		
	(Gross amount)	2,016	-
	Deposits	3,201	2,201
	Other liabilities	1	-
Rainist Co., Ltd. ¹	Deposits	-	1
Spark Biopharma Inc. ¹	Deposits	-	2,630
	Other liabilities	-	19
Stratio, Inc.	Deposits	726	516
CellinCells Co., Ltd	Deposits	1,545	-
	Other liabilities	1	-
Fabric Types CO.,LTD.	Deposits	395	-
	Other liabilities	2	-

BNF Corporation Ltd.	Loans at amortized cost		
Biti Corporation Eta.	(Gross amount)	1,400	_
	Other assets	2	-
	Deposits	947	-
	Other liabilities	6	-
KB IGen Private Equity Fund			
No.1	Deposits	147	148
KB Pre IPO Secondary Venture	Deposits	2,955	1,115
Fund 1	Other liabilities	1	1
Key management	Loans at amortized cost		
	(Gross amount)	3,423	2,218
	Allowances	1	-
	Other assets	3	2
	Deposits	10,104	9,771
	Other liabilities	226	165
Other			
Retirement pension	Other assets	366	331
	Other liabilities	17,620	16,388

¹ Excluded from the Group's related party as of December 31, 2019.

Right-of-use assets and lease liability with related parties as at December 31, 2019, are as follows:

(In millions of Korean won)		2019
Parent's Subsidiaries		
KB Securities Co., Ltd.	Right-of-use assets	13,863
	Lease liabilities	16,658
KB Kookmin Card Co., Ltd.	Right-of-use assets	168
	Lease liabilities	28
KB Capital Co., Ltd.	Right-of-use assets	9
	Lease liabilities	23
KB Insurance Co., Ltd.	Right-of-use assets	5,693
	Lease liabilities	5,751

² Non-controlling interest equity classified as liabilities include ₩ 3,602 million and ₩ 2,704 million as at December 31, 2019 and 2018, respectively.

³ Non-controlling interest equity classified as liabilities include ₩ 325 million as at December 31, 2019.

⁴ Non-controlling interest equity classified as liabilities include ₩ 3,596 million and ₩ 2,700 million as at December 31, 2019 and 2018, respectively.

⁵ Non-controlling interest equity classified as liabilities include ₩ 19,604 million and ₩ 13,502 million as at December 31, 2019 and 2018, respectively.

⁶ Non-controlling interest equity classified as liabilities include ₩ 1,624 million and ₩ 29,846 million as at December 31, 2019 and 2018, respectively.

Notional amount of derivative assets and liabilities arising from the related party transactions as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	2018
Parent's subsidiaries			
KB Securities Co., Ltd.	Notional amount of Derivative		
	financial instruments	651,372	393,515
KB Life Insurance Co., Ltd	Notional amount of Derivative		
	financial instruments	104,058	252,213
KB Kookmin Card Co., Ltd.	Notional amount of Derivative		
	financial instruments	44,472	62,611
KB Insurance Co., Ltd.	Notional amount of Derivative		
	financial instruments	799,567	1,127,722
KB NA Loan Specialty			
Private Real Estate	Notional amount of Derivative		
Investment Trust 1	financial instruments	29,153	-
KB NA Loan Specialty			
Private Real Estate	Notional amount of Derivative		
Investment Trust 3	financial instruments	95,519	_

In accordance with Korean IFRS 1024, the Group includes the Parent, the Parent's subsidiaries, associates, associates of the Parent's subsidiaries, key management (including family members), and post-employment benefit plans of the Group and entities regarded as its related parties in the scope of its related parties. Additionally, the Group discloses balances (receivables and payables) and other amounts arising from the related party transactions in the notes to the consolidated financial statements. Refer to Note 13 for details on investments in associates.

Key management includes the directors of the Bank and the executive directors (vice presidents and above) of the Bank and companies where the directors and/or their close family members have control or joint control.

Significant loan transactions with related parties for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)	2019 ¹				
,	Beginning	Loans	Repayments	Others	Ending
Parent's subsidiaries					
KB Securities Co., Ltd.	25,617	892,470	853,096	298	65,289
KB Kookmin Card Co., Ltd.	3,354	268,897	252,639	71	19,683
KB Capital Co., Ltd.	54,787	7,624	-	2,078	64,489
KB Star Office Private Real	·	ŕ			•
Estate Master Fund 3	24,000	-	24,000	-	-
KB Star Office Private Real					
Estate Master Fund 4	20,000	-	-	-	20,000
Associate					
Incheon Bridge Co., Ltd.	191,082	_	10,500	4,975	185,557
Associate of parent's					
subsidiaries					
SY Auto Capital Co., Ltd.	8,300	27,998	34,398	-	1,900
Food Factory Co., Ltd.	200	1,800	20	7	1,987
APRO CO.,LTD.	-	2,000	-	16	2,016
BNF Corporation Ltd.	-	-	-	1,400	1,400
Acts CO.,LTD	-	68	68	-	-
Key management ²	2,218	638	555	1,122	3,423
(la millione of Kovers vers)			2040 1		
(In millions of Korean won)	Beginning	Lagra	2018 ¹	Othoro	Endina
Deventle exheidieries	Beginning	Loans	Repayments	Others	Ending
Parent's subsidiaries	4.040	4 200 050	4 040 007		05.047
KB Securities Co., Ltd.	4,346	1,369,958	1,348,687	-	25,617
KB Kookmin Card Co., Ltd.	6,806	164,635	168,087	4 704	3,354
KB Capital Co., Ltd.	19,285	33,711	-	1,791	54,787
KB Star Office Private Real		04.000			04.000
Estate Master Fund 3	-	24,000	-	-	24,000
KB Star Office Private Real		20,000			20,000
Estate Master Fund 4	-	20,000	-	-	20,000
Associate	202 426		11 700	0.656	101 000
Incheon Bridge Co., Ltd.	203,126	-	14,700	2,656	191,082
Dongjo Co., Ltd	116	-	116	-	-
Associate of parent's subsidiaries					
SY Auto Capital Co., Ltd.		50,053	41,753		8,300
Food Factory Co., Ltd.	200	50,055	41,733	-	200
Key management ²	1,619	108	836	1,327	2,218
Ney management	1,019	100	030	1,327	۷,۷۱۵

¹ Transactions between related parties, such as settlements arising from operating activities and daylight overdraft to be repaid on the day of handling, are excluded.

² Includes details of loan transactions that occurred before they became related parties.

Significant lending transactions with related parties for the years ended December 31, 2019 and 2018, are as follows:

(In millions of Korean won)

(In millions of Korean won)				2019		
		Beginning	Increase	Decrease	Others ¹	Ending
Parent						
KB Financial Group						
Inc	Deposits	69,621	310,000	370,000	8,916	18,537
Parent's subsidiaries						
KB Asset Management						
Co., Ltd.	Deposits	3,284	-	-	3,645	6,929
KB Real Estate Trust						
Co., Ltd.	Deposits	27,321	-	-	22,387	49,708
KB Investment Co.,						
Ltd.	Deposits	20,784	410,000	365,000	(3,098)	62,686
KB Credit Information	·				,	
Co., Ltd.	Deposits	4,240	1,611	1,425	(379)	4,047
KB Data System Co.,	·				` ,	
Ltd.	Deposits	18,059	18,500	13,500	(1,417)	21,642
KB Life Insurance Co.,	Deposits	1,576	, -	, -	(1,005)	571
Ltd.	Debts	25,000	_	_	-	25,000
KB Kookmin Card Co.,		,				-,
Ltd.	Deposits	84,089	22,000	22,000	(9,289)	74,800
KB Capital Co., Ltd.	Deposits	64,283	-	-	62,595	126,878
KB Insurance Co., Ltd.	Deposits	5,188	_	2,441	2,738	5,485
- ,	Debts	20,000	_	, -	_	20,000
	Debenture	30,002	_	_	(11)	29,991
KB Securities Co., Ltd.	Deposits	334,470	96,445	75,000	67,138	423,053
KB Star Office Private	'	, ,		-,	,	,,,,,,
Real Estate						
Investment Trust No.3	Deposits	5,361	2,003	_	_	7,364
KB Star Office Private	'	,	,			,
Real Estate						
Investment Trust No.4	Deposits	1,629	354	_	_	1,983
Associates		,,,_,				1,000
Korea Credit Bureau						
Co., Ltd.	Deposits	15,674	_	3,000	5,292	17,966
Incheon Bridge Co.,	20000.10	,		3,000	0,202	,
Ltd.	Deposits	43,666	25,260	5,260	(18,219)	45,447
Doosung Metal Co.,	20000.10	. 5,555	_0,_00	0,200	(10,210)	,
Ltd.	Deposits	3	_	_	(3)	_
Jungdo Co., Ltd.	Deposits	4	_	_	-	4
Dae-A Leisure Co.,	Вороско	•				•
Ltd.	Deposits	1,229	_	_	(476)	753
Carlife Co., Ltd.	Deposits	2	_	_	(2)	-
Computerlife Co., Ltd.	Deposits	1	_	_	(-)	1
SKYDIGITAL INC	Deposits	16	_	_	9	25
Jo Yang Industrial Co.,	2000000	.0			3	20
Ltd.	Deposits	_	_	_	2	2
	2000110				_	_

KB12-1 Venture						
Investment						
Partnership	Deposits	245	-	-	195	440
KB High-tech						
Company Investment						
Fund	Deposits	275	5,500	5,500	11,480	11,755
Aju Good Technology						
Venture Fund	Deposits	6,439	-	-	(983)	5,456
KB-KDBC Pre-IPO						
New Technology						
Business Investment						
Fund	Deposits	7,088	15,000	10,000	(5,034)	7,054
KB Digital						
Innovation &						
Growth New						
Technology						
Business						
Investment Fund	Deposits	618	-	-	(606)	12
KB-Brain KOSDAQ						
Scale-up Fund	Deposits	18,813	-	-	(5,695)	13,118
KB Global Platform						
Fund	Deposits	-	-	-	17,928	17,928
Associate of parent						
KB Star Office Private						
Real Estate						
Investment Trust No.1	Deposits	7,946	5,018	5,072	401	8,293
Associates of parent's						
subsidiaries						
SY Auto Capital Co.,						
Ltd.	Deposits	5	-	-	3	8
KB No.9 Special						
Purpose Acquisition						
Company ²	Deposits	2,275	-	2,266	(9)	-
KB No.10 Special						
Purpose Acquisition						
Company ²	Deposits	1,666	-	1,618	(48)	-
KB No.11 Special						
Purpose Acquisition						
Company ²	Deposits	658	-	530	(128)	-
KB No.17 Special						
Purpose Acquisition						
Company	Deposits	-	1,500	-	242	1,742
KB No.18 Special						
Purpose Acquisition						
Company	Deposits	-	2,200	100	40	2,140
KB No.19 Special						
Purpose Acquisition						
Company	Deposits	-	1,000	-	93	1,093
KB No.20 Special						
Purpose Acquisition	Deposits	-	1,500	-	484	1,984

Company RAND Bio Science						
Co., Ltd.	Deposits	232	1,900	_	2,320	4,452
Wise Asset	Борозна	202	1,000		2,020	4,402
Management Co.,						
Ltd.	Deposits	696	_	682	7	21
Built On Co., Ltd. ²	Deposits	7	-	-	(7)	-
Food Factory Co., Ltd.	Deposits	68	-	-	1,005	1,073
Acts Co., Ltd.	Deposits	29	-	-	(28)	1
Paycoms Co., Ltd.	Deposits	1	-	-	-	1
Big Dipper Co., Ltd.	Deposits	182	-	-	(176)	6
Apro Co., Ltd.	Deposits	2,201	-	-	1,000	3,201
Rainist Co., Ltd.		1	-	-	(1)	-
Spark Biopharma Inc. ²	Deposits	2,630	17,000	9,000	(10,630)	-
Stratio, Inc	Deposits	516	-	-	210	726
Nexelon Co.,Ltd. ²	Deposits	-	-	200	200	-
CellinCells Co., Ltd	Deposits	-	-	-	1,545	1,545
KB IGen Private Equity						
Fund No.1	Deposits	148	-	-	(1)	147
KB Pre IPO Secondary						
Venture Fund 1st	Deposits	1,115	-	-	1,840	2,955
Fabric Types CO.,LTD.	Deposits	-	-	-	395	395
BNF Corporation Ltd.	Deposits	-	-	-	947	947
Key management ³	Deposits	9,771	8,724	8,232	(159)	10,104

(In millions of Korean won)

	2018				
	Beginning	Increase	Decrease	Others ¹	Ending
Deposits	46,062	1,555,000	1,495,000	(36,441)	69,621
Deposits	8,958	-	-	(5,674)	3,284
Deposits	16,187	-	-	11,134	27,321
Deposits	19,816	56,200	68,200	12,968	20,784
Deposits	4,444	1,569	1,409	(364)	4,240
Deposits	15,036	11,500	10,700	2,223	18,059
Deposits	372	-	-	1,204	1,576
Debts	25,000	-	-	-	25,000
Deposits	85,091	22,000	22,000	(1,002)	84,089
Deposits	73,906	-	-	(9,623)	64,283
Deposits	7,034	-	1,650	(196)	5,188
Debts	20,000	-	-	-	20,000
	Deposits Deposits Deposits Deposits Deposits Deposits Deposits Debts Deposits Deposits Deposits	BeginningDeposits46,062Deposits8,958Deposits16,187Deposits19,816Deposits4,444Deposits15,036Deposits372Debts25,000Deposits73,906Deposits7,034	Beginning Increase Deposits 46,062 1,555,000 Deposits 8,958 - Deposits 16,187 - Deposits 19,816 56,200 Deposits 4,444 1,569 Deposits 372 - Debts 25,000 - Deposits 85,091 22,000 Deposits 73,906 - Deposits 7,034 -	Deposits 46,062 1,555,000 1,495,000 Deposits 8,958 - - Deposits 19,816 56,200 68,200 Deposits 4,444 1,569 1,409 Deposits 372 - - Deposits 25,000 - - Deposits 85,091 22,000 22,000 Deposits 73,906 - - Deposits 7,034 - 1,650	Beginning Increase Decrease Others¹ Deposits 46,062 1,555,000 1,495,000 (36,441) Deposits 8,958 - - (5,674) Deposits 16,187 - - 11,134 Deposits 19,816 56,200 68,200 12,968 Deposits 4,444 1,569 1,409 (364) Deposits 372 - - 1,204 Debts 25,000 - - - Deposits 85,091 22,000 22,000 (1,002) Deposits 73,906 - - (9,623) Deposits 7,034 - 1,650 (196)

	Debenture	49,981	_	_	(19,979)	30,002
KB Securities Co., Ltd.	Deposits	436,508	111,996	82,512	(131,522)	334,470
KB Star Office Private						
Real Estate						
Investment Trust No.3	Deposits	-	5,361	-	-	5,361
KB Star Office Private Real Estate						
Investment Trust No.4	Deposits		1,629			1,629
Associates	Deposits	-	1,029	-	-	1,029
Korea Credit Bureau						
Co., Ltd.	Deposits	25,513	8,000	16,000	(1,839)	15,674
Incheon Bridge Co.,	Doposito	20,010	0,000	10,000	(1,000)	10,07 1
Ltd.	Deposits	48,795	1,260	1,270	(5,119)	43,666
Terra Co., Ltd.	Deposits	10	_	-	(10)	_
Jungdong Steel Co.,					()	
Ltd.	Deposits	3	-	-	(3)	-
Doosung Metal Co.,						
Ltd.	Deposits	-	-	-	3	3
Jungdo Co., Ltd.	Deposits	4	-	-	-	4
Dae-A Leisure Co.,						
Ltd.	Deposits	466	479	466	750	1,229
Daesang Techlon Co.,		_				
Ltd. ²	Deposits	2	-	-	(2)	-
Carlife Co., Ltd.	Deposits	-	-	-	2	2
Computerlife Co., Ltd.	Deposits	-	-	-	1	1
SKYDIGITAL INC KB12-1 Venture	Deposits	-	-	-	16	16
Investment						
Partnership	Deposits	4,963	_	_	(4,718)	245
Future Planning KB	Берозна	4,500			(4,710)	240
Start-up Creation						
Fund	Deposits	_	9,000	9,000	_	_
KB High-tech	•		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,		
Company Investment						
Fund	Deposits	7,212	-	-	(6,937)	275
Aju Good Technology						
Venture Fund	Deposits	2,771	-	-	3,668	6,439
KB-KDBC Pre-IPO						
New Technology						
Business Investment						
Fund	Deposits	7,500	-	-	(412)	7,088
KB Digital Innovation &						
Growth New						
Technology Business	Dana - 14 -				040	040
Investment Fund	Deposits	-	-	-	618	618
KB-Brain KOSDAQ Scale-up Fund	Deposits			_	18,813	18,813
ocaie-up i unu	Dehosira	-	-	-	10,013	10,013

·						
Associate of parent						
KB Star Office Private						
Real Estate						
Investment Trust No.1	Deposits	6,962	351	-	633	7,946
Associates of parent's						
subsidiaries						
SY Auto Capital Co.,	Donosito	6			(4)	F
Ltd. KB No.8 Special	Deposits	6	-	-	(1)	5
Purpose Acquisition						
Company ²	Deposits	2,339	_	2,300	(39)	_
KB No.9 Special	Deposits	2,559	_	2,500	(55)	_
Purpose Acquisition						
Company ²	Deposits	2,309	2,266	2,234	(66)	2,275
KB No.10 Special	Воросно	2,000	2,200	2,201	(00)	2,270
Purpose Acquisition						
Company ²	Deposits	1,698	1,618	1,618	(32)	1,666
KB No.11 Special	'	,	,	,	(-)	,
Purpose Acquisition						
Company ²	Deposits	530	530	530	128	658
RAND Bio Science	·					
Co., Ltd.	Deposits	1,032	-	500	(300)	232
Wise Asset						
Management Co.,						
Ltd.	Deposits	340	2,366	2,008	(2)	696
Built On Co., Ltd. ²	Deposits	26	-	-	(19)	7
Food Factory Co., Ltd.	Deposits	1	-	-	67	68
Acts Co., Ltd.	Deposits	4	-	-	25	29
Paycoms Co., Ltd.	Deposits	-	-	-	1	1
Big Dipper Co., Ltd.	Deposits	473	-	-	(291)	182
Apro Co., Ltd.	Deposits	-	-	-	2,201	2,201
Rainist Co., Ltd.	Deposits	-	-	-	1	1
Spark Biopharma Inc. ²	Deposits	-	4,300	3,300	1,630	2,630
Stratio, Inc	Deposits	-	-	-	516	516
KB IGen Private Equity					4.40	4.40
Fund No.1	Deposits	-	-	-	148	148
KB Pre IPO Secondary	Б ::	0.000	0.000	4.000	405	4 445
Venture Fund 1st	Deposits	2,690	2,000	4,000	425	1,115
POSCO-KB	D 14 -		20.000	00.000		
Shipbuilding Fund	Deposits	-	32,800	32,800	-	-
Inno Lending Lab	Donosita	4.4			(44)	
Co., Ltd. ² Key management ³	Deposits	41 9.042	- 6 60F	E 110	(41)	0 774
Ney management	Deposits	8,042	6,605	5,140	264	9,771

¹ Transactions between related parties, such as settlements arising from operating activities and deposits, are excluded.

Significant contribution and collection arising from transactions with related parties for the year ended December 31, 2019, are as follows:

² Not considered to be the Bank's related party as at December 31, 2019.

³ Includes details of lending transactions that occurred before they became related parties.

(In millions of Korean won)	2019			
,		Collection and		
	Contribution	others		
Parent's subsidiaries				
Hanbando BTL Private Special Asset Fund	-	21,563		
Hope Sharing BTL Private Special Asset Fund	-	1,653		
KB Intellectual Property Investment Association	-	182		
KB Senior Loan Private Fund No.1	-	13,458		
KB Evergreen Private Securities Fund 98(Bond) ¹	-	52,302		
KB KBSTAR Mid-Long Term KTB Active ETF(Bond)	-	500		
KB Onkookmin 2025 TDF Fund (FoFs) ¹	5,500	-		
KB Onkookmin 2030 TDF Fund (FoFs)	5,500	-		
KB Onkookmin 2035 TDF Fund (FoFs) ¹	-	2,289		
KB Onkookmin 2045 TDF Fund (FoFs)	-	2,184		
KB Star Office Private Real Estate Master Fund 3	-	2,313		
KB Star Office Private Real Estate Master Fund 4	-	1,713		
KB Korea Short Term Premium Private Securities				
4(USD)(Bond) ¹	-	48,050		
KB Korea Short Term Premium Private Securities				
5(USD)(Bond) ¹	92,776	211,053		
KB Korea Short Term Premium Private Securities				
10(USD)(Bond)	70,176	-		
KB Global Core Bond Securities Master Fund(Bond)	30,000	22,220		
KB Haeoreum private securities investment trust 96(Bond) 1	-	50,656		
KB New Renewable Energy Private Special Asset Fund 1	858	4		
KB Mezzanine Private Securities Fund 3rd	22,000	-		
KB Wise Star Jongno Tower Real Estate Master Fund	65,000	1,836		
Koratevien Specialist Private Equity Fund 1	35,000	-		
KB Europe Renewable Specialized Private Equity Private				
Asset Investment Trust No. 2	3,767	-		
KB Global Infra Specialized Private Equity Private Asset				
Investment Trust No. 5	1	-		
KB Global Infra Specialized Private Equity Private Asset				
Investment Trust No. 6	1	-		
Associates				
Korea Credit Bureau Co., Ltd.	-	135		
Balhae Infrastructure Fund	592	6,855		
KoFC KBIC Frontier Champ 2010-5 (PEF) 1	-	138		
KB GwS Private Securities Investment Trust	-	7,276		
KB12-1 Venture Investment Partnership	-	3,400		
Future Planning KB Start-up Creation Fund	-	4,400		
KB High-tech Company Investment Fund	-	6,950		
Aju Good Technology Venture Fund	1,960	-		
KB-KDBC New Technology Business Investment Fund	2,500	-		
KB-TS Technology Venture Private Equity Fund	4,200	1,200		
KB Digital Innovation & Growth New Technology Business				
Investment Fund	1,125	-		
KB Intellectual Property Fund 2	6,000	-		
KB Digital Innovation Investment Fund Limited partnership	24,500	-		
KB-Brain KOSDAQ Scale-up Fund	7,000	-		
KB Sprott Renewables No.1. Private Equity Fund	1,327	-		
KB Global Platform Fund	19,500	-		
KB-UTC Inno-Tech Venture Fund	300	-		
Associate of parent				

KB Star Office Private Real Estate Investment Trust No.1	-	1,275
Associates of parent's subsidiaries		
KB Stone Bridge Secondary Private Equity Investment	4,040	1,060

¹ Not considered to be the Group's related party as at December 31, 2019.

Acceptances and guarantees and unused commitments provided to related parties as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won) Parent's subsidiaries	-	2019	2018
KB Securities Co., Ltd	Loan commitment in		
NB CCCarries Co., Eta	Korean won	140,000	137,509
KB Investment Co., Ltd.	Loss sharing	140,000	107,000
NB IIIVeditient Co., Etc.	agreements	1,000	1,000
KB Kookmin Card Co., Ltd.	Loan commitment in	1,000	1,000
NB NOOKIIIII Gala Go., Eta.	Korean won	820,000	820,000
	Loan commitment in	020,000	020,000
	foreign currency	3,473	5,591
	Other commitments	0,470	3,331
	in Korean won	1,300,000	1,300,000
KB Insurance Co., Ltd.	Loan commitment in	1,500,000	1,000,000
No insurance oo., Etc.	Korean won	20,000	_
KB Mezzanine Private Security	Purchase of	20,000	
Investment Trust No.2	securities	11,141	11,141
KB Mezzanine Private Securities Fund 3rd	Purchase of	11,141	11,141
NB Wezzanine i mate decunies i una ora	securities	48,260	_
KB Senior Loan Private Fund No.1	Purchase of	40,200	_
ND Sellior Loan Frivate Fullu No. 1	securities	3,770	3,770
KB New Renewable Energy Private Special	Purchase of	3,770	3,770
Asset Fund 1	securities	39,142	
KB Europe Renewable Specialized Private	Purchase of	39,142	-
Equity Private Asset Investment Trust No. 2	securities	14,454	
KB Global Infra Specialized Private Equity	Purchase of	14,454	-
Private Asset Investment Trust No. 5	securities	24 000	
KB Global Infra Specialized Private Equity	Purchase of	24,999	-
Private Asset Investment Trust No. 6	securities	24,999	
Associates	Securilles	24,999	-
Balhae Infrastructure Fund	Purchase of		
Damae ilinastructure i unu	securities	7,327	10,453
Incheon Bridge Co., Ltd.	Loan commitment in	1,321	10,455
incheon bridge Co., Ltd.	Korean won	20,000	20,000
KoEC KRIC Frontier Champ 2010 5 (REE) 1	Purchase of	20,000	20,000
KoFC KBIC Frontier Champ 2010-5 (PEF) ¹	securities		1 200
KB GwS Private Securities Investment Trust	Purchase of	-	1,290
KD GWS Private Securities investment trust	securities	976	976
Kara Dasca HANNAHA KB Sharad Grayth		876	876
KoFC POSCO HANWHA KB Shared Growth	Purchase of securities	10.040	10.040
No.2. Private Equity Fund	Purchase of	10,040	10,040
Aju Good Technology Venture Fund	securities	1 151	1 060
	securilles	1,154	1,960

KB-KDBC New Technology Business	Purchase of		
Investment Fund	securities	_	2,500
KB-TS Technology Venture Private Equity	Purchase of		_,
Fund	securities	3,180	7,380
KB Digital Innovation & Growth New	Purchase of		
Technology Business Investment Fund	securities	2,250	3,375
KB Intellectual Property Fund 2	Purchase of		
	securities	6,000	12,000
KB Digital Innovation Investment Fund	Purchase of		
Limited partnership	securities	2,800	27,300
KB-Brain KOSDAQ Scale-up Fund	Purchase of		
	securities	9,000	16,000
KB Sprott Renewables No.1. Private Equity	Purchase of		
Fund	securities	18,173	-
KB Global Platform Fund	Purchase of		
	securities	30,500	-
KB-UTC Inno-Tech Venture Fund	Purchase of		
	securities	14,700	-
Associates of parent's subsidiaries			
SY Auto Capital Co., Ltd.	Loan commitment in		
	Korean won	8,100	6,700
BNF Corporation Ltd.	Loan commitment in		
	Korean won	360	-
KB Stone Bridge Secondary Private Equity	Purchase of		
Investment	securities	15,960	-
Key management	Loan commitment in		
	Korean won	564	894

¹ Not considered to be the Group's related party as at December 31, 2019.

Acceptances and guarantees and unused commitments received from related parties as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		2019	2018
Parent's subsidiaries	_		
KB Investment Co., Ltd.	Loss sharing agreements	12,209	14,474
KB Real Estate Trust Co., Ltd.	Purchase of securities	19	1,319
KB Securities Co., Ltd.	Purchase of securities	19	1,319
KB Life Insurance Co., Ltd.	Purchase of securities	3,438	6,595
KB Insurance Co., Ltd.	Purchase of securities	3,343	-
KB Asset Management Co., Ltd.	Purchase of securities	666	-
KB Kookmin Card Co., Ltd.	Loan commitment in Korean won	86,400	87,922

Compensation to key management for the years ended December 31, 2019 and 2018, consists of:

(In millions of Korean won)		2019		
	Short-term employee benefits	Post- employment benefits	Share-based payments	Total
Registered directors (executive) Registered directors (non-	1,833	49	1,594	3,476
executive)	402	-	-	402
Non-registered directors	5,767	213	4,235	10,215
	8,002	262	5,829	14,093
(In millions of Korean won)		2018		
	Short-term	Post-		
	employee	employment	Share-based	
	benefits	benefits	payments	Total
Registered directors (executive) Registered directors (non-	1,278	51	1,022	2,351
executive)	337	-	-	337
Non-registered directors	4,807	183	3,217	8,207
	6,422	234	4.239	10,895

Significant operating transactions occurring between the Group and related parties include the establishment of deposit accounts, issuance of general purpose loans, loans on business transactions and trade receivables, and providing foreign currency remittances and related services. Other significant transactions include the grant of credit due to acceptance of banker's usance that the Bank issues and overdraft credit accounts arising from net settlement agreement between the Bank and KB Kookmin Card Co., Ltd.

Collateral offered to related parties as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)		20	2019 2018		
	Assets pledged as collateral ¹	Carrying amount	Collateralized amount	Carrying amount	Collateralized amount
Parent's subsidiaries					
KB Securities Co., Ltd.	Securities	50,471	50,000	62,006	62,000
KB Life Insurance Co., Ltd.	Securities	25,977	25,000	26,055	25,000
	Building/ Land	207,333	32,500	209,459	32,500
KB Insurance Co., Ltd.	Securities	49,990	50,000	50,000	50,000
	Building/ Land	207,333	26,000	209,459	26,000

¹ Collaterals related to lease contracts arising from operating activities between related parties are excluded.

Collateral received from related parties as at December 31, 2019 and 2018, are as follows:

(In millions of Korean won)			
,	Assets pledged as collateral ¹	2019	2018
Parent's subsidiaries			
KB Securities Co., Ltd.	Time deposits/		
	Beneficiary right certificate	167,000	178,178
	Securities	27,948	20,000
	Real estate ²	12,000	-
KB Life Insurance Co., Ltd.	Securities	10,000	10,000
KB Kookmin Card Co., Ltd.	Time deposits	22,000	22,000
KB Insurance Co., Ltd.	Securities	135,500	66,500
KB Credit Information Co., Ltd	l. Time deposits and others	1,611	1,425
KB Star Office Private Real	Real estate		
Estate Master Fund 3		-	28,800
KB Star Office Private Real	Real estate		
Estate Master Fund 4		24,000	24,000
Key management	Time deposits and others	192	401
	Real estate	2,922	3,182

¹ Collaterals related to lease contracts arising from operating activities between related parties are excluded.

As at December 31, 2019, Incheon Bridge Co., Ltd., a related party, provides fund management account, civil engineering completed risk insurance, and management rights as senior collateral amounting to \forall 611,000 million to a financial syndicate that consists of the Group and five other institutions, and as subordinated collateral amounting to \forall 384,800 million to subordinated debt holders that consist of the Group and two other institutions. Also, it provides certificate of credit guarantee amounting to \forall 400,000 million as collateral to a financial syndicate consisting of the Group and five other institutions.

The amounts of debt securities purchased through KB securities Co., Ltd. are $\mbox{$W$12,778,602$}$ million and $\mbox{$W$7,920,050$}$ million for the years ended December 31, 2019 and 2018, respectively, and the amounts of debts securities sold through KB securities Co., Ltd. are $\mbox{$W$7,799,397$}$ million and $\mbox{$W$3,835,245$}$ million for the years ended December 31, 2019 and 2018, respectively. In addition, KB securities Co., Ltd. acquired $\mbox{$W$2,120,000$}$ million and $\mbox{$W$160,000$}$ million of bonds issued by the Bank for the years ended December 31, 2019 and 2018, respectively.

The amounts of intangible assets purchased through KB Data System Co., Ltd. are \forall 37,004 million and \forall 17,831 million for the years ended December 31, 2019 and 2018, respectively.

The Bank has entered CLS(Continuous Linked Settlement) service agreement with KB Securities Co., Ltd. and accordingly the Bank is able to provide USD 500 million in intraday liquidity under the terms of repayment on the day of payment.

The Bank and KB Kookmin Card Co., Ltd. are jointly and severally liable for the payables of the Bank before the spin-off date.

² Related to KB Wise Star Jongno Tower Real Estate Master Fund, a subsidiary of KB Securities Co., Ltd.

42. Changes in accounting policies-adoption of Korean IFRS 1116 Leases

The Group applied Korean IFRS 1116 retrospectively with recognizing the cumulative effect of initial adoption of the standard as at January 1, 2019. The Group did not restate any comparative prior financial statements under the transitional provisions of Korean IFRS 1116.

Therefore reclassification and adjustments under the new IFRS were recognized in the financial statements beginning on January 1, 2019.

A lessee shall apply this standard to its leases either:

- retrospectively to each prior reporting period presented applying Korean IFRS 1008 Accounting Policies, Changes in Accounting Estimates and Errors (Full retrospective application); or
- retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application.

For leases previously classified as 'finance leases', the Group recognized the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. The measurement principles of Korean IFRS 1116 are only applied after that date. The remeasurements to the lease liabilities were recognized as adjustments to the related right-of-use assets immediately after the date of initial application.

(In millions of Korean won)	January 1, 2019
Right-of-use asset	
Operating lease commitments as at December 31, 2018 ¹	365,685
Add : Finance lease asset recognized at December 31, 2018	26,083
Right-of use asset recognized as of the date of initial application	391,768
Lease liability	
Operating lease commitments as at December 31, 2018	346,348
Discounted amount using the lessee's incremental borrowing rate ² at the date of initial application	332,457
Add : Finance lease liability recognized at December 31, 2018	8,065
Lease liabilities recognized as of the date of initial application	340,522

¹The amount included lease contract related provisions for asset retirement obligation and other assets/liabilities according to the adoption of Korean IFRS.

The difference between the amount of the right-of-use asset and the lease liabilities is adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the consolidated statement of financial position immediately before the date of initial application.

The Group did not need to make any adjustments to the accounting for assets held as lessor as a result of the adoption of Korean IFRS 1116.

43. Approval of Issuance of the Financial Statements

The issuance of the Group's consolidated financial statements as at and for the year ended December 31, 2019, was approved by the Board of Directors on February 5, 2020.

² The weighted average incremental borrowing rate of interest is 2.19%.

Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholder of Kookmin Bank

Opinion

We have audited the accompanying consolidated financial statements of Kookmin Bank and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2018 and 2017 and the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2018 and 2017, and its consolidated financial performance and cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS)

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Korean IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the entity's internal control.
- · Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we

conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

/s/ Samil PricewaterhouseCoopers Seoul, Korea

March 11, 2019

This report is effective as of March 11, 2019, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Kookmin Bank and Subsidiaries Consolidated Statements of Financial Position Years Ended December 31, 2018 and 2017

(In millions of Korean won)	Notes	2018 ¹	2017
Assets			
Cash and due from financial institutions Financial assets at fair value through profit or loss (Under	4,6,7,36	14,889,010	15,646,318
Korean IFRS 1039)	4,6,12	-	8,408,730
Financial assets at fair value through profit or loss	4,6,8,12	12,257,005	-
Derivative financial assets	4,6,9	1,613,970	2,607,659
Loans at amortized cost	4,6,8,10,11	276,944,202	251,710,605
Financial investments	4,6,8,12	42,723,480	40,815,674
Investments in associates	13	506,664	345,892
Property and equipment	14	3,127,666	3,015,594
Investment property	8,14	257,924	337,500
Intangible assets	15	224,208	217,608
Current income tax assets	32	4,638	3,209
Deferred income tax assets	16,32	3,131	2,050
Assets held for sale	18	16,952	155,506
Other assets	4,6,17	4,390,408	6,499,582
Total assets		356,959,258	329,765,927
Liabilities	_		
Financial liabilities at fair value through profit or loss (Unde Korean IFRS 1039)	er 4,6	-	74,191
Financial liabilities at fair value through profit or loss	4,6	87,168	-
Derivative financial liabilities	4,6,9	1,642,409	2,608,820
Deposits	4,6,19	272,484,528	252,478,931
Debts	4,6,20	17,496,055	15,810,753
Debentures	4,6,21	23,163,585	19,183,798
Provisions	22	308,374	358,192
Net defined benefit liabilities	23	166,605	8,568
Current income tax liabilities	32	5,737	3,543
Deferred income tax liabilities	16,32	120,867	172,131
Other liabilities	4,6,24,30	14,816,064	13,743,566
Total liabilities	_	330,291,392	304,442,493
Equity	-		
Capital stock	25	2,021,896	2,021,896
Capital surplus	25	5,218,788	5,219,693
Accumulated other comprehensive income	25, 34	115,784	678,094
Retained earnings	25, 33	19,311,398	17,403,751
(Provision of regulatory reserve for credit losses			
December 31, 2018 : ₩2,150,772 million			
December 31, 2017 : ₩2,001,063 million)			
(Amounts estimated to be appropriated			
December 31, 2018 : ₩140,247 million			
December 31, 2017 : ₩149,709 million)			
Equity attributable to the shareholder of the Parent Comp	any _	26,667,866	25,323,434
Non-controlling interest equity	-	-	-
Total equity	-	26,667,866	25,323,434
Total liabilities and equity	-	356,959,258	329,765,927
	_	<u> </u>	, , , ,

¹ The consolidated statement of financial position as at December 31, 2018 is prepared applying Korean IFRS 1109, and the comparative consolidated statement of financial position as at December 31, 2017 has not been restated retrospectively as permitted by the transitional provisions of Korean IFRS 1109.

The accompanying notes are an integral part of these consolidated financial statements.

(In millions of Korean won)	Notes	2018 ¹	2017
Interest income		10,019,888	8,508,893
Interest income from financial instruments at fair value through other comprehensive income and amortized cost		9,797,583	-
Interest income from financial instruments at fair value through profit or loss		222,305	-
Interest income from loans and receivables Interest income from financial instruments at fair value		-	8,338,424 170,469
through profit or loss (Under Korean IFRS 1039) Interest expense		(3,919,166)	(2,944,109)
Net interest income	26	6,100,722	5,564,784
Fee and commission income		1,422,791	1,471,480
Fee and commission expense		(300,043)	(246,791)
Net fee and commission income	27	1,122,748	1,224,689
Net losses on financial instruments at fair value through profit or loss (Under Korean IFRS 1039)	28		(71,207)
Net gains on financial instruments at fair value through profit or loss	29	226 205	
	28	326,395	
Net other operating expenses	29	(696,486)	(288,087)
General and administrative expenses	14,15,23,30,40	(3,766,995)	(3,665,822)
Operating profit before provision for credit losses		3,086,384	2,764,357
Provision for credit losses	7,11,12,17,22	(93,916)	(115,166)
Operating profit		2,992,468	2,649,191
Share of profit of associates	13	49,698	37,571
Net other non-operating income	31	44,172	(73,467)
Net non-operating profit		93,870	(35,896)
Profit before income tax expense		3,086,338	2,613,295
Income tax expense	32	(827,140)	(438,590)
Profit for the year (Adjusted profit after provision of regulatory reserve for credit losses	25	2,259,198	2,174,705
2018 : ₩ 2,011,991 million	23		
2017 : ₩ 2,024,996 million			
Items that will not be reclassified to profit or loss:			
Remeasurements of net defined benefit liabilities	23	(95,796)	14,177
Net losses on equity instruments at fair value through other comprehensive income		(36,013)	-
Items that may be subsequently reclassified to profit or loss: Currency translation adjustments		27,383	(67,106)
Gains on valuation of financial investments		-	110,188
Net gains on debt instruments at fair value		57.400	
through other comprehensive income Share of other comprehensive income(loss) of associates		57,188 (3,383)	91,839
Gains (losses) on hedging instruments of net investments in	foreign operations	(25,386)	26,719
Gains on cash flow hedging instruments		3,788	7,414
Other comprehensive income for the year, net of tax	34	(72,219)	183,231
Total comprehensive income for the year		2,186,979	2,357,936
Profit attributable to:		0.000 100	0.1=1=1=
Shareholder of the Parent Company		2,259,198	2,174,705
Non-controlling interests		2,259,198	2,174,705
Total comprehensive income for the year attributable to:			
Shareholder of the Parent Company Non-controlling interests		2,186,979	2,357,936
		2,186,979	2,357,936

¹ The consolidated statements of comprehensive income for the year ended December 31, 2018 are prepared applying Korean IFRS 1109, and the comparative consolidated statements of comprehensive income for the year ended December 31, 2017 have not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1109.

The accompanying notes are an integral part of these consolidated financial statements

Kookmin Bank and Subsidiaries Consolidated Statements of Changes in Equity Years Ended December 31, 2018 and 2017

		Attributab	le to the sharehold				
				Accumulated Other			
(In millions of Korean won)	Notes	Capital Stock	Capital Surplus	Comprehensive Income	Retained Earnings	Non-controlling interests	Total Equity
Balance at January 1, 2017		2,021,896	5,219,704	494,863	15,588,539	-	23,325,002
Comprehensive income for the year							
Profit for the year		-	-	-	2,174,705	-	2,174,705
Remeasurements of net defined benefit liabilities		-	-	14,177	-	-	14,177
Currency translation adjustments		-	-	(67,106)	-	-	(67,106)
Gains on valuation of financial investments		-	-	110,188	-	-	110,188
Share of other comprehensive income of associates		-	-	91,839	-	-	91,839
Gains on hedging instruments of a net investment							
in a foreign operation		-	-	26,719	-	-	26,719
Gains on cash flow hedging instruments	_		 .	7,414	0.474.705		7,414
Total comprehensive income for the year	_		-	183,231	2,174,705		2,357,936
Transactions with the shareholder							
Dividends		-	-	-	(359,493)	-	(359,493)
Changes in ownership of subsidiaries			(11)	<u> </u>	<u> </u>	<u> </u>	(11)
Total transactions with the shareholder	_		(11)	- -	(359,493)		(359,504)
Balance at December 31, 2017	_	2,021,896	5,219,693	678,094	17,403,751		25,323,434
Balance at January 1, 2018		2,021,896	5,219,693	678,094	17,403,751	-	25,323,434
The effect of changes in accounting policies	42	-	-	(490,091)	274,943		(215,148)
Balance after reflecting the change of accounting policies Comprehensive income for the year		2,021,896	5,219,693	188,003	17,678,694	-	25,108,286
Profit for the year		-	-	-	2,259,198	-	2,259,198
Remeasurements of net defined benefit liabilities		-	-	(95,796)	-	-	(95,796)
Net gains on equity instruments				(00.040)	10.000		(00.075)
at fair value through other comprehensive income Currency translation adjustments		-	-	(36,013) 27,383	13,638	-	(22,375) 27,383
· · · · · · · · · · · · · · · · · · ·		-	-	21,303	-	-	21,303
Net gains on debt instruments at fair value through other comprehensive income				57,188			57,188
Share of other comprehensive loss of associates		-	-	(3,383)	-	-	(3,383)
Losses on hedging instruments of net investments		-	-	(3,363)	-	-	(3,363)
in foreign operations		_	_	(25,386)	_	_	(25,386)
Gains on cash flow hedging instruments		_	_	3,788	_	_	3,788
Total comprehensive income for the year	_			(72,219)	2,272,836		2,200,617
Transactions with the shareholder							
Dividends		_	_	_	(640,132)	_	(640,132)
Changes in ownership of subsidiaries			(905)		(040,102)	-	(905)
Total transactions with the shareholder	_		(905)		(640,132)		(641,037)
B	_	0.004.000	5.040.700	115 701	40.044.000		00.007.000
Balance at December 31, 2018	_	2,021,896	5,218,788	115,784	19,311,398		26,667,866

¹ The consolidated statement of changes in equity for the year ended December 31, 2018 is prepared applying Korean IFRS 1109, and the comparative consolidated statement of changes in equity for the year ended December 31, 2017 has not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1109.

Kookmin Bank and Subsidiaries Consolidated Statements of Cash Flows Years Ended December 31, 2018 and 2017

(In millions of Korean won)	Notes	2018 ¹	2017
Cash flows from operating activities			
Profit for the year	_	2,259,198	2,174,705
Adjustment for non-cash items			
Net losses on financial assets/liabilities			20.455
at fair value through profit or loss (Under Korean IFRS 1039)		-	39,455
Net gains on financial assets/liabilities at fair value through profit or loss		(56,385)	_
Net losses (gains) on derivative financial investments		(50,505)	_
for hedging purposes		41,522	(17,327)
Adjustment of fair value of derivative financial instruments		410	(1,000)
Provision for credit losses		93,916	115,166
Net losses (gains) on financial investments		(88,079)	69,390
Share of profit of associates and subsidiaries		(49,698)	(37,570)
Depreciation and amortization expense		246,488	236,436
Other net losses (gains) on property and equipment/intangible as	sets	(139,092)	15,258
Share-based payment		4,051	33,148
Post-employment benefits		140,877	147,470
Net interest expense		250,854	274,832
Gains on foreign currency translation		(9,004)	(301,414)
Other expense	_	16,356 452,216	47,666 621,510
Changes in operating assets and liabilities	_	432,210	021,310
Financial assets at fair value through profit or loss (Under			
Korean IFRS 1039)		-	(623,731)
Financial assets at fair value through profit or loss		(2,983,784)	-
Derivative financial instrument		(9,867)	(2,785)
Loans at amortized cost		(25,553,376)	(16,964,006)
Current income tax assets		(1,416)	8,728
Deferred income tax assets		(649)	44,807
Other assets		1,622,046	(2,439,559)
Financial liabilities at fair value through profit or loss (Under			
Korean IFRS 1039)		-	953
Financial liabilities at fair value through profit or loss		10,419	17 700 000
Deposits Deferred income tax liabilities		19,633,557 56,200	17,722,080 83,671
Other liabilities		975,835	(1,360,225)
Other habilities	_	(6,251,035)	(3,530,067)
Net cash outflow from operating activities	-	(3,539,621)	(733,852)
	_		,
Cash flows from investing activities			
Net cash flows from derivative financial instrument for hedging purpo	ses	(14,918)	(23,490)
Disposal of financial assets at fair value through profit or loss		8,303,648	-
Acquisition of financial assets at fair value through profit or loss		(6,220,238)	-
Disposal of financial investments		53,180,839	33,006,057
Acquisition of financial investments		(57,553,020)	(38,243,965)
Disposal of investments in associates Acquisition of investments in associates		44,865 (159,320)	87,443 (23,540)
Disposal of property and equipment		1,724	(58)
Acquisition of property and equipment		(333,949)	(218,080)
Acquisition of investment property		(179)	(262)
Disposal of investment property		139,639	-
Disposal of intangible assets		1,425	487
Acquisition of intangible assets		(53,057)	(51,398)
Net cash flows from changes in ownership of subsidiaries		14,280	158,858
Others	_	301,012	210,834
Net cash outflow from investing activities	_	(2,347,249)	(5,097,114)
Cash flows from financing activities			
Net cash flows from derivative financial instrument for hedging purpo	1999	(17,698)	5,804
Net increase in debts		1,517,015	746,719
Increase in debentures		14,209,940	13,594,668
Decrease in debentures		(10,414,512)	(9,026,842)
Payment of dividends		(640,132)	(359,493)
Net increase(decrease) in other payables from trust accounts		267,076	587,523
Others	_	(220,618)	215,662
Net cash inflow from financing activities	_	4,701,071	5,764,041
Exchange gains (losses) on cash and cash equivalents		(35,660)	(193,279)
Net decrease in cash and cash equivalents	_	(1,221,459)	(260,204)
Cash and cash equivalents at the beginning of the year	36	6,077,954	6,338,158
Cash and cash equivalents at the end of the year	36	4,856,495	6,077,954
•	_		

¹ The consolidated statement of cash flows for the year ended December 31, 2018 is prepared applying Korean IFRS 1109, and the comparative consolidated statement of cash flows for the year ended December 31, 2017 has not been restated retrospectively as permitted by transitional provisions of Korean IFRS 1109.

The accompanying notes are an integral part of these consolidated financial statements.

1. The Bank

Kookmin Bank (the "Bank" or the "Parent Company") was incorporated in 1963 under the Citizens National Bank Act to provide banking services to the general public and to small and medium-sized enterprises. Pursuant to the Repeal Act of the Citizens National Bank Act, effective January 5, 1995, the Bank's status changed to a financial institution which operates under the Banking Act and Commercial Act.

The Bank merged with Korea Long Term Credit Bank on December 31, 1998, and with its subsidiaries, Daegu, Busan, Jeonnam Kookmin Mutual Savings & Finance Co., Ltd., on August 22, 1999. Pursuant to the directive from the Financial Services Commission related to the Structural Improvement of the Financial Industry Act, the Bank acquired certain assets, including performing loans, and assumed most of the liabilities of Daedong Bank on June 29, 1998. Also, the Bank completed the merger with Housing and Commercial Bank ("H&CB") on October 31, 2001, and merged with Kookmin Credit Card Co., Ltd., a majority-owned subsidiary, on September 30, 2003. Meanwhile, the Bank spun off its credit card business segment on February 28, 2011, and KB Kookmin Card Co., Ltd. became a subsidiary of KB Financial Group Inc.

The Bank listed its shares on the Stock Market Division of the Korea Exchange ("KRX," formerly Korea Stock Exchange) in September 1994. As a result of the merger with H&CB, the shareholder of the former Kookmin Bank and H&CB received new common shares of the Bank which were relisted on the KRX on November 9, 2001. In addition, H&CB listed its American Depositary Shares ("ADS") on the New York Stock Exchange ("NYSE") on October 3, 2000, prior to the merger. Following the merger with H&CB, the Bank listed its ADS on the NYSE on November 1, 2001. The Bank became a wholly owned subsidiary of KB Financial Group Inc. through a comprehensive stock transfer on September 29, 2008. Subsequently, the Bank's shares and its ADS, each listed on the KRX and the NYSE, were delisted on October 10, 2008 and September 26, 2008, respectively. As at December 31, 2018, the Bank's paid-in capital is \preceived million.

The Bank engages in the banking business in accordance with the Banking Act, trust business in accordance with the Financial Investment Services and Capital Markets Act, and other relevant businesses. As at December 31, 2018, the Bank operates 1,057 domestic branches and offices, and six overseas branches (excluding four subsidiaries and three offices).

2. Basis of Preparation

2.1 Application of Korean IFRS

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with Korean IFRS. The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

The consolidated financial statements of the Bank and its subsidiaries (collectively the "Group") have been prepared in accordance with Korean IFRS. These are the standards and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

The preparation of the consolidated financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 2.4.

The Group newly applied the following amended and enacted standards and interpretations from January 1, 2018, and these applications do not have any material impact on the consolidated financial statements, except for the adoption of Korean IFRS 1109 *Financial Instruments*.

- Amendments to Korean IFRS 1028 Investments in Associates and Joint Ventures

When an investment in an associate or a joint venture is held by, or it held indirectly through, an entity that is a venture capital organization, or a mutual fund and similar entities, the entity may elect to measure that investment at fair value through profit or loss. The amendments clarify that an entity shall make this election separately for each associate of joint venture, at initial recognition of the associate or joint venture.

- Amendments to Korean IFRS 1040 Transfers of Investment Property

Paragraph 57 of Korean IFRS 1040 clarifies that a transfer to, or from, investment property, including property under construction, can only be made if there has been a change in use that is supported by evidence, and provides a list of circumstances as examples.

- Amendments to Korean IFRS 1102 Share-based Payment

The amendments clarify accounting for a modification to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity-settled and also, clarifies that the measurement approach should treat the terms and conditions of a cash-settled award in the same way as for an equity-settled award.

- Enactment of Interpretation 2122 Foreign Currency Transactions and Advance Consideration

According to the enactment, the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the

payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the entity shall determine a date of the transaction for each payment or receipt of advance consideration.

- Amendments to Korean IFRS 1109 Financial Instruments

The Group adopted Korean IFRS 1109 *Financial Instruments* with a date of initial application of January 1, 2018. As permitted by the transitional provisions of Korean IFRS 1109, comparative periods have not been restated. The Group recognized the difference between the previous carrying amount and the carrying amount at the date of initial application in equity as at January 1, 2018.

For the detail impacts of the adoption of Korean IFRS 1109, see Note 42.

- Enactment of Korean IFRS 1115 Revenue from Contracts with Customers

The Group has adopted Korean IFRS 1115, Revenue from Contracts with Customers from January 1, 2018. The new standard for revenue recognition replaced Korean IFRS 1018 Revenue, Korean IFRS 1011 Construction Contracts, Interpretation 2031 Revenue-Barter Transactions Involving Advertising Services, Interpretation 2113 Customer Loyalty Programs, Interpretation 2115 Agreements for the Construction of Real Estate and Interpretation 2118 Transfers of Assets from Customers.

The Group has changed the following accounting policy for the period beginning on January 1, 2018.

- Presentation of interest income arising from financial assets at fair value through profit or loss

The Group previously recognized interest income arising from financial assets at fair value through profit or loss (under Korean IFRS 1039) as net gains (losses) of financial assets/liabilities at fair value through profit or loss (under Korean IFRS 1039) in the statement of comprehensive income. From January 1, 2018, the Group changed the accounting policy and corresponding interest income is presented as a part of interest income in the statement of comprehensive income. The Group believes the change in accounting policy provides more relevant information. The statements of comprehensive income for the year ended December 31, 2017 have been restated by adjusting classification of interest income.

This change in accounting policy does not have any impact on the statements of financial position as at December 31, 2018 and 2017 and profit for the years ended December 31, 2018 and 2017. The impacts on the statements of comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
Increase in interest income	222,305	170,469
Decrease in net gains on financial instruments at fair value		
through profit or loss (under Korean IFRS 1109)	(222,305)	-
Decrease in net gains on financial instruments at fair value		
through profit or loss (under Korean IFRS 1039)	-	(170,469)

Certain new accounting standards and interpretations that have been published but are not mandatory for the reporting period commencing January 1, 2018 and have not been early adopted by the Group are set out below.

- Korean IFRS 1116 Leases

Korean IFRS 1116 Leases issued on May 22, 2017 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted. This standard will replace Korean IFRS 1017 Leases, Interpretation 2104 Determining whether an Arrangement contains a Lease, Interpretation 2015 Operating Leases-Incentives, and Interpretation 2027 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

At inception of a contract, the Group shall assess whether the contract is, or contains, a lease. Also, at the date of initial application, the Group shall assess whether the contract is, or contains, a lease in accordance with the standard. However, the Group may not need to reassess all contracts with applying the practical expedient that can be applied to contracts entered before the date of initial application. On the basis of the date of initial application, the Group will assess whether the contract is, or contains, a lease.

For a contract that is, or contains, a lease, the Group shall account for each lease component within the contract as a lease separately from non-lease components of the contract. In addition, as a practical expedient, the lessee may elect, by class of underlying asset, not to separate non-lease components from lease components, and instead account for each lease component and any associated non-lease components as a single lease component. For the all (or partial) contracts that are, or contain, a lease, the Group plans to apply the practical expedient to account for each lease component and any associated non-lease components as a single lease component.

A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. The lessee may elect not to apply the requirements to short-term lease (a lease term of 12 months or less at the commencement date) and low value assets (e.g. underlying assets below \$ 5,000). The Group plans to apply the recognition exemption for the short-term contracts of leasing realty for training purposes (a lease term of 12 months or less at the commencement date) and leases for which the underlying asset is of low value (e.g. underlying assets below \$5,000).

For sale and leaseback transactions, an entity (the seller-lessee) shall apply the requirements for determining when a performance obligation is satisfied in Korean IFRS 1115 *Revenue from Contracts with Customers* to determine whether the transfer of an asset is accounted for as a sale of that asset. The entity shall not reassess sale and leaseback transactions entered into before the date of initial application.

The accounting treatment as a lessor did not change significantly from the one under Korean IFRS 1017 Leases. The Group expects the effect on the financial statements applying the new standard will not be significant as accounting for the Group, as a lessor, will not significantly change.

A lessee shall apply this standard to its leases either (a) retrospectively to each prior reporting period presented applying Korean IFRS 1008 *Accounting Policies, Changes in Accounting Estimates and Errors* (Full retrospective application); or (b) with the cumulative effect of initially applying the standard being recognized at the date of initial application.

The Group plans to apply Korean IFRS 1116 retrospectively with the cumulative effect of initially applying the standard and as such will not restate any comparative information.

The Group performed an impact assessment to identify potential financial effects of applying Korean IFRS 1116. The assessment was performed based on available information as at December 31, 2018 to identify effects on 2019 financial statements.

The total minimum lease payment expected to be paid by the Group in relation to operating leases before discounted to their present value is \forall 344,297 million. When the payment is discounted at incremental borrowing rate of the lessee, the total minimum lease payment amounts to \forall 330,644 million. Based on the impact assessment, the Group expects the underlying leased asset and a lease liability as at December 31, 2018 to be increased by \forall 363,869 million and \forall 330,644 million, respectively. The difference between the right-of-use asset and the lease liability is arising from the adjustments made at the right-of-use asset for the lease contracts entered before the date of the adoption of this standard.

The impact assessment may change due to additional information that the Group may obtain after the assessment.

- Korean IFRS 1109 Financial Instruments

The narrow-scope amendments made to Korean IFRS 1109 Financial Instruments enable entities to measure certain prepayable financial assets with negative compensation at amortized cost. When a modification of a financial liability measured at amortized cost that does not result in the derecognition, a modification gain or loss shall be recognized in profit or loss. These amendments will be applied for annual periods beginning on or after January 1, 2019, with early adoption permitted.

- Amendments to Korean IFRS 1019 Employee Benefits

The amendments require that an entity shall calculate current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement based on updated actuarial assumptions from the date of the change. The amendments also require that a reduction in a surplus must be recognized in profit or loss even if that surplus was not previously recognized because of the impact of the asset ceiling. The amendments are effective for plan amendments, curtailments and settlements occurring in reporting periods that begin on or after 1 January 2019.

- Amendments to Korean IFRS 1028 Investments in Associates and Joint Ventures

The amendments clarify that an entity shall apply Korean IFRS 1109 to financial instruments in an associate or joint venture to which the equity method is not applied. These include long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture. The amendments clarify that an entity shall apply Korean IFRS 1109 to other interests in an associate or joint venture to which the equity method is not applied. In addition, the entity shall apply the impairment requirements in Korean IFRS 1109 first to its other long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture. These amendments will be applied for annual periods beginning on or after January 1, 2019, with early adoption permitted. In accordance with the transitional provisions in Korean IFRS 1109, the restatement of the comparative information is not required and the cumulative effects of initially applying the amendments

retrospectively should be recognized in the beginning balance of retained earnings (or other components of equity, as appropriate) at the date of initial application.

- Enactment to Interpretation of Korean IFRS 2123 Uncertainty over Income Tax Treatments

The Interpretation explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment, and includes guidance on how to determine whether each uncertain tax treatment is considered separately or together. It also presents examples of circumstances where a judgement or estimate is required to be reassessed. This Interpretation will be applied for annual periods beginning on or after January 1, 2019, and an entity can either restate the comparative financial statements retrospectively or recognize the cumulative effect of initially applying the Interpretation as an adjustment in the beginning balance at the date of initial application.

- Annual Improvements to Korean IFRS 2015 2017 Cycle:
 - (a) Korean IFRS 1103 Business Combination

The amendments clarify that when a party to a joint arrangement obtains control of a business that is a joint operation, and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. In such cases, the acquirer shall remeasure its entire previously held interest in the joint operation. These amendments will be applied to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2019, with early adoption permitted.

(b) Korean IFRS 1111 Joint Agreements

The amendments clarify that when a party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the join operation constitutes a business. In such cases, previously held interests in the joint operation are not remeasured. These amendments will be applied to transactions in which an entity obtains joint control on or after the beginning of the first annual reporting period beginning on or after 1 January 2019, with early adoption permitted.

(c) Paragraph 57A of Korean IFRS 1012 Income Tax

The amendment is applied to all the income tax consequences of dividends and requires an entity to recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized those past transactions or events. These amendments will be applied for annual reporting periods beginning on or after January 1, 2019, with early adoption permitted.

(d) Korean IFRS 1023 Borrowing Costs

The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use (or sale), it becomes part of general borrowings. These amendments will be applied to borrowing costs incurred on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early adoption permitted.

2.2 Measurement Basis

The consolidated financial statements have been prepared under the historical cost convention unless otherwise specified.

2.3 Functional and Presentation Currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Korean won, which is the Parent Company's functional and presentation currency. Refer to Notes 3.2.

2.4 Critical Accounting Estimates

The preparation of consolidated financial statements requires the application of accounting policies, certain critical accounting estimates and assumptions that may have a significant impact on the assets (liabilities) and incomes (expenses). Management's estimates of outcomes may differ from actual outcomes if management's estimates and assumptions based on management's best judgment at the reporting date are different from the actual environment.

Estimates and assumptions are continually evaluated and any change in an accounting estimate is recognized prospectively by including it in profit or loss in the period of the change, if the change affects that period only. Alternatively if the change in accounting estimate affects both the period of change and future periods, that change is recognized in the profit or loss of all those periods.

Uncertainty in estimates and assumptions with significant risk that may result in material adjustment to the consolidated financial statements are as follows:

2.4.1 Income Taxes

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain.

If certain portion of the taxable income is not used for investments, increase in wages, and others in accordance with the Tax Law for Promotion of investment and Collaborative Cooperation (Recirculation of Corporate Income), the Group is liable to pay additional income tax calculated based on the tax laws. The new tax law is effective for three years from 2018 and measurement of current and deferred income tax is affected. As the Group's income tax is dependent on the investments, increase in wages, and others, there exists uncertainty with regard to measuring the final tax effects.

2.4.2 Fair Value of Financial Instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. Refer to Note 6 for details on valuation techniques and inputs used to determine the fair value of financial instruments.

2.4.3 Provisions for Credit Losses (allowances for loan losses, provisions for acceptances and quarantees, and unused loan commitments)

The Group determines and recognizes allowances for losses on financial assets at amortized cost and fair value through other comprehensive income through impairment test and recognizes provisions for acceptances and guarantees, and unused loan commitments. The accuracy of provisions for credit losses is determined by the methodology and assumptions used for the estimation of expected cash flows of the borrower for individually assessed allowances of loans, collectively assessed allowances for groups of loans, acceptances and guarantees, and unused loan commitments.

2.4.4 Net Defined Benefit Liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions(Note 23).

2.4.5 Estimated Impairment of Goodwill

The Group tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. (Note 15).

3. Significant Accounting Policies

The significant accounting policies applied in the preparation of these consolidated financial statements are set out below. The items related to financial instruments on the financial statements are accounted for applying Koreans IFRS 1109 for the current period, and Korean IFRS 1039 for the comparative prior period, respectively.

Comparative financial statements are not restated retrospectively and the described accounting policies on financial instruments are applied for the financial statements for the current period. Except for the changes in accounting policies related to financial instruments, these policies have been consistently applied to all periods presented.

3.1 Consolidation

3.1.1 Subsidiaries

Subsidiaries are companies that are controlled by the Group. The Group controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The existence and effects of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date when control is transferred to the Group and de-consolidated from the date when control is lost.

If a subsidiary uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to make the subsidiary's accounting policies conform to those of the Group when the subsidiary's financial statements are used by the Group in preparing the consolidated financial statements.

Profit or loss and each component of other comprehensive income are attributed to the owners of the Parent Company and to the non-controlling interests, if any. Total comprehensive income is attributed

to the owners of the Parent Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions; that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognized in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

3.1.2 Associates

Associates are entities over which the Group has significant influence in the financial and operating policy decisions. If the Group holds 20% or more of the voting power of the investee, it is presumed that the Group has significant influence.

Under the equity method, investments in associates are initially recognized at cost and the carrying amount is increased or decreased to recognize the Group's share of the profit or loss of the investee and changes in the investee's equity after the date of acquisition. The Group's share of the profit or loss of the investee is recognized in the Group's profit or loss. Distributions received from an investee reduce the carrying amount of the investment. Profit and loss resulting from 'upstream' and 'downstream' transactions between the Group and associates are eliminated to the extent at the Group's interest in associates. Unrealized losses are eliminated in the same way as unrealized gains except that they are only eliminated to the extent that there is no evidence of impairment.

If associates use accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to make the associate's accounting policies conform to those of the Group when the associate's financial statements are used by the Group in applying equity method.

After the carrying amount of the investment is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee.

The Group determines at each reporting period whether there is any objective evidence that the investments in the associates are impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the associates and its carrying value and recognizes the amount as 'non-operating income (expense)' in the statement of comprehensive income.

3.1.3 Structured Entity

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. When the Group decides whether it has power to the structured entities in which the Group has interests, it considers factors such as the purpose, the form, the practical ability to direct the relevant activities of a structured entity, the nature of its relationship with a structured entity and the amount of exposure to variable returns.

3.1.4 Trusts and Funds

The Group provides management services for trust assets, collective investment and other funds. These trusts and funds are not consolidated in the Group's consolidated financial statements, except for trusts and funds over which the Group has control.

3.1.5 Intra-group Transactions

All intra-group balances and transactions, and any unrealized gains arising on intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealized losses are eliminated in the same way as unrealized gains except that they are only eliminated to the extent that there is no evidence of impairment.

3.2 Foreign Currency

3.2.1 Foreign Currency Transactions and Balances

A foreign currency transaction is recorded, on initial recognition in the functional currency, by applying the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. At the end of each reporting period, foreign currency monetary items are translated using the closing rate which is the spot exchange rate at the end of the reporting period. Non-monetary items that are measured at fair value in a foreign currency are translated using the spot exchange rates at the date when the fair value was determined and non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the spot exchange rate at the date of the transaction. Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognized in profit or loss in the period in which they arise, except for exchange differences arising on net investments in a foreign operation and financial liability designated as a hedge of the net investment. When gains or losses on a nonmonetary item are recognized in other comprehensive income, any exchange component of those gains or losses are also recognized in other comprehensive income. Conversely, when gains or losses on a non-monetary item are recognized in profit or loss, any exchange component of those gains or losses are also recognized in profit or loss.

3.2.2 Foreign Operations

The financial performance and financial position of all foreign operations, whose functional currencies differ from the Group's presentation currency, are translated into the Group's presentation currency using the following procedures.

Assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the reporting period. Income and expenses in the statement of comprehensive income presented are translated at average exchange rates for the period. All resulting exchange differences are recognized in other comprehensive income.

Any goodwill arising from the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising from the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and are translated into the presentation currency at the closing rate.

On the disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation, recognized in the separate component of equity, is reclassified from other comprehensive income to profit or loss (as a reclassification adjustment) when the gains or losses on disposal are recognized. On the partial disposal of a subsidiary that includes a foreign operation, the Group re-attributes the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income to the non-controlling interests in that foreign operation. In any other partial disposal of a foreign operation, the Group reclassifies to profit or loss only the proportionate share of the cumulative amount of the exchange differences recognized in other comprehensive income.

3.3 Recognition and Measurement of Financial Instruments

3.3.1 Initial Recognition

The Group recognizes a financial asset or a financial liability in its statement of financial position when the Group becomes a party to the contractual provisions of the instrument. A regular way purchase or sale of financial assets (a purchase or sale of a financial asset under a contract whose terms require delivery of the financial instruments within the time frame established generally by market regulation or practice) is recognized and derecognized using trade date accounting.

The Group classifies financial assets as financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income or financial assets at amortized cost. The Group classifies financial liabilities as financial liabilities at fair value through profit or loss, or other financial liabilities. The classification depends on the Group's business model for managing financial instruments and the contractual cash flow characteristics of the financial instruments at initial recognition.

At initial recognition, a financial asset or financial liability is measured at its fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability. The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The fair value of a financial instrument on initial recognition is normally the transaction price (that is, the fair value of the consideration given or received) in an arm's length transaction.

3.3.2 Subsequent Measurement

After initial recognition, financial instruments are measured at amortized cost or fair value based on classification at initial recognition.

Amortized cost

The amortized cost of a financial asset or financial liability is the amount at which the financial asset or financial liability is measured at initial recognition and adjusted to reflect principal repayments, cumulative amortization using the effective interest method and any reduction (directly or through the use of an allowance account) for impairment or uncollectibility.

Fair value

Fair values, which the Group primarily uses for the measurement of financial instruments, are the published price quotations based on market prices or dealer price quotations of financial instruments traded in an active market where available. These are the best evidence of fair value. A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, an entity in the same industry, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis.

If the market for a financial instrument is not active, fair value is determined either by using a valuation technique or independent third-party valuation service. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, referencing to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models.

The Group uses valuation models that are commonly used by market participants and customized for the Group to determine fair values of common over-the-counter (OTC) derivatives such as options, interest rate swaps and currency swaps which are based on the inputs observable in markets. For more complex instruments, the Group uses internally developed models, which are usually based on valuation methods and techniques generally used within the industry, or a value measured by an independent external valuation institution as the fair values if all or some of the inputs to the valuation models are not market observable and therefore it is necessary to estimate fair value based on certain assumptions.

The Group's Fair Value Evaluation Committee, which consists of the risk management department, trading department and accounting department, reviews the appropriateness of internally developed valuation models, and approves the selection and changing of the external valuation institution and other considerations related to fair value measurement. The review results on the fair valuation models are reported to the Market Risk Management subcommittee by the Fair Value Evaluation Committee on a regular basis.

If the valuation technique does not reflect all factors which market participants would consider in setting a price, the fair value is adjusted to reflect those factors. Those factors include counterparty credit risk, bid-ask spread, liquidity risk and others.

The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It incorporates all factors that market participants would consider in setting a

price and is consistent with economic methodologies applied for pricing financial instruments. Periodically, the Group calibrates the valuation technique and tests its validity using prices of observable current market transactions of the same instrument or based on other relevant observable market data.

3.3.3 Derecognition

Derecognition is the removal of a previously recognized financial asset or financial liability from the statement of financial position. The Group derecognizes a financial asset or a financial liability when, and only when:

Derecognition of financial assets

Financial assets are derecognized when the contractual rights to the cash flows from the financial assets expire or the financial assets have been transferred and substantially all the risks and rewards of ownership of the financial assets are also transferred, or all the risks and rewards of ownership of the financial assets are neither substantially transferred nor retained and the Group has not retained control. If the Group neither transfers nor disposes of substantially all the risks and rewards of ownership of the financial assets, the Group continues to recognize the financial asset to the extent of its continuing involvement in the financial asset.

If the Group transfers the contractual rights to receive the cash flows of the financial asset, but retains substantially all the risks and rewards of ownership of the financial asset, the Group continues to recognize the transferred asset in its entirely and recognize a financial liability for the consideration received.

The Group writes off the carrying amount and allowance of financial assets in its entirety or to a portion thereof when the principal and interest are determined to be no longer recoverable. In general, the Group considers write-off when it is determined that the debtor does not have sufficient resources or income to cover the principal and interest, and this write-off decision is made in accordance with internal regulations. After the write-off, the Group can collect the written-off loans continuously according to the internal policy. Recovered amounts from written-off financial assets are recognized in profit or loss.

Derecognition of financial liabilities

Financial liabilities are derecognized from the statement of financial position when the obligation specified in the contract is discharged, cancelled or expired.

3.3.4 Offsetting

Financial assets and financial liabilities are offset and the net amount are presented in the statement of financial position when, and only when, the Group currently has a legally enforceable right to offset the recognized amounts and intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

3.4 Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, foreign currency, and short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

3.5 Non-derivative Financial Assets

3.5.1 Financial Assets at Fair Value through Profit or Loss

Financial assets classified as held for trading, financial assets designated by the Group as at fair value through profit or loss upon initial recognition, and financial assets that are required to be mandatorily measured at fair value through profit or loss are classified as financial assets at fair value through profit or loss.

The Group may designate certain financial assets upon initial recognition as at fair value through profit or loss when the designation eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as 'an accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

After initial recognition, a financial asset at fair value through profit or loss is measured at fair value and gains or losses arising from a change in the fair value are recognized in profit or loss. Interest income using the effective interest method and dividend income from financial assets at fair value through profit or loss are also recognized in profit or loss.

3.5.2 Financial Assets at Fair Value through Other Comprehensive Income

The Group classifies below financial assets as financial assets at fair value through other comprehensive income;

- Debt instruments that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and where the assets' cash flows represent solely payments of principal and interest on the principal amount outstanding or;
- Equity instruments that are not held for trading with the objective of generating a profit from short-term fluctuations in price or dealer's margin, designated as financial assets at fair value through other comprehensive income

After initial recognition, a financial asset at fair value through other comprehensive income is measured at fair value. Gains or losses arising from a change in fair value, other than dividend income, interest income using effective interest method and exchange differences arising on monetary items which are recognized directly in profit or loss, are recognized as other comprehensive income in equity.

Upon disposal of financial assets at fair value through other comprehensive income, the cumulative gain or loss previously recognized in other comprehensive income is reclassified to profit or loss. However, cumulative gain or loss of equity instrument designated as fair value through other comprehensive income are not reclassified to profit or loss at disposal.

Financial assets at fair value through other comprehensive income denominated in foreign currencies are translated at the closing rate. Fair value differences resulting from exchange differences on the amortized cost are recognized in profit or loss, and other changes are recognized as equity.

3.5.3 Financial Assets at Amortized Cost

A financial asset, which are held within the business model whose objective is to hold assets in order to collect contractual cash flows and consistent with representing solely payments of principal and interest on the principal amount outstanding, are classified as a financial asset at amortized cost.

These financial assets are subsequently carried at amortized cost using the effective interest method after initial recognition and interest income is recognized using the effective interest method.

The carrying amount of financial assets at amortized cost is presented by deducting allowance for doubtful accounts, and the measurement method is described in Note 3.6.

3.6 Expected Credit Loss of Financial Assets (Debt Instruments)

The Group measures expected credit loss and recognizes loss allowance at the end of the reporting period for financial assets at amortized cost and fair value through other comprehensive income with the exception of financial asset at fair value through profit or loss.

Expected credit losses are estimated at present value of probability-weighted amount that is determined by evaluating a range of possible outcomes. The Group measures expected credit losses by reflecting reasonable and supportable information that is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions.

The approaches of measuring expected credit losses in accordance with Korean IFRS are as follows:

- General approach: for financial assets not subject to the below approach and unused loan commitments on off-balance sheet
- Credit-impaired approach: for financial assets that are credit-impaired at the time of acquisition

Application of general approach is differentiated depending on whether credit risk has increased significantly after initial recognition. After initial recognition, loss allowances for the assets without significant increase in credit risk are measured at the amount of 12 month expected credit losses, whereas the loss allowances for the assets with significant increase in credit risk are measured at the amount of lifetime expected credit losses. Lifetime is presumed to be a period to the contractual maturity date of financial assets (the expected life of financial assets).

The Group determines whether the credit risk has increased significantly using the following information, and if one or more of the following items are met, it is deemed as significant increase in credit risk. Information of more than 30 days overdue is applied to all subsidiaries, and other information is applied selectively considering specific indicators of each subsidiary or additionally considering specific indicators of each subsidiary. When the contractual cash flows of a financial asset are renegotiated or otherwise modified, the Group determines whether the credit risk has increased significantly using the same following information.

- More than 30 days past due
- Decline in credit rating at period end by more than certain notches as compared to that at initial recognition
- Subsequent managing ratings below certain level in the early warning system
- Debt restructuring (except for impaired financial assets) and
- Credit delinquency information on Korea Federation of Banks, and etc.

If one or more of the following items are met, it is generally deemed as credit-impaired:

- 90 days or more past due
- Legal proceedings related to collection
- A borrower registered on the credit management list of Korea Federation of Banks
- A corporate borrower with the credit rating C or D
- Refinancing or
- Debt restructuring, and etc.

3.6.1 Forward-looking Information

The Group uses forward-looking information, when it determines whether the credit risk has increased significantly and it measures the expected credit losses.

The Group assumes the risk components have a certain correlation with the economic cycle, and uses statistical methodologies to estimate the relation between key macroeconomic variables and risk components for expected credit losses. The Group has derived a correlation between the time series data of more than 8 years and the key macroeconomic variables, and calculates the expected credit losses by reflecting the results of the correlation on the risk component. The correlation between the major macroeconomic variables and the credit risk is as follows;

Key macroeconomic variables	Correlation between the major macroeconomic variables and the credit risk
Domestic GDP growth rate	(-)
Composite stock index	(-)
Construction investment change rate	(-)
Housing transaction price index	(-)
Consumer price index	(+)
Unemployment rate	(+)

Forward-looking information used in calculation of expected credit losses is based on the macroeconomic forecasts utilized by the management of Bank for its business plan taking into account reliable external agency's forecasts and others. The forward-looking information is generated by KB Research under KB Financial Group with comprehensive approach to capture the possibility of various economic forecast scenarios that are derived from the internal and external viewpoints of the macroeconomic situation.

3.6.2 Measuring Expected Credit Losses on Financial Assets at Amortized Cost

The expected credit losses on financial assets at amortized cost are measured as the difference between the asset's contractual terms of cash flow and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate. The Group estimates expected future cash flows for financial assets that are individually significant (individual assessment of

impairment).

For financial assets that are not individually significant, the Group collectively estimates expected credit loss by grouping loans with homogeneous credit risk profile (collective assessment of impairment).

Individual assessment of impairment

Individual assessment of impairment losses are calculated by discounting the expected future cash flows of a loan at its original effective interest rate and comparing the resultant present value with the loan's current carrying amount. This process normally encompasses management's best estimate, such as operating cash flow of the borrower and net realizable value of any collateral held.

Collective assessment of impairment

Collective assessment of impairment is performed by using a methodology based on historical loss experience and reflecting forward-looking information. Such methodology applies factors such as type of collateral, product and borrowers, credit rating, portfolio size, recovery period, probability of default estimated for each group of assets and loss given default by type of recovery method. Also, consistent assumptions are applied to form a formula-based model in estimating expected credit loss and to determine factors on the basis of historical loss experience and forward-looking information. The methodology and assumptions used for collective assessment of impairment are reviewed regularly to reduce any differences between estimated and actual losses.

Lifetime expected credit loss is measured by applying Probability of Default ("PD") and adjusted Loss Given Default ("LGD") reflecting the changes in carrying amount to the carrying amount as at the end of the reporting period deducted by expected repayment of principals.

3.6.3 Measuring Expected Credit Losses on Financial Assets at Fair Value through Other Comprehensive Income

Measuring method of expected credit losses on financial assets at fair value through other comprehensive income is equal to the method of financial assets at amortized cost. However, the loss allowance shall be recognized in other comprehensive income. Upon disposal or repayment of financial assets at fair value through other comprehensive income, the amount of loss allowances is reclassified from other comprehensive income to profit or loss.

3.7 Derivative Financial Instruments

The Group enters into numerous derivative financial instrument contracts such as currency forwards, interest rate swaps, currency swaps and others for trading purposes or to manage its exposures to fluctuations in interest rates and currency exchange, amongst others. The Group's derivative operations focus on addressing the needs of the Group's corporate clients to hedge their risk exposure and to hedge the Group's risk exposure that results from such client contracts. These derivative financial instruments are presented as derivative financial instruments within the consolidated financial statements irrespective of transaction purpose and subsequent measurement requirement.

The Group designates certain derivatives and non-derivatives as hedging instruments to hedge the risk of changes in fair value and cash flow of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge and cash flow hedge). The Group designates part of derivatives and non-derivatives as hedging instruments to hedge the risk of foreign exchange of a net investment in a foreign operation (hedge of net investment).

At the inception of the hedge, there is formal designation and documentation of the hedging relationship and the Group's risk management objective and strategy for undertaking the hedge. That documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value attributable to the hedged risk.

See Note 9 for changes in fair value of the hedging instruments and changes in other comprehensive income related to derivatives held for cash flow hedging.

The Group applies hedge accounting for risk management activities aligned with the requirements and qualifying criteria for hedge accounting of Korean IFRS 1109.

3.7.1 Derivative Financial Instruments Held for Trading

All derivative financial instruments, except for derivatives that are designated and qualify for hedge accounting, are measured at fair value. Gains or losses arising from changes in fair value are recognized in profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss.

3.7.2 Fair Value Hedges

If derivatives and non-derivatives qualify for a fair value hedge, the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk are recognized in profit or loss as part of other operating income and expenses. If the hedged items are equity instruments for which the Group has elected to present changes in fair value in other comprehensive income, the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk are recognized in other comprehensive income.

Fair value hedge accounting is discontinued prospectively if the hedging instrument expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for hedge accounting or the Group revokes the designation. Once fair value hedge accounting is discontinued, the adjustment to the carrying amount of a hedged item is amortized to profit or loss by the maturity of the financial instrument using the effective interest method.

3.7.3 Cash Flow Hedges

The effective portion of changes in fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income, limited to the cumulative change in fair value (present value) of the hedged item (the present value of the cumulative change in the future expected cash flows of the hedged item) from the inception of the hedge. The ineffective portion is recognized in gain or loss (other operating income or expense). The associated gains or losses that were previously recognized in other comprehensive income are reclassified from equity to profit or loss (other operating income and expenses) as a reclassification adjustment in the same period or

periods during which the hedged forecast cash flows affects profit or loss. Cash flow hedge accounting is discontinued prospectively if the hedging instrument expires or is sold, terminated or exercised, or the hedge no longer meets the criteria for hedge accounting or the Group revokes the designation. When the cash flow hedge accounting is discontinued, the cumulative gains or losses on the hedging instrument that have been recognized in other comprehensive income are reclassified to profit or loss over the period in which the forecast transaction occurs. If the forecast transaction is no longer expected to occur, the cumulative gains or losses that had been recognized in other comprehensive income are immediately reclassified to profit or loss.

3.7.4 Hedge of Net Investment

If derivatives and non-derivatives qualify for a net investment hedge, the effective portion of changes in fair value of hedging instrument is recognized in other comprehensive income or loss and the ineffective portion is recognized in net other operating income (expense). The gain or loss on the hedging instrument relating to the effective portion of the hedge that has been recognized in other comprehensive income will be reclassified from other comprehensive income or loss to profit or loss as a reclassification adjustment on the disposal or partial disposal of the foreign operation.

3.7.5 Risk Management Strategy

Interest rate risk arises from changes in fair value resulting from changes in the discount rate of fixed rate financial instruments, and changes in cash flows resulting from changes in the nominal interest rate of floating rate financial instruments. Foreign currencies risk arises from net investment in a foreign operation, whose functional currencies differ from the Group's functional currency.

While the Group entirely hedges the interest rate risk, the Group hedges the foreign currencies risk only the proportional part of the notional amount.

At inception of the hedge relationship, the Group reviews the hedge effectiveness; and periodically reviews the effectiveness in order to confirm that economic relationship between the hedged item and the hedging instrument exists. The requirement that an economic relationship exists means that the hedging instrument and the hedged item have values that generally move in the opposite direction because of the same risk, which is the hedged risk. The Group designates the exposure of hedged item opposite to the exposure of hedging instruments in order to meet economic relationship requirement.

The Group designates hedge relationship at one-on-one ratio between the nominal amount of hedging instrument and to the nominal amount of hedged item.

Ineffectiveness could arise because of differences in the underlying parameters (acquisition date, credit risk or liquidity and others) or other differences between the hedging instrument and the hedged item that the Group accepts in order to achieve a cost-effective hedging relationship.

The Group avoids the cash flow variability of its floating rate debt securities by using interest rate swaps. Both are linked to the same interest rate; however, the paid amount of the floating rate may be set on different dates. Even if the variability of interest rate related cash flows (as a risk factor) are designated as a hedged item, the difference in set-up dates creates a hedge ineffectiveness.

The Group avoids the variability of fair values of its fixed rate debt securities by using interest rate swaps. The calculating method of the number of the dates for paying fixed-rate interest amount can

be different between both. Even if the volatility of the fair value due to the benchmark interest rate (as a risk factor) are designated as a hedged item, the difference calculating in set-up dates creates a hedge ineffectiveness.

3.7.6 Embedded Derivatives

An embedded derivative is separated from the host contract and accounted for as a derivative if, and only if, 1) the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract, 2) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and, 3) the hybrid contract contains a host that is not a financial asset and is not designated as at fair value through profit or loss. Gains or losses arising from a change in the fair value of an embedded derivative separated from the host contract are recognized in profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss.

3.7.7 Day One Gain and Loss

If the Group uses a valuation technique that incorporates data not obtained from observable markets for the fair value at initial recognition of the financial instrument, there may be a difference between the transaction price and the amount determined using that valuation technique. In these circumstances, the difference is deferred and not recognized in profit or loss, and is amortized by using the straight-line method over the life of the financial instrument. If the fair value of the financial instrument is subsequently determined using observable market inputs, the remaining deferred amount is recognized in profit or loss as part of net gains or losses on financial instruments at fair value through profit or loss or other operating income and expenses.

3.8 Property and Equipment

3.8.1 Recognition and Measurement

All property and equipment that qualify for recognition as an asset are measured at cost and subsequently carried at cost less any accumulated depreciation and any accumulated impairment losses.

The cost of property and equipment includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent expenditures are capitalized only when they prolong the useful life or enhance values of the assets but the costs of the day-to-day servicing of the assets such as repair and maintenance costs are recognized in profit or loss as incurred.

3.8.2 Depreciation

Land is not depreciated whereas other property and equipment are depreciated using the method that reflects the pattern in which the asset's future economic benefits are expected to be consumed by the Group. The depreciable amount of an asset is determined after deducting its residual value. As for leased assets, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term and its useful life.

The depreciation methods and estimated useful lives of the assets are as follows:

Property and equipment	Depreciation method	Estimated useful lives	
Buildings and structures	Straight-line	40 years	
Leasehold improvements	Declining-balance	4 years	
Equipment and vehicles	Declining-balance	4 years	

The residual value, the useful life and the depreciation method applied to an asset are reviewed at least at each financial year end and, if expectations differ from previous estimates or if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the changes are accounted for as a change in an accounting estimate.

3.9 Investment Properties

3.9.1 Recognition and Measurement

Properties held to earn rentals or for capital appreciation or both are classified as investment properties. Investment properties are measured initially at their cost and subsequently the cost model is used.

3.9.2 Depreciation

Land is not depreciated, whereas other investment properties are depreciated using the method that reflects the pattern in which the asset's future economic benefits are expected to be consumed by the Group. The depreciable amount of an asset is determined after deducting its residual value.

The depreciation method and estimated useful lives of the assets are as follows:

Investment properties	Depreciation method	Estimated useful lives	
Buildings	Straight-line	40 years	

The residual value, the useful life and the depreciation method applied to an asset are reviewed at least at each financial year end and, if expectations differ from previous estimates or if there has been a significant change in the expected pattern of consumption of the future economic benefits embodied in the asset, the changes are accounted for as a change in an accounting estimate.

3.10 Intangible Assets

Intangible assets are measured initially at cost and subsequently carried at their cost less any accumulated amortization and any accumulated impairment losses.

Intangible assets, except for goodwill and membership rights, are amortized using the straight-line method with no residual value over their estimated useful economic life since the asset is available for use.

Intangible assets	Amortization method	Estimated useful lives
Industrial property rights	Straight-line	5 years
Software	Straight-line	4 ~ 5 years

Others Straight-line 1 ~ 10 years

The amortization period and the amortization method for intangible assets with a finite useful life are reviewed at least at each financial year end. Where an intangible asset is not being amortized, because its useful life is considered to be indefinite, the Group carries out a review in each accounting period to confirm whether or not events and circumstances still support the assumption of an indefinite useful life. If they do not, the change from the indefinite to finite useful life is accounted for as a change in an accounting estimate.

3.10.1 Goodwill

Recognition and measurement

Goodwill acquired from business combinations before January 1, 2010, is stated at its carrying amount which was recognized under the Group's previous accounting policy, prior to the transition to Korean IFRS.

Goodwill acquired from business combinations after January 1, 2010, is initially measured as the excess of the aggregate of the consideration transferred, fair value of non-controlling interest and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the business acquired, the difference is recognized in profit or loss.

For each business combination, the Group decides whether the non-controlling interest in the acquiree is initially measured at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets at the acquisition date.

Acquisition-related costs incurred to effect a business combination are charged to expenses in the periods in which the costs are incurred and the services are received, except for the costs to issue debt or equity securities.

Additional acquisitions of non-controlling interest

Additional acquisitions of non-controlling interests are accounted for as equity transactions. Therefore, no additional goodwill is recognized.

Subsequent measurement

Goodwill is not amortized and is stated at cost less accumulated impairment losses. However, goodwill that forms part of the carrying amount of an investment in associates is not separately recognized and an impairment loss recognized is not allocated to any asset, including goodwill, which forms part of the carrying amount of the investment in the associates.

3.10.2 Subsequent Expenditure

Subsequent expenditure is capitalized only when it enhances values of the assets. Internally generated intangible assets, such as goodwill and trade name, are not recognized as assets but expensed as incurred.

3.11 Leases

3.11.1 Finance Lease

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. At the commencement of the lease term, the Group recognizes finance leases as assets and liabilities in its statements of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. Any initial direct costs of the lessee are added to the amount recognized as an asset.

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Contingent rents are charged as expenses in the periods in which they are incurred.

The depreciable amount of a leased asset is allocated to each accounting period during the period of expected use on a systematic basis consistent with the depreciation policy the Group adopts for depreciable assets that are owned. If there is reasonable certainty that the lessee will obtain ownership by the end of the lease term, the period of expected use is the useful life of the asset; otherwise, the asset is fully depreciated over the shorter of the lease term and its useful life.

3.11.2 Operating Lease

A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

Leases in the financial statements of lessees

Lease payments under an operating lease (net of any incentives received from the lessor) are recognized as an expense on a straight-line basis over the lease term unless another systematic basis is more representative of the time pattern of the asset's benefit.

Leases in the financial statements of lessors

Lease income from operating leases are recognized in income on a straight-line basis over the lease term unless another systematic basis is more representative of the time pattern in which use benefit derived from the leased asset is diminished. Initial direct costs incurred by the lessors in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income.

3.12 Greenhouse Gas Emission Rights and Liabilities

The Group measured at zero the emission rights received free of charge from the government following the Enforcement of Allocation and Trading of Greenhouse Gas Emissions Allowances. Emission rights purchased are measured initially at cost and subsequently carried at their costs less any accumulated impairment losses. Emission liabilities are measured as the sum of the carrying amount of emission allowances held by the Group and best estimate of the expenditure required to settle the obligation for any excess emissions at the end of reporting period. The emission rights and liabilities are classified as 'intangible assets' and 'provisions', respectively, in the consolidated statement of financial position.

The emission rights held for trading are measured at fair value and the changes in fair value are recognized in profit or loss. The changes in fair value and gain or loss on disposal are classified as non-operating income and expenses.

3.13 Impairment of Non-Financial Assets

The Group assesses at the end of each reporting period whether there is any indication that a non-financial asset, except for (i) deferred income tax assets, (ii) assets arising from employee benefits and (iii) non-current assets (or group of assets to be sold) classified as held for sale, may be impaired. If any such indication exists, the Group estimates the recoverable amount of the asset. However, irrespective of whether there is any indication of impairment, the Group tests (i) goodwill acquired in a business combination, (ii) intangible assets with an indefinite useful life and (iii) intangible assets not yet available for use for impairment annually by comparing their carrying amount with their recoverable amount.

The recoverable amount is estimated for the individual asset. If it is not possible to estimate the recoverable amount of the individual asset, the Group determines the recoverable amount of the cash-generating unit to which the asset belongs (the asset's cash-generating unit). A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit that are discounted by a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

If the recoverable amount of an asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. That reduction is an impairment loss and recognized immediately in profit or loss. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units that are expected to benefit from the synergies of the combination. The impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit and then to the other assets of the unit pro rata on the basis of the carrying amount of each asset in the unit.

An impairment loss recognized for goodwill is not reversed in a subsequent period. The Group assesses at the end of each reporting period whether there is any indication that an impairment loss recognized in prior periods for an asset, other than goodwill, may no longer exist or may have decreased, and an impairment loss recognized in prior periods for an asset other than goodwill shall be reversed if, and only if, there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognized. The increased carrying amount of

an asset other than goodwill attributable to a reversal of an impairment loss cannot exceed the carrying amount that would have been determined (net of amortization or depreciation) had no impairment loss been recognized for the asset in prior years.

3.14 Non-Current Assets Held for Sale

A non-current asset or disposal group is classified as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For being qualified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. A non-current asset (or disposal group) classified as held for sale is measured at the lower of its carrying amount and fair value less costs to sell which is measured in accordance with the applicable Korean IFRS, immediately before the initial classification of the asset (or disposal group) as held for sale.

A non-current asset while it is classified as held for sale or while it is part of a disposal group classified as held for sale is not depreciated (or amortized).

Impairment loss is recognized for any initial or subsequent write-down of the asset (or disposal group) to fair value less costs to sell. Gains are recognized for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss that has been recognized.

3.15 Financial Liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities.

The Group recognizes financial liabilities in the statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

3.15.1 Financial Liabilities at Fair Value through Profit or Loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

In relation to securities lending or borrowing transactions, the Group records transaction using memorandum value when it borrows securities from Korea Securities Depository and others. The borrowed securities are treated as financial liabilities at fair value through profit or loss when they are sold. Changes in fair value at the end of the reporting period and difference between carrying amount at redemption and purchased amount is recognized as profit or loss.

3.15.2 Other Financial Liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. Other financial liabilities include deposits, debts, debentures and others. Upon of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

In case an asset is sold under repurchase agreement, the Group does not derecognize the asset while the amount sold is accounted for as financial liabilities.

The Group derecognizes a financial liability from the consolidated statement of financial position only when the obligation specified in the contract is discharged, cancelled or expired.

3.16 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of provisions, and where the effect of the time value of money is material, the amount of provisions are the present value of the expenditures expected to be required to settle the obligation.

Provisions on confirmed and unconfirmed acceptances and guarantees, unfunded commitments of credit cards and unused credit lines of consumer and corporate loans are recognized using a valuation model that applies the credit conversion factor, probability of default, and loss given default.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provisions are reversed.

If the Group has a contract that is onerous, the present obligation under the contract is recognized and measured as provisions. An onerous contract is a contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it. The unavoidable costs under a contract reflect the minimum net cost to exit from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfill it.

When an onerous contract is occurred, the present obligation under the contract is recognized and measured as provisions.

3.17 Financial Guarantee Contracts

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due according to the original or modified terms of a debt instrument.

Financial guarantee contracts are initially recognized at fair value and classified as other liabilities, and are amortized over the contractual term. After initial recognition, financial guarantee contracts are measured at the higher of:

- Provisions measured in accordance with Korean IFRS 1109 Financial Instruments and
- The initial amount recognized, less, when appropriate, cumulative amortization recognized in accordance with Korean IFRS 1115 *Revenue from Contracts with Customers*.

3.18 Equity Instrument Issued by the Group

An equity instrument is any contract or agreement that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are deducted, net of tax, from the equity.

3.19 Revenue Recognition

The Group recognizes revenues in accordance with the following steps determined in accordance with Korean IFRS 1115 *Revenue from Contracts with Customers*.

- Step 1: Identify the contract with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.
- Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

3.19.1 Interest Income and Expense

Interest income and expense from debt securities at fair value through profit or loss (excluding beneficiary certificates, equity investments, other debt securities and derivative-linked securities), loans, financial instruments at amortized cost and debt securities at fair value through other comprehensive income, are recognized in statement of comprehensive income using the effective interest method. The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability (or groups of financial assets or financial liabilities) and of allocating the interest income or interest expense over the relevant period.

The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument but does not consider future credit losses. The calculation includes all fees and points paid (main components of effective interest rates only) or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts. In those rare cases when it is not possible to estimate reliably the cash flows or the expected life of a

financial instrument (or group of financial instruments), the Group uses the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments).

Interest on impaired financial assets is recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss. Interest income earned from debt instruments at fair value through profit or loss is also classified as interest income in the statement of comprehensive income.

3.19.2 Fee and Commission Income

The Group recognizes financial service fees in accordance with the purpose of charging the fees and the accounting standard of the financial instrument related to the fees earned.

Fees that are an integral part of the effective interest of a financial instrument

Such fees are generally treated as adjustments of effective interest. Such fees may include compensation for activities such as evaluating the borrower's financial condition, evaluating and recording guarantees, collateral and other security arrangements, negotiating the terms of the instrument, preparing and processing documents and closing the transaction and origination fees received on issuing financial liabilities at amortized cost. However, fees relating to the creation or acquisition of a financial instrument at fair value through profit or loss are recognized as revenue immediately.

Fees related to performance obligations in the contract satisfied over time

As control over related goods and services of fees and commission income of performance obligation contracts transfer over time, commission income is recognized over the period of performance obligations. Fees and commission income, including asset management fees and commission fees are recognized as the related services are rendered.

Fees earned at a point in time

Fees earned at a point in time are recognized when a customer obtains controls of a promised asset and the Group satisfies a performance obligation.

Commission on negotiation or participation in negotiation for the third party such as trading stocks or other securities, arranging transfer and acquisition of business is recognized as revenue when the transaction has been completed.

A syndication fee that arranges a loan and retains no part of the loan package for itself (or retains a part at the same effective interest rate for comparable risk as other participants) is compensation for the service of syndication. Such a fee is recognized as revenue when the syndication has been completed.

3.19.3 Net gains/losses on financial instruments at fair value through profit or loss

Net gains/losses on financial instruments at fair value through profit or loss include profit or loss (including changes in fair value, dividends, and gain/loss from foreign currency translation) from following financial instruments:

- Gain or loss from financial instruments at fair value through profit or loss, excluding interest income calculated by the effective interest rate
- Gain or loss from derivatives for trading, including derivatives for hedging that does not meet the criteria for hedge accounting

3.19.4 Dividend Income

Dividend income is recognized as profit or loss when the right to receive payment is established. Dividend income is recognized as relevant profit or loss on the statement of comprehensive income depending on the classification of equity securities.

3.20 Employee Compensation and Benefits

3.20.1 Post-employment Benefits:

Defined benefit plans

All post-employment benefits, other than defined contribution plans, are classified as defined benefit plans. The amount recognized as a net defined benefit liability is the present value of the defined benefit obligation less the fair value of plan assets at the end of the reporting period.

The present value of the defined benefit obligation is calculated annually by independent actuaries using the Projected Unit Credit method. The rate used to discount post-employment benefit obligations is determined by reference to market yields at the end of the reporting period on high quality corporate bonds. The currency and term of the corporate bonds are consistent with the currency and estimated term of the post-employment benefit obligations. Actuarial gains and losses including experience adjustments and the effects of changes in actuarial assumptions are recognized in other comprehensive income(loss).

When the total of the present value of the defined benefit obligation minus the fair value of plan assets results in an asset, it is recognized to the extent of the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

Past service cost is the change in the present value of the defined benefit obligation, which arises when the Group introduces a defined benefit plan or changes the benefits of an existing defined benefit plan. Such past service cost is immediately recognized as an expense for the period.

Defined contribution plans

The contributions are recognized as employee benefit expense when they are due.

3.20.2 Short-term Employee Benefits

Short-term employee benefits are employee benefits(other than termination benefits) that are due to be settled within 12 months after the end of the period in which the employees render the related service. The undiscounted amount of short-term employee benefits expected to be paid in exchange for that service is recognized as a liability(accrued expense), after deducting any amount already paid.

The expected cost of profit-sharing and bonus payments are recognized as liabilities when the Group has a present legal or constructive obligation to make such payments as a result of past events rendered by employees and a reliable estimate of the obligation can be made.

3.20.3 Share-based Payment

The Group has share grant and mileage stock programs to directors and employees of the Group. The Group has a choice of whether to settle share grant in cash or by issuing equity instruments of KB Financial Group Inc., the ultimate parent company, at the date of settlement, while the Group shall settle the mileage stock in cash based on the stock price.

For a share-based payment transaction in which the terms of the arrangement provide the Group with the choice of whether to settle in cash or by issuing equity instruments, the Group determines that it has a present obligation to settle in cash because the Group has a past practice and a stated policy of settling in cash. Therefore, the fair value of the employee service is recognized as expense and accrued expenses over the vesting period. Also, the Group accounts for the mileage stock in accordance with the requirements of cash-settled share-based payment transactions, and recognizes the corresponding liability and expenses at the vesting period.

Until the liability is settled, the Group remeasures the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in fair value recognized in profit or loss for the period.

3.20.4 Termination Benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group shall recognize a liability and expense for termination benefits at the earlier of the following dates: when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring that is within the scope of Korean IFRS 1037 and involves the payment of termination benefits. Termination benefits are measured by considering the number of employees expected to accept the offer in the case of a voluntary early retirement. Termination benefits over 12 months after the reporting period are discounted to present value.

3.21 Income Tax Expenses

Income tax expense comprises current tax expense and deferred income tax expense. Current and deferred income tax are recognized as income or expense for the period, except to the extent that the tax arises from a transaction or an event which is recognized, in the same or a different period outside profit or loss, either in other comprehensive income or directly in equity and a business combination. Income tax expense for the period is recognized based on management's best estimate of the weighted average annual income tax rate expected for the full financial year.

3.21.1 Current income tax

Current income tax is the amount of income tax payable in respect of the taxable profit (loss) for a period. A difference between the taxable profit and accounting profit may arise when income or expense is included in accounting profit in one period, but is included in taxable profit in a different period. Differences may also arise if there is revenue that is exempt from taxation, or expense that is not deductible in determining taxable profit (loss). Current income tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

The Group offsets current income tax assets and current income tax liabilities if, and only if, the Group (a) has a legally enforceable right to set off the recognized amounts and (b) intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

3.21.2 Deferred Income Tax

Deferred income tax is recognized, using the asset-liability method, on temporary differences arising between the tax based amount of assets and liabilities and their carrying amount in the consolidated financial statements. Deferred income tax liabilities are recognized for all taxable temporary differences and deferred income tax assets are recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized. However, deferred income tax liabilities are not recognized if they arise from the initial recognition of goodwill; deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries, and associates, except for deferred income tax liabilities for which the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

The carrying amount of a deferred income tax asset is reviewed at the end of each reporting period. The Group reduces the carrying amount of a deferred income tax asset to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred income tax asset to be utilized.

Deferred tax assets and liabilities shall be measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets shall reflect the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

The Group offsets deferred income tax assets and deferred income tax liabilities when the Group has a legally enforceable right to offset current income tax assets against current income tax liabilities; and the deferred income tax assets and the deferred income tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity; or different taxable entities which intend either to settle current income tax liabilities and assets on a net basis, or to realize the

assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred income tax liabilities or assets are expected to be settled or recovered.

3.21.3 Uncertain Tax Positions

Uncertain tax positions arise from tax treatments applied by the Group which may be challenged by the tax authorities due to the complexity of the transaction or different interpretation of the tax laws, a claim for rectification brought by the Group, an appeal for a refund claimed from the tax authorities related to additional assessments or a tax investigation processed by the tax authorities. The Group recognizes its uncertain tax positions in the consolidated financial statements based on the guidance in Korean IFRS 1012. The income tax asset is recognized if a tax refund is probable for taxes paid and levied by the tax authority, and the amount to be paid as a result of the tax investigation and others is recognized as the current tax payable. However, interest and penalties related to income taxes are recognized in accordance with Korean IFRS 1037 as its economic substances.

3.22 Transactions with the Trust Accounts

Under the Financial Investment Services and Capital Markets Act, the Group recognizes trust accounts ("the trust accounts") as separate. The borrowings from trust accounts represent transfer of funds in trust accounts into banking accounts. Such borrowings from trust accounts are recorded as receivables from the banking accounts in the trust accounts and as borrowings from trust accounts in the banking accounts. The Group earns trust fees from the trust accounts for its management of trust assets and operations. The reserves for future profits and losses are set up in the trust accounts for profits and losses related to those trust funds with a guarantee of the principal or of the principal and a certain minimum rate of return in accordance with the relevant laws and regulations applicable to trust operations. The reserves are used to provide for the losses on such trust funds and, if the losses incurred are in excess of the reserves, the excess losses are compensation paid as a loss on trust management in other operating expenses and the trust accounts recognize the corresponding compensation as compensation from banking accounts.

3.23 Operating Segments

Operating segments are components of the Group where separate financial information is available and is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance.

Segment information includes items which are directly attributable and reasonably allocated to the segment.

4. Financial Risk Management

4.1 Summary

4.1.1 Overview of Financial Risk Management Policy

The financial risks that the Group is exposed to are credit risk, market risk, liquidity risk, operational risk and others.

The note regarding financial risk management provides information about the risks that the Group is exposed to, including the objectives, policies and processes for managing the risks, the methods

used to measure the risks, and capital management. Additional quantitative information is disclosed throughout the consolidated financial statements.

The Group's risk management system focuses on increasing transparency, developing the risk management environment, preventing transmission of risk to other risk types, and the preemptive response to risk due to rapid changes in the financial environment to support The Group's long-term strategy and business decisions efficiently. Credit risk, market risk, liquidity risk, and operational risk have been recognized as The Group's key risks. These risks are measured and managed in Internal Capital or VaR (Value at Risk) using a statistical method.

4.1.2 Risk Management Organization

Risk Management Committee

The Risk Management Committee establishes risk management strategies in accordance with the directives of the Board of Directors and determines the Group's target risk appetite approves significant risk matters and reviews the level of risks that the Group is exposed to and the appropriateness of the Group's risk management operations as an ultimate decision-making authority.

Risk Management Council

The Risk Management Council is a consultative group which reviews and makes decisions on matters delegated by the Risk Management Committee and discusses the detailed issues relating to the Group's risk management.

Risk Management Subcommittee

The Risk Management Subcommittee enforces decisions made by Risk Management Council, and makes practical decisions to implement risk management policies and procedures.

- Credit Risk Management Subcommittee

The Credit Risk Management Subcommittee approves exotic and hybrid products accompanying credit risk and reviews newly developed products accompanying credit risk. Also, it reviews and approves the exposure limits by industry.

- Market Risk Management Subcommittee

The Market Risk Management Subcommittee reviews and makes decisions on setting risk limits and approving the standard for investments in newly developed standard, exotic and hybrid products.

- Operational Risk Management Subcommittee

The Operational Risk Management Subcommittee reviews the issues that have a significant effect on the Group's operational risk relating to establishment, amendment and abolition of major system, process and others.

Risk Management Group

The Risk Management Group is responsible for managing specific policies, procedures and work processes relating to the Group's risk management.

4.2 Credit Risk

4.2.1 Overview of Credit Risk

Credit risk is the risk of possible losses in an asset portfolio in the event of a counterparty's default, breach of contract and deterioration in the credit quality of the counterparty. For risk management reporting purposes, the individual borrower's default risk, country risk, specific risks and other credit risk exposure components are considered as a whole. The Group uses definition of default as defined and applied in the calculation of Capital Adequacy Ratio (Basel III) in accordance with the new Basel Accord.

4.2.2 Credit Risk Management

The Group measures expected losses and internal capital on assets that are subject to credit risk management whether on- or off-balance sheet items and uses expected losses and internal capital as a management indicator. The Group manages credit risk by allocating credit risk internal capital limits.

In addition, the Group controls the credit concentration risk exposure by applying and managing total exposure limits to prevent an excessive risk concentration to each industry and borrower.

The Group has organized a credit risk management group that focuses on credit risk management in accordance with the Group's credit risk management policy. The Group's credit group, customer service group and SME/SOHO group, which are independent from the sales department, are responsible for loan policy, loan limit, loan review, credit evaluation, restructuring and subsequent events. The credit risk management group is also responsible for planning risk management policy, applying limits of credit lines, measuring the credit risk internal capital, adjusting credit limits, reviewing credit and verifying credit evaluation models.

4.2.3 Maximum Exposure to Credit Risk

The Group's maximum exposures of financial instruments excluding equity securities to credit risk without consideration of collateral values as at December 31, 2018 are as follows:

(In millions of Korean won)	2018
Financial assets	
Due from financial institutions ¹	11,831,688
Financial assets at fair value through profit or loss	
Securities	11,883,025
Loans	212,596
Financial instruments indexed to gold	78,808
Derivatives	1,613,970
Loans at amortized cost ¹	276,944,202
Financial investments	
Securities at fair value through other comprehensive income	27,682,463
Securities at amortized cost ¹	12,792,526
Loans at fair value through other comprehensive income	349,547
Other financial assets ¹	4,199,197
	347,588,022
Off-balance sheet items ²	

Acceptances and guarantees contracts	7,277,136
Financial guarantee contracts	3,135,589
Commitments	81,278,583
	91,691,308
	439,279,330

¹ Due from financial institutions, loans at amortized cost, securities at amortized cost and other financial assets are presented net of allowance.

The Group's maximum exposures of financial instruments excluding equity securities and beneficiary certificates, to credit risk without consideration of collateral values as at December 31, 2017 are as follows:

(In millions of Korean won)	2017	
Financial assets		
Due from financial institutions Financial assets at fair value through profit or loss	13,048,893	
(under Korean IFRS 1039)		
Financial assets held for trading ¹	7,974,469	
Financial assets designated at fair value through profit or loss	95,357	
Derivatives	2,607,659	
Loans ²	251,710,605	
Financial investments		
Available-for-sale financial assets	27,605,761	
Held-to-maturity financial assets	8,737,150	
Other financial assets ²	6,341,463	
	318,121,357	
Off-balance sheet items		
Acceptances and guarantees contracts	6,977,468	
Financial guarantee contracts	2,968,354	
Commitments	50,851,024	
	60,796,846	
	378,918,203	

¹The amounts of ₩73,856 million as at December 31, 2017, related to financial instruments indexed to the price of gold are included.

4.2.4 Credit Risk of Loans

The Group maintains an allowance for loan losses associated with credit risk on loans to manage its credit risk.

The Group assesses expected credit loss on financial asset at amortized cost and financial asset at fair value through other comprehensive income other than financial asset at fair value through profit or

² For details of relevant provisions, see Note 22.

² Loans and other financial assets are presented net of allowance for loan losses.

loss and recognizes loss allowance. Expected credit losses are a probability-weighted estimate of possible credit losses occurred in a certain range by reflecting reasonable and supportable information that is reasonably available at the reporting date without undue cost or effort, including information about past events, current conditions and forecasts of future economic conditions. The Group measures the expected credit losses on loans classified as financial assets measured at amortized cost, and by deducting allowances for credit losses. The expected credit losses of loans classified as financial assets at fair value through other comprehensive income are presented in other comprehensive income on the financial statements.

Credit risk exposure

Loans as at December 31, 2018, are classified as follows:

(In millions o	of Korean won)			2018		
	Financial instruments applying 12-	Financial ir applying lifeti credit l	me expected	Financial instruments applying	Financial instruments not applying	Total
	month expected credit losses	Non-	Impaired	credit impaired approach	expected credit losses	Total
Financial as	sets at amortized	cost				
Corporate						
Grade 1	69,619,761	1,451,514	1,573	-	-	71,072,848
Grade 2	54,119,274	4,073,167	1,610	-	-	58,194,051
Grade 3	2,698,199	1,691,008	6,566	-	-	4,395,773
Grade 4	395,707	903,215	40,043	-	-	1,338,965
Grade 5	26,019	342,477	935,447			1,303,943
	126,858,960	8,461,381	985,239			136,305,580
Retail						
Grade 1	124,212,610	4,387,477	8,836	-	-	128,608,923
Grade 2	4,171,518	7,058,259	6,218	-	-	11,235,995
Grade 3	140,074	881,415	4,158	-	-	1,025,647
Grade 4	478,701	154,535	5,103	-	-	638,339
Grade 5	8,478	296,087	379,555			684,120
	129,011,381	12,777,773	403,870			142,193,024
	255,870,341	21,239,154	1,389,109			278,498,604
	sets at fair value t	hrough other con	nprehensive inc	ome		
Corporate						
Grade 1	149,226	25,731	-	-	-	174,957
Grade 2	128,712	45,878	-	-	-	174,590
Grade 3	-	-	-	-	-	-
Grade 4	-	-	-	-	-	-
Grade 5		<u>-</u> _	<u>-</u> _		-	-

	277,938	71,609			<u>-</u> _	349,547
Retail						
Grade 1	-	-	-	-	-	-
Grade 2	-	-	-	-	-	-
Grade 3	-	-	-	-	-	-
Grade 4	-	-	-	-	-	-
Grade 5				<u> </u>	<u>-</u>	
		<u>-</u> _		<u> </u>	<u>-</u>	
	277,938	71,609			<u>-</u>	349,547
	256,148,279	21,310,763	1,389,109			278,848,151

¹ Before netting of allowance.

	Corporate	Retail
Grade 1	AAA ~ BBB+	1 ~ 5 grade
Grade 2	BBB ~ BB	6 ~ 8 grade
Grade 3	BB- ∼ B	9 ~ 10 grade
Grade 4	B- ∼ CCC	11 grade
Grade 5	CC or under	12 grade or under

Loans as at December 31, 2017, are classified as follows:

(In millions of Korean won)

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_	u		•

Laana	Retail		Corporate	,	Total	
Loans	Amount	%	Amount	%	Amount	%
Neither past due nor impaired	129,231,082	99.04	121,257,211	98.88	250,488,293	98.96
Past due but not						
impaired	865,485	0.66	198,270	0.16	1,063,755	0.42
Impaired	389,552	0.30	1,182,726	0.96	1,572,278	0.62
•	130,486,119	100.00	122,638,207	100.00	253,124,326	100.00
Allowances	(318,533)	0.24	(1,095,188)	0.89	(1,413,721)	0.56
Carrying amount	130,167,586	_	121,543,019	_	251,710,605	

Credit qualities of loans that are neither past due nor impaired as at December 31, 2017 are as follows:

(In millions of Korean won)

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	Retail	Corporate	Total	
Grade 1	115,311,505	62,287,457	177,598,962	
Grade 2	12,537,698	52,057,018	64,594,716	
Grade 3	804,042	5,341,955	6,145,997	
Grade 4	398,177	1,253,960	1,652,137	
Grade 5	179,660	316,821	496,481	
	129,231,082	121,257,211	250,488,293	

Credit qualities of loans graded according to internal credit ratings as at December 31, 2017 are as follows:

	Retail	Corporate
Grade 1	1 ~ 5 grade	AAA ~ BBB+
Grade 2	6 ~ 8 grade	BBB ~ BB
Grade 3	9 ~ 10 grade	BB- ∼ B
Grade 4	11 grade	B- ~ CCC
Grade 5	12 grade or under	CC or under

Loans that are past due but not impaired as at December 31, 2017 are as follows:

(In millions of Korean won)

2017

	1 ~ 29 days	30 ~ 59 days	60 ~ 89 days	Total
Retail	736,264	87,901	41,320	865,485
Corporate	154,706	26,654	16,910	198,270
	890,970	114,555	58,230	1,063,755

Impaired loans as at December 31, 2017 are as follows:

(In millions of Korean won)

2017				
Retail	Corporate	Total		
389,552	1,182,726	1,572,278		
(126,691)	(771,131)	(897,822)		
-	(684,377)	(684,377)		
(126,691)	(86,754)	(213,445)		
262,861	411,595	674,456		
	389,552 (126,691) - (126,691)	389,552 1,182,726 (126,691) (771,131) - (684,377) (126,691) (86,754)		

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Credit risk mitigation by collateral

The quantification of the extent to which collateral and other credit enhancements mitigate credit risk as at December 31, 2018 is as follows:

(In millions of Korean won)

		2018						
	Financial instruments applying 12- month expected credit losses	Financial instruments applying lifetime expected credit losses		Financial instruments applying credit	Financial instruments not applying			
		Non-impaired	Impaired	impaired approach	expected credit losses	Total		
Guarantees	60,020,814	5,864,526	146,818		-	66,032,158		
Deposits and savings Property and	1,372,286	76,960	5,265	-	-	1,454,511		
equipment	2,540,384	97,807	2,461	-	-	2,640,652		
Real estate	145,155,068	12,512,423	388,109	-	-	158,055,600		
	209,088,552	18,551,716	542,653			228,182,921		

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A quantification of the extent to which collateral and other credit enhancements mitigate credit risk as at December 31, 2017, is as follows:

2017

(In millions of Korean won)

	_*				
	Impaired	Impaired Loans		Non-impaired Loans	
	Individual	Collective	Past due	Not past due	Total
Guarantees	17,257	107,610	198,379	57,399,810	57,723,056
Deposits and savings	10,501	5,375	23,126	1,576,897	1,615,899
Property and equipment	125	456	43	2,091,917	2,092,541
Real estate	96,010	271,937	638,044	145,583,507	146,589,498
	123,893	385,378	859,592	206,652,131	208,020,994

4.2.5 Credit Quality of Securities

The credit quality of financial investments excluding equity securities that are exposed to credit risk as at December 31, 2018, are as follows:

(In millions of Korean won)

			2	2018		
	Financial	Financial ins		Financial instruments		_
	instruments	applying lifetir	applying lifetime expected		Financial	
	applying 12-	credit lo	osses	applying	instruments	
	month			credit	not applying	
	expected	Non-		impaired	expected	
	credit losses	impaired	Impaired	approach	credit losses	Total
Securities at	amortized cost					
Grade 1	12,769,605	-	-	-	-	12,769,605
Grade 2	9,569	-	-	-	-	9,569
Grade 3	14,649	-	-	-	-	14,649
Grade 4	-	-	-	-	-	-
Grade 5	-	-	-	-	-	-
	12,793,823	-		-		12,793,823
Securities at	fair value through otl	ner comprehensive	e income		<u></u> -	
Grade 1	27,120,098	-	-	-	-	27,120,098
Grade 2	559,855	-	-	-	-	559,855
Grade 3	-	-	-	-	-	-
Grade 4	2,510	-	-	-	-	2,510
Grade 5	-	-	-	-	-	-
	27,682,463			-		27,682,463
	40,476,286			-		40,476,286

¹ Before netting of allowance.

The credit qualities of securities, excluding equity securities according to the credit ratings by external rating agencies as at December 31, 2018, are as follows:

Credit		Domestic			Foreign	
quality	KIS	NICE P&I	FnPricing Inc.	S&P	Fitch-IBCA	Moody's
Grade 1	AA0 to AAA	AA0 to AAA	AA0 to AAA	A- to AAA	A- to AAA	A3 to Aaa
Grade 2	A- to AA-	A- to AA-	A- to AA-	BBB- to BBB+	BBB- to BBB+	Baa3 to Baa1
Grade 3	BBB0 to BBB+	BBB0 to BBB+	BBB0 to BBB+	BB to BB+	BB to BB+	Ba2 to Ba1
Grade 4	BB0 to BBB-	BB0 to BBB-	BB0 to BBB-	B+ to BB-	B+ to BB-	B1 to Ba3
Grade 5	BB- or under	BB- or under	BB- or under	B or under	B or under	B2 or under

Debt securities' credit qualities denominated in Korean won are based on the lowest credit rating by the three domestic credit rating agencies above, and those denominated in foreign currencies are based on the lowest credit ratings by the three foreign credit rating agencies above.

Financial assets at fair value through profit or loss and financial investments, excluding equity securities and beneficiary certificates, that are exposed to credit risk as at December 31, 2017 are as follows:

(In millions of Korean won)	2017
Securities that are neither past due nor impaired	44,338,881
Impaired securities	-
	44,338,881

The credit quality of securities, excluding equity securities and beneficiary certificates, that are neither past due nor impaired as at December 31, 2017, is as follows:

(In millions of Korean won)

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-	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total
Financial assets held for						
trading	6,525,798	1,304,926	44,157	25,732	-	7,900,613
Financial assets designated at fair value						
through profit or loss Available-for-sale	95,357	-	-	-	-	95,357
financial assets Held-to-maturity financial	27,433,166	144,312	25,762	2,521	-	27,605,761
assets	8,737,150	-	-	-	-	8,737,150
_ _	42,791,471	1,449,238	69,919	28,253	-	44,338,881

The credit qualities of securities, excluding equity securities and beneficiary certificates, according to the credit ratings by external rating agencies as at December 31, 2017, are as follows:

Credit		Domestic			Foreign	
quality	KIS	NICE P&I	FnPricing Inc.	S&P	Fitch-IBCA	Moody's
Grade 1	AA0 to AAA	AA0 to AAA	AA0 to AAA	A- to AAA	A- to AAA	A3 to Aaa
Grade 2	A- to AA-	A- to AA-	A- to AA-	BBB- to BBB+	BBB- to BBB+	Baa3 to Baa1
Grade 3	BBB0 to BBB+	BBB0 to BBB+	BBB0 to BBB+	BB to BB+	BB to BB+	Ba2 to Ba1
Grade 4	BB0 to BBB-	BB0 to BBB-	BB0 to BBB-	B+ to BB-	B+ to BB-	B1 to Ba3
Grade 5	BB- or under	BB- or under	BB- or under	B or under	B or under	B2 or under

Credit qualities of debt securities denominated in Korean won are based on the lowest credit rating by the three domestic credit rating agencies above, and those denominated in foreign currencies are based on the lowest credit rating by the three foreign credit rating agencies above.

4.2.6 Credit Risk of Due from Financial Institutions

The credit quality of due from financial institutions as at December 31, 2018, is classified as follows:

(In millions of Korean won)

,	2018						
	Financial instruments applying 12-	Financial ins applying lifetim credit lo	e expected	Financial instruments applying			
	month expected credit losses	Non-impaired	Impaired	credit impaired approach	Total		
Due from finar	ncial institutions at am	ortized cost					
Grade 1	11,035,800	-	-	-	11,035,800		
Grade 2	167,900	-	-	-	167,900		
Grade 3	608,314	-	-	-	608,314		
Grade 4	19,531	-	-	-	19,531		
Grade 5	1,691	-	-	-	1,691		
	11.833.236				11.833.236		

¹ Before netting of allowance.

The classification criteria of the credit quality for due from financial institutions are the same as the criteria for securities (excluding equity securities).

4.2.7 Credit Risk Mitigation of Derivative Financial Instruments

The quantification of the extent to which collateral mitigates credit risk of derivative financial instruments as at December 31, 2018 and 2017, is as follows:

(In millions of Korean won)	2018	2017
Deposits and savings, securities and others	381,959	1,198,373

4.2.8 Credit Risk Concentration Analysis

Details of the Group's loans by country as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018

						Carrying
	Retail	Corporate ¹	Total	%	Allowances	amount
Korea	142,003,442	132,576,712	274,580,154	98.40	(1,524,099)	273,056,055
China	-	2,278,545	2,278,545	0.82	(20,586)	2,257,959
Japan	106	333,918	334,024	0.12	(1,865)	332,159
United States	-	892,958	892,958	0.32	(5,165)	887,793
Europe	-	348,336	348,336	0.12	(498)	347,838
Others	189,476	437,254	626,730	0.22	(2,189)	624,541
	142,193,024	136,867,723	279,060,747	100.00	(1,554,402)	277,506,345

¹ Expected credit loss of loans at fair value through other comprehensive income is ₩ 1,307 million.

(In millions of Korean won)

	Retail	Corporate	Total	%	Allowances	Carrying amount
Korea	130,390,627	119,273,608	249,664,235	98.63	(1,369,907)	248,294,328
China	-	1,867,380	1,867,380	0.74	(30,720)	1,836,660
Japan	539	127,009	127,548	0.05	(6,268)	121,280
United States	-	866,867	866,867	0.34	(1,599)	865,268
Europe	-	192,980	192,980	80.0	(2,326)	190,654
Others	94,953	310,363	405,316	0.16	(2,901)	402,415
_	130,486,119	122,638,207	253,124,326	100.00	(1,413,721)	251,710,605

Details of the Group's corporate loans by industry as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won) 2018

				Carrying
	Loans	%	Allowances	amount
Financial institutions	11,118,159	8.12	(5,798)	11,112,361
Manufacturing	42,063,832	30.73	(448,644)	41,615,188
Service	59,278,536	43.31	(249,776)	59,028,760
Wholesale and retail	16,284,464	11.90	(93,091)	16,191,373
Construction	2,640,614	1.93	(283,768)	2,356,846
Public	821,317	0.60	(3,286)	818,031
Others	4,660,801	3.41	(24,512)	4,636,289
	136,867,723	100.00	(1,108,875)	135,758,848

(In millions of Korean won) 2017

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			Carrying
Loans	%	Allowances	amount
9,041,823	7.38	(6,265)	9,035,558
39,127,515	31.90	(434,349)	38,693,166
52,794,807	43.05	(281,847)	52,512,960
14,620,777	11.92	(85,972)	14,534,805
2,538,256	2.07	(269,185)	2,269,071
834,687	0.68	(2,911)	831,776
3,680,342	3.00	(14,659)	3,665,683
122,638,207	100.00	(1,095,188)	121,543,019
	9,041,823 39,127,515 52,794,807 14,620,777 2,538,256 834,687 3,680,342	9,041,823 7.38 39,127,515 31.90 52,794,807 43.05 14,620,777 11.92 2,538,256 2.07 834,687 0.68 3,680,342 3.00	9,041,823 7.38 (6,265) 39,127,515 31.90 (434,349) 52,794,807 43.05 (281,847) 14,620,777 11.92 (85,972) 2,538,256 2.07 (269,185) 834,687 0.68 (2,911) 3,680,342 3.00 (14,659)

Details of the Group's retail loans by type as at December 31, 2018 and 2017, are as follows:

(In millions of Korean

2	n	4	0

				Carrying
	Loans	%	Allowances	amount
Housing purpose	70,178,328	49.35	(28,940)	70,149,388
General purpose	72,014,696	50.65	(416,587)	71,598,109
	142,193,024	100.00	(445,527)	141,747,497

(In millions of Korean won) 2017

				Carrying
	Loans	%	Allowances	amount
Housing purpose	62,319,992	47.76	(14,914)	62,305,078
General purpose	68,166,127	52.24	(303,619)	67,862,508
	130,486,119	100.00	(318,533)	130,167,586

Details of the Group's mortgage loans¹ as at December 31, 2018, are as follows:

(In millions of Korean won)

	Loans	%	Allowances	Carrying amount
Group1	6,671,012	7.11	(3,296)	6,667,716
Group2	18,911,235	20.16	(8,322)	18,902,913
Group3	35,580,948	37.94	(8,753)	35,572,195
Group4	32,256,160	34.39	(12,338)	32,243,822
Group5	356,892	0.38	(737)	356,155
Group6	16,776	0.02	(35)	16,741
	93,793,023	100.00	(33,481)	93,759,542

¹ Retail loans for general purpose with the real estate as collateral are included.

	Ranges		
Group1	LTV 0% to less than 20%		
Group2	LTV 20% to less than 40%		
Group3	LTV 40% to less than 60%		
Group4	LTV 60% to less than 80%		
Group5	LTV 80% to less than 100%		
Group6	LTV over 100%		

¹ LTV: Loan to Value ratio

Credit risk by industry of due from financial institutions, securities and derivative financial instruments

Details of the Group's credit risk concentration of due from financial institutions, securities excluding equity securities and derivative financial instruments as at December 31, 2018, are as follows:

(In millions of Korean won) 2018 Carrying % Amount **Allowances** amount Due from financial institutions at amortized cost Finance and insurance 11,833,236 100.00 (1,548)11,831,688 100.00 11.833.236 (1,548)11.831.688 Securities at fair value through profit or loss¹ Government and government funded institutions 2,755,250 23.19 2,755,250 Finance and insurance 7,523,708 63.31 7,523,708 Others 13.50 1,604,067 1,604,067 11,883,025 100.00 11,883,025 **Derivatives** Government and government funded institutions 39,290 2.43 39,290 Finance and insurance 1,485,912 92.07 1,485,912 Others 88,768 5.50 88,768 1,613,970 100.00 1,613,970 Securities at fair value through other comprehensive income² Government and government funded institutions 7.844.258 28.34 7.844.258 Finance and insurance 17,770,112 64.19 17,770,112 Others 2,068,093 7.47 2,068,093 27,682,463 100.00 27,682,463 Securities at amortized cost Government and government funded institutions 1,937,657 15.15 1,937,653 (4) Finance and insurance 10,826,102 84.62 10,824,815 (1,287)Others 30,064 0.23 30,058 (6) 12,793,823 100.00 12,792,526 (1,297)65,803,672 65,806,517 (2,845)

¹ Collective investment securities included in securities at fair value through profit or loss are classified as finance and insurance.

² Expected credit loss of securities at fair value through other comprehensive income is ₩ 1,348 million.

Details of the Group's credit risk of securities, excluding equity securities and beneficiary certificates, and derivative financial instruments by industry as at December 31, 2017, are as follows:

(In millions of Korean won)	2017		
	Amount	%	
Financial assets held for trading			
Government and government funded institutions	2,408,760	30.49	
Finance and Insurance	3,876,344	49.06	
Others	1,615,509	20.45	
	7,900,613	100.00	
Financial assets designated at fair value through profit or loss			
Finance and Insurance	95,357	100.00	
	95,357	100.00	
Derivative financial assets			
Government and government funded institutions	12,099	0.47	
Finance and Insurance	2,464,286	94.50	
Others	131,274	5.03	
_	2,607,659	100.00	
Available-for-sale financial assets			
Government and government funded institutions	8,188,744	29.67	
Finance and Insurance	18,044,307	65.36	
Others	1,372,710	4.97	
	27,605,761	100.00	
Held-to-maturity financial assets			
Government and government funded institutions	2,563,480	29.34	
Finance and Insurance	6,073,478	69.51	
Others	100,192	1.15	
	8,737,150	100.00	
	46,946,540		

Details of the Group's credit risk of due from financial institutions, securities, excluding equity securities, and derivative financial instruments by country as at December 31, 2018, are as follows:

(In millions of Korean won)	2018			
	Amount	%	Allowances	Carrying amount ¹
Due from financial institutions at amortized cost				
Korea	9,478,190	80.10	-	9,478,190
United States	667,139	5.64	(6)	667,133
Others	1,687,907	14.26	(1,542)	1,686,365
	11,833,236	100.00	(1,548)	11,831,688
Securities at fair value through profit or loss				
Korea	10,524,924	88.57	-	10,524,924
United States	726,271	6.11	-	726,271
Others	631,830	5.32	-	631,830
	11,883,025	100.00	-	11,883,025
Derivatives				
Korea	752,028	46.59	-	752,028
United States	285,460	17.69	-	285,460
France	222,905	13.81	-	222,905
Others	353,577	21.91	-	353,577
	1,613,970	100.00		1,613,970
Securities at fair value through other comprehensive income ¹				
Korea	26,139,297	94.43	-	26,139,297
United States	711,946	2.57	-	711,946
Others	831,220	3.00		831,220
	27,682,463	100.00	-	27,682,463
Securities at amortized cost				
Korea	11,805,442	92.27	(945)	11,804,497
United States	155,417	1.21	(32)	155,385
United Kingdom	705,790	5.52	(247)	705,543
Others	127,174	1.00	(73)	127,101
	12,793,823	100.00	(1,297)	12,792,526
	65,806,517		(2,845)	65,803,672

¹ Expected credit loss of securities at fair value through other comprehensive income is ₩ 1,348 million.

Details of the Group's credit risk of securities, excluding equity securities and beneficiary certificates, and derivative financial instruments by country as at December 31, 2017, are as follows:

(In millions of Korean won)	2017			
	Amount	%		
Financial assets held for trading				
Korea	7,021,083	88.87		
Others	879,530	11.13		
	7,900,613	100.00		
Financial assets designated at fair value through profit or loss				
Korea	95,357	100.00		
	95,357	100.00		
Derivative financial assets				
Korea	1,266,612	48.57		
United States	303,283	11.63		
United Kingdom	52,781	2.02		
France	303,883	11.65		
Others	681,100	26.13		
	2,607,659	100.00		
Available-for-sale financial assets				
Korea	27,006,817	97.83		
Others	598,944	2.17		
	27,605,761	100.00		
Held-to-maturity financial assets				
Korea	7,647,772	87.53		
Others	1,089,378	12.47		
	8,737,150	100.00		
	46,946,540			

The counterparties to the financial assets under due from financial institutions and financial instruments indexed to the price of gold within financial assets measured at fair value through profit or loss and derivatives are in the financial and insurance industries which have high credit ratings.

4.3 Liquidity risk

4.3.1 Overview of Liquidity Risk

Liquidity risk is the risk of insolvency or loss due to a disparity between the inflow and outflow of funds, unexpected outflow of funds, and obtaining funds at a high price or disposing of securities at an unfavorable price due to lack of available funds. The Group manages its liquidity risk through analysis of the contractual maturity of interest-bearing assets and liabilities, assets and liabilities related to the other in and outflows, and off-balance sheet items related to the inflows and outflows of currency derivative instruments and others.

4.3.2. Liquidity Risk Management and Indicator

The liquidity risk is managed by ALM ('Asset Liability Management') and related guidelines which are applied to the risk management policies and procedures that addresses all the possible risks that arise from the overall business of the Group.

The Group has to establish the liquidity risk management strategy including the objectives of liquidity risk management, management policies and internal control system, and obtain approval from Risk Management Committee. Risk Management Committee operates the Risk Management Council for the purpose of efficient risk management, monitors establishment and enforcement of policies based on risk management strategy.

For the purpose of liquidity management, the liquidity gap ratio, liquidity ratio, maturity gap ratio and the results of the stress testing related to liquidity risk on transactions affecting the inflows and outflows of funds and transactions of off-balance sheet items are measured, managed and reported to the Risk Management Committee and Risk Management Council on a regular basis.

4.3.3. Analysis of Remaining Contractual Maturity of Financial Assets and Liabilities

Cash flows disclosed below are undiscounted contractual principal and interest to be received (paid) and, thus, differ from the amounts in the financial statements which are based on the present value of expected cash flows. The amount of interest to be received or paid on floating rate assets and liabilities is measured on the assumption that the current interest rate would be the same through maturity.

The remaining contractual maturity of financial assets and liabilities, excluding derivatives held for cash flow hedging, as at December 31, 2018 and 2017, is as follows:

(In millions of Korean won)				2018			
		Up to	1-3	3-12	1-5	Over 5	
	On demand	1 month	months	months	years	years	Total
Financial assets							
Cash and due from financial							
institutions 1	4,727,159	339,350	178,406	458,164	_	_	5,703,079
Financial assets at fair value		•	•	•			, ,
through profit or loss 2	12,043,909	230	7,182	184,881	5,542	90,736	12,332,480
Derivatives held for trading ²	1,533,650	-	-	-	, -	-	1,533,650
Derivatives held for hedging ³	-	2,289	1,364	16,251	20,025	40,830	80,759
Loans at amortized cost	-	18,705,807	27,929,002	107,831,857	71,668,732	95,363,933	321,499,331
Financial investments ⁴	1,898,944	2,176,313	3,646,572	13,634,982	20,703,303	2,454,592	44,514,706
Financial assets at fair value	, , .	, .,.	-,,-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,,	, - ,	,- ,
through other							
comprehensive income	1,898,944	1,418,537	2,278,547	9,765,281	14,987,787	191,966	30,541,062
Securities at amortized cost	-	757,776	1,368,025	3,869,701	5,715,516	2,262,626	13,973,644
Other financial assets	285	2,449,979	520	1,020,442	-	_	3,471,226
	20,203,947	23,673,968	31,763,046	123,146,577	92,397,602	97,950,091	389,135,231
Financial liabilities	.,,	.,,	, ,		. , ,	, , , , , , , , ,	, , , , ,
Financial liabilities at fair							
value through profit or loss 2	87,168	_	-	_	-	_	87,168
Derivatives held for trading ²	1,553,858	-	-	-	-	_	1,553,858
Derivatives held for hedging ³	-	4,091	(4,249)	(14,415)	15,660	31	1,118
Deposits 5	123,264,494	16,840,316	27,895,787	94,902,004	11,164,154	2,780,594	276,847,349
Debts	872	2,683,213	3,317,577	6,830,511	4,348,308	669,151	17,849,632
Debentures	30,160	702,704	2,368,679	8,329,923	12,113,285	673,863	24,218,614
Other financial liabilities	-	10,451,177	2,206	76,647	60,145	-	10,590,175
	124,936,552	30,681,501	33,580,000	110,124,670	27,701,552	4,123,639	331,147,914
Off-balance sheet items				,			
Commitments 6	81,278,583	_	_	_	_	_	81,278,583
Payment guarantee	, ,						
agreement	7,277,136	_	_	_	_	_	7,277,136
Financial	, , ,						
guarantee contracts 7	3,135,590	-	-		-	-	3,135,590
	91,691,309	-	-	-	-	-	91,691,309

¹ The amounts of ₩ 9,203,969 million which are restricted amount due from the financial institutions as at December 31, 2018 are excluded.

² Financial liabilities at fair value through profit or loss and derivatives held for trading and financial assets at fair value through profit or loss (excluding loans) are not managed by contractual maturity because they are held for trading or redemption before maturity. Therefore, the carrying amounts are included in the 'On demand' category.

³ Cash flows of derivative instruments held for hedging are shown at net amounts of cash inflows and outflows by remaining contractual maturity.

⁴ Equity securities designated as financial assets at fair value through other comprehensive income included in the 'On demand' category as most are available for sale at any time. However, in the case of equity investments which are restricted for sale, these will be classified to its respective maturity when the restriction on disposal is released.

⁵ Deposits that are contractually repayable on demand or on short notice are included under the 'On demand' category.

⁶ Unused lines of credit within commitments are included under the 'On demand' category as payments can be required upon request.

⁷ Financial guarantee contracts are included under the 'On demand' category as payments can be required upon request.

(In millions of Korean won)				2017			
-		Up to	1-3	3-12	1-5	Over 5	
	On demand	1 month	months	months	years	years	Total
Financial assets				-			
Cash and due from							
financial institutions ¹	5,716,586	399,460	140,676	159,353	-	-	6,416,075
Financial assets							
held for trading ²	8,313,373	-	-	-	-	-	8,313,373
Financial assets							
designated at fair value							
through profit or loss ²	95,357	-	-	-	-	-	95,357
Derivatives							
held for trading ²	2,509,930	-	-	-	-	-	2,509,930
Derivatives							
held for hedging ³	-	21,489	2,722	2,647	(5,017)	52,698	74,539
Loans	-	14,978,083	26,503,526	96,536,587	62,850,146	89,830,481	290,698,823
Available-for-sale							
financial assets 4	6,056,352	1,486,656	2,111,060	9,396,840	15,050,896	791,200	34,893,004
Held-to-maturity							
financial assets	-	584,825	388,928	2,608,727	4,343,586	1,986,169	9,912,235
Other financial assets	291	4,604,953		1,042,830	-	-	5,648,074
	22,691,889	22,075,466	29,146,912	109,746,984	82,239,611	92,660,548	358,561,410
Financial liabilities							
Financial liabilities							
held for trading ²	74,191	-	-	-	-	-	74,191
Derivatives							
held for trading ²	2,558,786	-	-	-	-	-	2,558,786
Derivatives							
held for hedging ³	-	4,176	(4,715)	(19,705)	(7,144)	244	(27,144)
Deposits 5	124,342,154	12,319,041	23,092,872	82,158,996	11,320,759	2,801,348	256,035,170
Debts	936	3,843,258	1,871,117	5,325,664	4,462,359	573,088	16,076,422
Debentures	40,655	540,471	1,218,396	5,425,995	11,524,310	1,536,151	20,285,978
Other financial liabilities	_	10,055,251	774	74,577	6,794	218,097	10,355,493
-	127,016,722	26,762,197	26,178,444	92,965,527	27,307,078	5,128,928	305,358,896
Off-balance sheet items						<u> </u>	
Commitments ⁶	50,851,024	_	_	-	_	_	50,851,024
Financial	, , . — .						-,,-
guarantee contracts 7	2,968,354	-	-	_	_	_	2,968,354
<u> </u>	53,819,378					_	53,819,378
-	, , •						, ,

¹ The amounts of ₩ 9,240,008 million which are restricted amount due from the financial institutions as at December 31, 2017 are excluded

² Financial assets held for trading, financial assets designated at fair value through profit or loss, financial liabilities held for trading and derivatives held for trading are not managed by contractual maturity because they are held for trading or redemption before maturity. Therefore, the carrying amounts are included in the 'On demand' category. However, the cash flows of the embedded derivatives (e.g. conversion options and others) which are separated from their host contracts, are included in the cash flows of the host contracts.

³ Cash flows of derivative instruments held for hedging are shown at net amounts of cash inflows and outflows by remaining contractual maturity.

⁴ Equity investments in financial assets classified as available-for-sale are generally included in the 'On demand' category as most are available for sale at any time. However, in the case of equity investments which are restricted for sale, these will be classified to its respective maturity when the restriction on disposal is released.

⁵ Deposits that are contractually repayable on demand or on short notice are included under the 'On demand' category.

⁶ Unused lines of credit within commitments are included under the 'On demand' category as payments can be required upon request.

⁷ Financial guarantee contracts are included under the 'On demand' category as payments can be required upon request.

The remaining contractual cash flows of derivatives held for cash flow hedging as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018	3		
	Up to	1-3	3-12	1-5	Over	
	1 month	months	months	years	5 years	Total
Cash flow to be received of net settlement derivatives	251	2,548	4,871	11,642	-	19,312
Cash flow to be paid of net						
settlement derivatives	197	129	493	79	-	898
(In millions of Korean won)			201	7		
	Up to	1-3	3-12	1-5	Over	
	1 month	months	months	years	5 years	Total
Cash flow to be received of net			,			
settlement derivatives	2	198	488	104	-	792
Cash flow to be paid of net						
settlement derivatives	94	536	1,444	5,852	-	7,926

4.4 Market Risk

4.4.1 Concept

Market risk is the risk of possible losses which arise from changes in market factors, such as interest rate, stock price, foreign exchange rate and other market factors, and incurred in securities, derivatives and others. The most significant risks associated with trading positions are interest rate risks and currency risks, and other risks include stock price risks. In addition, the Group is exposed to interest rate risks associated with non-trading positions. The Group classifies exposures to market risk into either trading or non-trading positions for managerial purpose.

4.4.2 Risk Management

The Group sets internal capital limits for market risk and interest rate risk and monitors the risks to manage the risk of trading and non-trading positions. The Group maintains risk management systems and procedures, such as trading policies and procedures, market risk management guidelines for trading positions and ALM risk management guidelines for non-trading positions in order to manage market risk efficiently. The procedures mentioned are implemented with approval from the Risk Management Committee and Risk Management Council.

The Group establishes market risk management policy, sets position limits, loss limits and VaR limits of each business group and approves newly developed products through its Risk Management Council. The Market Risk Management Subcommittee, which is chaired by the Chief Risk Officer (CRO), is the decision maker and sets position limits, loss limits, VaR limits, sensitivity limits and scenario loss limits for each division, at the level of each individual business department.

The Asset-Liability Management Committee (ALCO) determines the operational standards of interest and commission, the details of establishment and prosecution of the Asset Liability Management (ALM) policies and enacts and amends relevant guidelines. The Risk Management Council monitors the establishment and enforcement of ALM risk management policies and enact and amend ALM risk management guidelines. The interest rate risk limit is set based on the future assets/liabilities position and interest rate volatility estimation reflects the annual work plan. The Financial Planning Department and Risk Management Department measure and monitor the interest risk status and

limits on a regular basis. The status and limits of interest rate risks, such as interest rate EaR, duration gap and interest rate VaR, are reported to the ALCO and Risk Management Council on a monthly basis and to the Risk Management Committee on a quarterly basis. To ensure adequacy of interest rate and liquidity risk management, the Risk Management Department assigns the limits, monitors and reviews the risk management procedures and tasks conducted by the Financial Planning Department. Also, the Risk Management Department independently reports related information to management.

4.4.3 Trading Position

Definition of a trading position

Trading positions subject to market risk management are interest rate, stock price positions for short-term profit-taking and others. Also, they include all foreign exchange rate positions. The basic requirements of trading positions are defined under the Trading Policy and Guideline, are as follows:

- The trading position is not restricted for purchase and sale, is measured daily at fair value, and its significant inherent risks are able to be hedged in the market.
- The criteria for classification as a trading position are clearly defined in the Trading Policy and guideline, and separately managed by the trading department.
- The trading position is operated in accordance with the documented trading strategy and managed through position limits.
- The operating department or professional dealers have an authority to enforce a deal on the trading position within predetermined limits without pre-approval.
- The trading position is reported periodically to management for the purpose of the Group's risk management.

Observation method on market risk arising from trading positions

The Group calculates VaR to measure the market risk by using market risk management systems on the entire trading portfolio. Generally, the Group manages market risk on the trading portfolio. In addition, the Group controls and manages the risk of derivative trading based on the regulations and guidelines formulated by the Financial Supervisory Service.

Value at Risk (VaR)

i. Value at Risk (VaR)

The Group uses the Value-at-Risk methodology to measure the market risk of trading positions.

The Group now uses the ten-day VaR, which estimates the maximum amount of loss that could occur in ten days under an historical simulation model which is considered to be a full valuation method. The distributions of portfolio's value changes are estimated based on the data over the previous 250 business days, and ten-day VaR is calculated by subtracting net present market value from the value measured at a 99% confident level of portfolio's value distribution results.

VaR is a commonly used market risk measurement technique. However, the method has some shortcomings. VaR estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movements are, however, not necessarily a good indicator of future events, as there may be conditions and circumstances in the future that the model does not anticipate. As a result, the timing and magnitude of the actual losses may vary depending on

the assumptions made at the time of the calculation. In addition, the time periods used for the model, generally one or ten days, are assumed to be a sufficient holding period before liquidating the relevant underlying positions. If these holding periods are not sufficient, or too long, the VaR results may understate or overstate the potential loss.

The Group uses an internal model (VaR) to measure general risk, and a standard method to measure each individual risk. When the internal model is not permitted for certain market risk, the Group uses the standard method. Therefore, the market risk VaR may not reflect the market risk of each individual risk and some specific positions.

ii. Back-Testing

Back-testing is conducted on a daily basis to validate the adequacy of the VaR model. In back-testing, the Group compares both the actual and hypothetical profit or loss with the VaR calculations.

iii. Stress Testing

Stress testing is carried out to analyze the impact of abnormal market situations on the trading and available-for-sale portfolio. It reflects changes in interest rates, stock prices, foreign exchange rates, implied volatilities of options and other risk factors that have significant influence on the value of the portfolio. The Group uses historical scenarios and hypothetical scenarios for the analysis of abnormal market situations. Stress testing is performed at least once every quarter.

The units that analyze total VaR can be categorized as follows: ① by product: interest rate products (debt securities in Korean won and foreign currencies, etc.), foreign currency products (spots, futures, and CRS, etc.), equity securities (equities, ELS, etc.), ② by risk factors: interest rates (government bond interest rate in Korean won and foreign currencies, corporate bond interest rate, etc.), exchange rates (USD/KRW, USD/JPY, etc.), and stock market indexes (KOSPI, S&P 500, etc.); the Group previously assesses VaR by product considering timeliness and efficiency.

However, as the amount of investment property in foreign currencies increases, products evaluated as multiple risk factors (i.e. for foreign currency bonds, ① by product: interest rate product ② by risk factor: interest rate and foreign exchange rate) had a tendency that dispersion effect is excessive due to not reflecting the actual hedge position by products in detail; to prevent which, the Group has decided to use VaR by risk factor from 2018.

VaR at a 99%, excluding Stressed Value at Risks, confidence level of interest rate, stock price and foreign exchange rate risk for trading positions with a ten-day holding period as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018	3	
	Average	Minimum	Maximum	Ending
Interest rate risk	12,513	6,044	18,684	7,074
Stock price risk	2,995	1,253	4,831	3,348
Foreign exchange rate risk	9,443	5,033	16,453	16,453
Deduction of diversification effect				(11,939)
Total VaR	16,221	11,653	23,078	14,936
(In millions of Korean won)		2017	7	
	Average	Minimum	Maximum	Ending
Interest rate risk	22,682	14,313	42,155	23,758
Stock price risk	1,002	757	1,345	1,255
Foreign exchange rate risk	32,709	12,405	44,322	24,315
Deduction of diversification effect				(29,727)
Total VaR	23,312	16,498	30,247	19,601

The required equity capital using the standard method related to the positions which are not measured by VaR as at December 31, 2018 and 2017, is as follows:

(In millions of Korean won)	2018	2017
Interest rate risk	112,153	98,235
Stock price risk	19,756	1,646
Foreign exchange rate risk	1,339	810
	133,248	100,691

Details of risk factors

i. Interest rate risk

Trading position interest rate risk usually arises from debt securities denominated in Korean won. The Group's trading strategy is to benefit from short-term movements in the prices of debt securities arising from changes in interest rates. The Group manages interest rate risk on major trading portfolios using market value-based tools such as VaR and sensitivity analysis (Price Value of a Basis Point: PVBP).

ii. Stock price risk

Stock price risk only arises from trading securities denominated in Korean won as the Group does not have any trading exposure to shares denominated in foreign currencies. The trading securities portfolios in Korean won are composed of exchange-traded stocks and derivative instruments linked to stock with strict limits on diversification.

iii. Foreign exchange rate risk

Foreign exchange rate risk arises from holding assets and liabilities denominated in foreign currency and foreign currency derivatives. Net foreign currency exposure mostly occurs from the foreign assets and liabilities which are denominated in US dollars and Chinese yuan. The Group sets both loss limits and net foreign currency exposure limits and manages comprehensive net foreign exchange exposures which consider both trading and non-trading portfolios.

4.4.4 Non-trading Position

i. Definition of non-trading position

Managed interest rate risk in non-trading position includes on or off-balance sheet assets, liabilities and derivatives that are sensitive to interest rate, except trading position for market risk. The interest rate sensitive assets and liabilities are interest-bearing assets and liabilities that create interest income and expenses.

ii. Observation method on market risk arising from non-trading position

Interest rate risk occurs due to mismatches on maturities and interest rate reset periods between interest-bearing assets and liabilities. The Group manages the risk through measuring and managing interest rate VaR and EaR that are maximum expected decreases in net asset value (NPV) and net interest income (NII) for one year, respectively, arising from unfavorable changes in market interest rate.

iii. Interest Rate VaR

Interest rate VaR is the maximum possible loss due to interest rate risk under a normal distribution at a 99.90% confidence level. The measurement results of risk as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Interest Rate VaR	168,282	350,178

4.4.5 Financial Assets and Liabilities in Foreign Currencies

Financial assets and liabilities in foreign currencies as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)				2018			
·	USD	JPY	EUR	GBP	CNY	Others	Total
Financial assets							
Cash and due from financial							
institutions	1,374,423	307,580	188,508	24,536	1,088,299	362,727	3,346,073
Financial assets at fair value							
through profit or loss	1,756,048	44,175	69,728	-	-	17,773	1,887,724
Derivatives held for trading	98,101	-	-	-	4,643	-	102,744
Derivatives held for hedging	32,996	-	-	-	-	-	32,996
Loans at amortized cost	12,155,429	333,848	571,077	5,993	990,705	396,228	14,453,280
Financial assets at fair value							
through other comprehensive							
income	2,999,581	36,538	5,134	-	125,571	3,699	3,170,523
Financial assets at amortized	040.007				20.000		000 000
Cost	949,227	-	17 101	-	38,802	-	988,029
Other financial assets	942,708	297,430	17,184	21,447	251,725	24,149	1,554,643
	20,308,513	1,019,571	851,631	51,976	2,499,745	804,576	25,536,012
Financial liabilities							
Derivatives held for trading	103,451	14	42	-	4,062	-	107,569
Derivatives held for hedging	88,367	-	-	-	4 000 500	450.040	88,367
Deposits	8,948,057	616,551	491,628	48,264	1,263,562	450,340	11,818,402
Debts	8,984,548	90,778	184,173	-	11,393	24,057	9,294,949
Debentures Other financial liabilities	3,960,312 898,222	102 205	31,979	2 566	265.090	42,240	4,034,531
Other illiancial liabilities		103,395	130,282	3,566	265,080	41,853	1,442,398
Off halamaa ahaat itawa	22,982,957	810,738	838,104	51,830	1,544,097	558,490	26,786,216
Off-balance sheet items	13,573,398	32,619	1,262	-	270,018	7,552	13,884,849
(In millions of Korean won)				2017			
	USD	JPY	EUR	GBP	CNY	Others	Total
Financial assets		·					
Cash and due from financial							
institutions	1,509,387	250,933	131,100	19,779	815,014	236,570	2,962,783
Financial assets held for trading	1,044,336	83,716	81,394	8,922	-	18,145	1,236,513
Derivatives held for trading	78,769	441	52	-	96	202	79,560
Derivatives held for hedging	29,489	-	-	-	-	-	29,489
Loans Available-for-sale	10,605,408	228,747	1,503,493	9,548	795,302	220,859	13,363,357
financial assets	2,189,461	76,185	38,936	_	38,606	20,666	2,363,854
Held-to-maturity financial	2,100,401	70,100	00,000		00,000	20,000	2,000,004
assets	1,084,474	-	-	-	4,905	-	1,089,379
Other financial assets	1,509,793	452,446	406,009	13,101	199,422	201,173	2,781,944
_	18,051,117	1,092,468	2,160,984	51,350	1,853,345	697,615	23,906,879
Financial liabilities							
Derivatives held for trading	56,598	-	35	-	3,563	-	60,196
Derivatives held for hedging	49,962	-	-	-	-	-	49,962
Deposits	8,343,862	757,704	437,881	39,990	1,096,430	573,326	11,249,193
Debts	7,130,892	44,885	77,604	737	-	10,483	7,264,601
Debentures	2,940,251	-	-	-	-	-	2,940,251
Other financial liabilities	2,183,242	43,671	887,197	3,338	198,043	28,647	3,344,138
	20,704,807	846,260	1,402,717	44,065	1,298,036	612,456	24,908,341
Off-balance sheet items	11,304,709	705	2,404	-	257,940	12,823	11,578,581

4.5 Operational Risk

4.5.1 Concept

The Group defines operational risk as risk of loss resulting from inadequate or failed internal processes, people, systems and external events. The operational risk includes financial and non-financial risks.

4.5.2 Risk Management

The purpose of operational risk management is not only to comply with requirements of regulatory authorities but is also to establish an integrated system to cultivate enterprise culture that values importance of risk management, strengthen internal controls, improve processes and provide with timely feedback to management so that eventually mitigate operational risk of the Group. In addition, the Group established Business Continuity Planning (BCP) to ensure critical business functions can be maintained, or restored, in the event of material disruptions arising from internal or external events. It has constructed replacement facilities as well as has carried out full scale test for head office and IT departments to test its BCPs.

4.6 Capital Management

The Group complies with the capital adequacy standard established by the Financial Services Commission. The capital adequacy standard is based on Basel III revised by Basel Committee on Banking Supervision in Bank for International Settlements in June 2011, and was implemented in Korea in December 2013. The Group is required to maintain a minimum Common Equity Tier 1 ratio of at least 4.5%, a minimum Tier 1 ratio of 6.0% and a minimum Total Regulatory Capital of 8.0% as at December 31, 2018. Capital Conservation Buffer of 1.875% and Capital Requirement of Domestic Systemically Important Bank (D-SIB) of 0.75% are additionally applied. Therefore, the Group is required to maintain a capital ratio including a minimum capital ratio and additional capital requirements (a Common Equity Tier 1 Ratio of 7.125% (December 31, 2017 : 6.25%), a Tier 1 Ratio of 8.625% (December 31, 2017 : 7.75%), and a Total Regulatory Capital Ratio of 10.625% (December 31, 2017 : 9.75%)).

The Group's equity capital is classified into three categories in accordance with Detailed Supervisory Regulations on Banking Business:

- Common Equity Tier 1 Capital: Common Equity Tier 1 Capital represents the issued capital that takes the first and proportionately greatest share of any losses and represents the most subordinated claim in liquidation of the Group, and not repaid outside of liquidation. It includes common shares issued, capital surplus, retained earnings, non-controlling interests of consolidated subsidiaries, accumulated other comprehensive income, other capital surplus and others.
- Additional Tier 1 Capital: Additional Tier 1 Capital includes perpetual instruments issued by the Group that meet the criteria for inclusion in Additional Tier 1 capital, and stock surplus resulting from the issue of instruments included in Additional Tier 1 capital and others.
- Tier 2 Capital: Tier 2 Capital represents the capital that takes the proportionate share of losses in the liquidation of the Group. Tier 2 Capital includes a fund raised by issuing subordinated debentures maturing in not less than 5 years that meet the criteria for inclusion in Tier 2 capital, and the allowance for loan losses which are accumulated for assets classified as normal or precautionary in

accordance with Regulations on Supervision of Banking Business and others.

Risk-weighted asset means the assets weighted according to the inherent risks in the total assets and the possible losses resulting from the errors of internal process and external events which the Group should cover. The Group calculates risk-weighted asset by each risk (credit risk, market risk and operational risk) based on Detailed Regulations on Supervision of Banking Business and uses it for its capital ratio calculation. The Group complied with external capital adequacy requirements as at December 31, 2018 and 2017.

In addition to the capital ratio, the Group assesses its adequacy of capital by using the internal assessment and management policy of the capital adequacy. The assessment of the capital adequacy is conducted by comparing available capital (actual amount of available capital) and internal capital (amount of capital enough to cover all significant risks under target credit rate set by the Group). The Group monitors the soundness of finance and provides risk adjusted basis for performance review using the assessment of the capital adequacy. The internal capital is calculated by adding the stress testing results and other required items to the total internal capitals which are calculated for each risk.

The Risk Management Council of the Group determines the Group's risk appetite and allocates internal capital by risk type and business group. Each business group efficiently operates its capital within range of granted internal capital. The Risk Management Department of the Group monitors a management of the limit on internal capital and reports the results to management and the Risk Management Council. The Group maintains the adequacy of capital through proactive review and approval of the Risk Management Committee when the internal capital is expected to exceed the limits.

Details of the Group's capital adequacy calculation in line with Basel III requirements as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Equity Capital	27,694,178	25,913,677
Tier I Capital	25,567,995	24,040,408
Common Equity Tier 1 Capital	25,567,995	24,040,408
Tier II Capital	2,126,183	1,873,269
Risk-weighted assets:	178,433,263	161,824,686
Credit risk ¹	163,693,288	145,958,874
Market risk ²	4,747,989	5,746,686
Operational risk ³	9,991,986	10,119,126
Equity Capital (%):	15.52	16.01
Tier I Capital (%)	14.33	14.86
Common Equity Tier 1 Capital (%)	14.33	14.86

¹ Credit risk-weighted assets are measured using the Internal Rating-Based Approach and Standardized Approach.

² Market risk-weighted assets are measured using the Internal Model-Based Approach and Standardized Approach.

³ Operational risk-weighted assets are measured using the Advanced Measurement Approach.

5. Segment Information

5.1 Overall Segment Information and Business Segments

The Group is organized into Banking, Retail Banking and Other Activities. These business divisions are based on the nature of the products and services provided, the type or class of customer, and the Group's management organization.

- Corporate banking: The activities within this segment include providing credit, deposit products and other related financial services to large, small and medium-sized enterprises and SOHOs, and their local subsidiaries-related works
- Retail banking: The activities within this segment include providing credit, deposit products and other related financial services to individuals and households.
- Other activities: The activities within this segment include trading activities in securities and derivatives, funding, trust and other activities.

Financial information by business segment for the year ended December 31, 2018 is as follows:

(In millions of Korean won)			2018		
	Corporate	Retail		Intra-group	
	Banking	Banking	Others	Adjustment	Total
Operating revenues from external					
customers	2,386,035	2,989,240	1,478,104	-	6,853,379
Segment operating revenues(expenses)	27,687	-	(39,343)	11,656	-
	2,413,722	2,989,240	1,438,761	11,656	6,853,379
Net interest income	2,753,928	2,960,598	386,407	(211)	6,100,722
Interest income	4,267,675	4,547,615	1,227,614	(23,016)	10,019,888
Interest expense	(1,513,747)	(1,587,017)	(841,207)	22,805	(3,919,166)
Net fee and commission income	287,978	490,447	362,846	(18,523)	1,122,748
Fee and commission income	381,481	583,213	486,034	(27,937)	1,422,791
Fee and commission expense	(93,503)	(92,766)	(123,188)	9,414	(300,043)
Net gains (losses) on financial assets/					
liabilities at fair value through profit or					
loss	13,933	-	297,938	14,524	326,395
Net other operating income (expense)	(642,117)	(461,805)	391,570	15,866	(696,486)
General and administrative expenses	(1,091,556)	(1,970,409)	(706,164)	1,134	(3,766,995)
Operating profit before provision for					
credit losses	1,322,166	1,018,831	732,597	12,790	3,086,384
Provision (Reversal) for credit losses	77,224	(179,229)	(273)	8,362	(93,916)
Operating profit	1,399,390	839,602	732,324	21,152	2,992,468
Share of profit of associates	-	-	49,698	-	49,698
Net other non-operating income					
(expense)	(65)	-	123,936	(79,699)	44,172
Segment profit before income tax					
expense	1,399,325	839,602	905,958	(58,547)	3,086,338
Income tax profit (expense)	(386,764)	(230,891)	(208,403)	(1,082)	(827,140)
Profit for the year	1,012,561	608,711	697,555	(59,629)	2,259,198
Profit attributable to the shareholder of					
the Parent Company	1,012,561	608,711	697,555	(59,629)	2,259,198
Profit attributable to non-controlling					
interests	-	-	-	-	-
Total assets 1	131,303,734	140,814,393	88,399,951	(3,558,820)	356,959,258
Total liabilities ¹	123,880,329	152,173,062	55,478,601	(1,240,600)	330,291,392

¹ Amounts as at December 31, 2018 before intra-segment transaction adjustment.

Financial information by business segment for the year ended December 31, 2017 is as follows:

(In millions of Korean won) 2017 Corporate Retail Intra-group Banking Banking Others Adjustment **Total** Operating revenues from external 2,080,531 2,710,798 1,638,850 6,430,179 customers (36,344)29,935 6,409 Segment operating revenues(expenses) 2,110,466 2,710,798 1,645,259 (36,344)6.430.179 Net interest income 2,555,780 2,647,768 361,058 5,564,784 178 Interest income 3,584,021 3,935,895 1,002,738 (13,761)8,508,893 Interest expense (1,028,241)(1,288,127)13,939 (2,944,109)(641,680)Net fee and commission income 406,141 1,224,689 235,210 595,322 (11,984)Fee and commission income 315,994 668,227 506,331 (19,072)1,471,480 Fee and commission expense (80,784)(72,905)(100,190)7,088 (246,791)Net losses on financial assets/ liabilities at fair value through profit or loss (under Korean IFRS 1039) (1,750)(59,852)(9,605)(71,207)(532,292) Net other operating income(expenses) (678,774)937,912 (14,933)(288,087)General and administrative expenses (974,096)(1,946,640)(747,783)2,697 (3,665,822)Operating profit before provision for credit losses 1,136,370 764,158 897,476 (33,647)2,764,357 Reversal (Provision) for credit losses 6,918 (122, 107)(466)489 (115,166)Operating profit 1,143,288 642,051 897,010 (33,158)2,649,191 Share of profit of associates 37,571 37,571 Net other non-operating income 1,873 145,889 (221,229)(73,467)Segment profit before income tax 642,051 1,080,470 expense 1,145,161 (254,387)2,613,295 Income tax profit (expense) (276,388)(155,377)2,989 (9,814)(438,590)Profit for the period 868,773 486,674 1,083,459 (264,201)2,174,705 Profit attributable to the shareholder of the Parent Company 868,773 486,674 1,083,459 (264,201)2,174,705 Profit attributable to non-controlling interests Total assets1 86,034,586 329,765,927 117,904,269 129,438,168 (3,611,096)Total liabilities¹ 102,224,405 147,870,309 55,552,078 (1,204,299)304,442,493

¹ Amounts as at December 31, 2017 before intra-segment transaction adjustment.

5.2 Services and Geographical Segments

5.2.1 Services Information

Operating revenues from external customers by services for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017		
Corporate banking service	2,386,035	2,080,531		
Retail banking service	2,989,240	2,710,798		
Other service	1,478,104	1,638,850		
	6,853,379	6,430,179		

5.2.2 Geographical Information

Geographical operating revenues from external customers for the years ended December 31, 2018 and 2017, and major non-current assets as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

	20	18	2017		
	Revenues		Revenues		
	from	Major	from	Major	
	external	non-current	external	non-current	
	customers	assets	customers	assets	
Domestic	6,721,355	3,600,570	6,339,930	3,562,722	
United States	11,727	144	9,889	161	
New Zealand	6,213	72	5,855	57	
China	81,620	3,623	44,989	3,432	
Japan	4,166	1,210	4,425	1,377	
Myanmar	2,675	707	593	653	
Vietnam	7,655	239	5,474	228	
Cambodia	9,849	2,696	7,476	1,753	
United Kingdom	8,119	537	11,548	319	
	6,853,379	3,609,798	6,430,179	3,570,702	

6. Financial Assets and Financial Liabilities

6.1 Classification and Fair Value

Carrying amount and fair values of financial assets and liabilities as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018			
	Carrying amount	Fair value		
Financial assets				
Cash and due from financial institutions	14,889,010	14,885,511		
Financial assets at fair value through profit				
or loss	12,257,005	12,257,005		
Debt securities	11,883,025	11,883,025		
Equity securities	82,576	82,576		
Loans	212,596	212,596		
Others	78,808	78,808		
Derivatives held for trading	1,533,650	1,533,650		
Derivatives held for hedging	80,321	80,321		
Loans at amortized cost	276,944,202	276,957,040		
Financial assets at fair value through other				
comprehensive income	29,930,955	29,930,955		
Debt securities	27,682,464	27,682,464		
Equity securities	1,898,944	1,898,944		
Loans	349,547	349,547		
Securities at amortized cost	12,792,526	12,823,961		
Others	4,199,197	4,199,197		
	352,626,866	352,667,640		
Financial liabilities				
Financial liabilities at fair value through profit				
or loss	87,168	87,168		
Derivatives held for trading	1,553,858	1,553,858		
Derivatives held for hedging	88,551	88,551		
Deposits	272,484,528	273,131,227		
Debts	17,496,056	17,523,408		
Debentures	23,163,585	23,445,303		
Other financial liabilities	13,297,404	13,297,394		
	328,171,150	329,126,909		

(In millions of Korean won)	2017	
	Carrying amount	Fair value
Financial assets		
Cash and due from financial institutions	15,646,318	15,646,654
Financial assets held for trading	8,313,373	8,313,373
Debt securities	7,900,613	7,900,613
Equity securities	338,904	338,904
Others	73,856	73,856
Financial assets designated at fair value		
through profit or loss	95,357	95,357
Derivative-linked securities	95,357	95,357
Derivatives held for trading	2,527,190	2,527,190
Derivatives held for hedging	80,469	80,469
Loans	251,710,605	251,173,805
Available-for-sale financial assets	32,078,524	32,078,524
Debt securities	27,605,761	27,605,761
Equity securities	4,472,263	4,472,263
Others	500	500
Held-to-maturity financial assets	8,737,150	8,774,918
Other financial assets	6,341,463	6,341,463
	325,530,449	325,031,753
Financial liabilities		
Financial liabilities held for trading	74,191	74,191
Derivatives held for trading	2,558,788	2,558,788
Derivatives held for hedging	50,032	50,032
Deposits	252,478,931	252,901,505
Debts	15,810,753	15,808,759
Debentures	19,183,798	19,409,286
Other financial liabilities	12,733,354	12,733,360
	302,889,847	303,535,921

The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. The Group discloses the fair value of each class of assets and liabilities in a way that permits it to be compared with its carrying amount at the end of each reporting period. The best evidence of fair value of financial instruments is a quoted price in an active market.

Methods of determining fair value for financial instruments are as follows:

Cash and due from financial institutions

The carrying amounts of cash and demand due from financial institutions and payment due from financial institutions are reasonable approximation of fair values. These financial instruments do not have a fixed maturity and are receivable on demand. Fair value of ordinary due from financial institutions is measured using DCF model (Discounted Cash Flow Model).

Investment securities

The fair value of financial instruments that are quoted in active markets is determined using the quoted prices. Fair value is determined through the use of independent third-party pricing services where quoted prices are not available. Pricing services use one or more of the following valuation techniques including DCF Model, FCFE (Free Cash Flow to Equity Model), Comparable Company Analysis, Dividend Discount Model, Risk Adjusted Discount Rate Method, and Net Asset Value Method.

Loans

The fair value of loans is determined through DCF Model and the use of independent third-party pricing services. Fair value measured by DCF Model is determined by discounting the expected cash flows, which are contractual cash flows adjusted by the expected prepayment rate, at appropriate discount rate. Fair value of the other loans that is not determined through DCF model is determined by independent third-party pricing services using Tree Model.

Derivatives

For exchange traded derivatives, quoted price in an active market is used to determine fair value and for OTC derivatives, fair value is determined using valuation techniques. The Group uses internally developed valuation models that are widely used by market participants to determine fair values of plain OTC derivatives including options, interest rate swaps, and currency swaps, based on observable market parameters. However, some complex financial instruments are valued using appropriate models developed from generally accepted market valuation models including the Finite Difference Method, the Monte Carlo Simulation and the Tree model or independent third-party valuation service. For OTC derivatives, the credit risk of counterparty and the Group's own credit risk are applied through Credit Valuation Adjustment(CVA).

Deposits

The carrying amount of demand deposits is regarded as representative of fair value because they do not have a fixed maturity and are payable on demand. Fair value of time deposits is determined using a DCF model. Fair value is determined by discounting the expected cash flows, which are contractual cash flows adjusted by the expected prepayment rate, at an appropriate discount rate.

Debts

The carrying amount of overdraft in foreign currency is regarded as representative of fair value because they do not have a fixed maturity and are payable on demand. Fair value of other debts is determined

using a DCF model discounting contractual future cash flows at an

appropriate discount rate.

Debentures Fair value is determined by using the valuations (DCF Model) of

independent third-party pricing services, which are calculated using

market inputs.

Other financial assets and other financial liabilities

The carrying amounts are reasonable approximation of fair values. These financial instruments are temporary accounts used for other various transactions and their maturities are relatively short or not defined. However, fair value of finance lease liabilities is measured

using a DCF model.

Fair value hierarchy

The Group believes that valuation methods used for measuring the fair values of financial instruments are reasonable and that the fair values recognized in the statements of financial position are appropriate. However, the fair values of the financial instruments recognized in the statements of financial position may be different if other valuation methods or assumptions are used. Additionally, as there is a variety of valuation techniques and assumptions used in measuring fair value, it may be difficult to reasonably compare the fair value with that of other financial institutions.

The Group classifies and discloses the fair value of the financial instruments into the following three-level hierarchy:

Level 1: The fair values are based on quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2: The fair values except for quoted prices included within Level 1 are based on inputs that are observable for the asset or liability, either directly or indirectly.

Level 3: The fair values are based on unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which the fair value measurement is categorized in its entirety shall be determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. For this purpose, the significance of an input is assessed against the fair value measurement in its entirety. If a fair value measurement uses observable inputs that require significant adjustment based on unobservable inputs, that measurement is a Level 3 measurement.

Fair value hierarchy of financial assets and liabilities at fair value in the statements of financial position

The fair value hierarchy of financial assets and liabilities at fair value in the statements of financial position as at December 31, 2018 and 2017, are as follows:

		20	18	
(In millions of Korean won)	Fair			
	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets at fair value				
through profit or loss				
Debt securities	2,298,811	8,103,073	1,481,141	11,883,025
Equity securities	43,088	-	39,488	82,576
Loans	-	-	212,596	212,596
Others	78,808	-	-	78,808
	2,420,707	8,103,073	1,733,225	12,257,005
Derivatives held for trading		1,533,572	78	1,533,650
Derivatives held for hedging	-	80,321	-	80,321
Financial assets through other comprehensive income				
Debt securities	8,998,246	18,684,218	-	27,682,464
Equity securities	971,367	-	927,577	1,898,944
Loans	-	349,547	-	349,547
	9,969,613	19,033,765	927,577	29,930,955
	12,390,320	28,750,731	2,660,880	43,801,931
Financial liabilities		'		
Financial liabilities at fair value				
through profit or loss	87,168	-	-	87,168
Derivatives held for trading	-	1,553,072	786	1,553,858
Derivatives held for hedging	-	88,551	-	88,551
	87,168	1,641,623	786	1,729,577

	2017			
(In millions of Korean won)	ns of Korean won) Fair value hierarchy			
·	Level 1	Level 2	Level 3	Total
Financial assets				
Financial assets held for trading				
Debt securities	2,276,513	5,624,100	-	7,900,613
Equity securities	299,564	39,340	-	338,904
Others	73,856	-	-	73,856
·	2,649,933	5,663,440	_	8,313,373
Financial assets designated at fair value through profit or loss				
Derivative linked securities	-	-	95,357	95,357
·	_	_	95,357	95,357
Derivatives held for trading	_	2,509,871	17,319	2,527,190
Derivatives held for hedging	-	79,694	775	80,469
Available-for-sale financial assets				
Debt securities	9,384,598	18,221,163	-	27,605,761
Equity securities ¹	1,303,011	1,237,456	1,931,796	4,472,263
Others	-	500	-	500
·	10,687,609	19,459,119	1,931,796	32,078,524
·	13,337,542	27,712,124	2,045,247	43,094,913
Financial liabilities				
Financial liabilities held for trading	74,191	-	-	74,191
Derivatives held for trading	_	2,557,895	893	2,558,788
Derivatives held for hedging	-	49,962	70	50,032
	74,191	2,607,857	963	2,683,011
-				

¹ The amounts of equity securities carried at cost in "Level 3" which do not have a quoted market price in an active market and cannot be measured reliably at fair value are ₩ 104,148 million as at December 31, 2017. These equity securities are carried at cost because it is practically difficult to quantify the intrinsic values of the equity securities issued by unlisted public and non-profit entities. In addition, due to significant fluctuations in estimated cash flows arising from entities being in its initial stages, which further results in varying and unpredictable probabilities, an online bank, unlisted equity securities issued by project financing cannot be reliably and reasonably assessed. Therefore, these equity securities are carried at cost. The Group has no plan to dispose of the financial instruments in the near future.

Valuation techniques and the inputs used in the fair value measurement of financial assets and liabilities classified as Level 2

Valuation techniques and inputs of financial assets and liabilities at fair value in the statements of financial position and classified as Level 2 as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

Fair value		
2018	Valuation techniques	Inputs
through profit or loss		
8,103,073	DCF Model, Net Asset Value	Discount rate, prices of underlying assets(debt securities, stocks, etc.)
8,103,073		
1,533,572	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
80,321	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and others
through ne		
18,684,218	DCF Model	Discount rate
349,547	DCF Model	Discount rate
19,033,765 28,750,731		
1,553,072	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
88,551	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate and others
1,641,623		
	2018 through profit or loss 8,103,073 8,103,073 1,533,572 80,321 through ne 18,684,218 349,547 19,033,765 28,750,731 1,553,072 88,551	2018 Valuation techniques through profit or loss 8,103,073 8,103,073 DCF Model, Net Asset Value 8,103,073 DCF Model, Closed Form, FDM 80,321 DCF Model, Closed Form, FDM through nee 18,684,218 DCF Model 19,033,765 28,750,731 DCF Model, Closed Form, FDM 88,551 DCF Model, Closed Form, FDM

(In millions	of Korean won)		
	Fair value	Valuation	
-	2017	techniques	Inputs
Financial assets			
Financial assets held for trading			
Debt securities	5,624,100	DCF Model	Discount rate
Equity securities	39,340	Net Asset Value	Prices of underlying assets(debt securities, stock, etc.)
_	5,663,440		, ,
Derivatives held for trading	2,509,871	DCF Model, Closed Form, FDM	Discount rate, volatility, foreign exchange rate, stock price and others
Delivatives field for trading	2,000,011	DCF Model,	Discount rate, volatility, foreign
Derivatives held for hedging	79,694	Closed Form, FDM	exchange rate and others
Available-for-sale financial assets			
Debt securities	18,221,163	DCF Model	Discount rate Prices of underlying assets(debt
Equity securities	1,237,456	Net Asset Value	securities, stock, etc.)
Others	500	DCF Model	Discount rate
_	19,459,119		
_	27,712,124		
Financial liabilities			
		DCF Model, Closed	Discount rate, volatility, foreign
Derivatives held for trading	2,557,895	Form, FDM	exchange rate, stock price and others
	40.000	DCF Model, Closed	Discount rate, volatility, foreign
Derivatives held for hedging	49,962	Form, FDM	exchange rate and others
_	2,607,857		

Fair value hierarchy of financial assets and liabilities whose fair value is disclosed

The fair value hierarchy of financial assets and liabilities whose fair value is disclosed as at December 31, 2018 and 2017, is as follows:

(In millions of Korean won)

20	18	
~0	10	

_	Fair value hierarchy			
_	Level 1	Level 2	Level 3	Total
Financial assets				
Cash and due from financial institutions ¹	3,057,323	10,827,281	1,000,908	14,885,512
Loans at amortized cost	-	-	276,957,040	276,957,040
Securities at amortized cost	4,126,591	8,697,370	-	12,823,961
Other financial assets ²	-	-	4,199,197	4,199,197
_	7,183,914	19,524,651	282,157,145	308,865,710
Financial liabilities				
Deposits ¹	-	123,778,718	149,352,509	273,131,227
Debts ¹	-	38,403	17,485,005	17,523,408
Debentures	-	23,445,303	-	23,445,303
Other financial liabilities ³	-	-	13,297,394	13,297,394
(In millions of Korean won)	-	147,262,424	180,134,908	327,397,332

¹ The amounts included in Level 2 are the carrying amounts which are reasonable approximation of the fair values.

³ The ₩ 13,289,339 million of other financial liabilities included in Level 3 are the carrying amounts which are reasonable approximation of fair values as at December 31, 2018.

		2	.017	
(In millions of Korean won)	Fa			
_	Level 1	Level 2	Level 3	Total
Financial assets				
Cash and due from financial institutions ¹	2,597,423	12,223,212	826,019	15,646,654
Loans	-	-	251,173,805	251,173,805
Held-to-maturity financial assets	1,197,738	7,577,180	-	8,774,918
Other financial assets ²	-	-	6,341,463	6,341,463
_	3,795,161	19,800,392	258,341,287	281,936,840
Financial liabilities				
Deposits ¹	-	122,498,859	130,402,646	252,901,505
Debts ¹	-	19,820	15,788,939	15,808,759
Debentures	-	19,409,286	-	19,409,286
Other financial liabilities ³	-	-	12,733,360	12,733,360
_	-	141,927,965	158,924,945	300,852,910

¹ The amounts included in Level 2 are the carrying amounts which are reasonable approximation of the fair values.

² The amounts of other financial assets included in Level 3 are the carrying amounts which are reasonable approximation of the fair values as at December 31, 2018.

² The amounts of other financial assets included in Level 3 are the carrying amounts which are reasonable approximation of the fair values as at December 31, 2017.

³ The ₩12,731,712 million of other financial liabilities included in Level 3 are the carrying amounts which are reasonable approximation of fair values as at December 31, 2017.

Valuation techniques and inputs used in the fair value measurement

Valuation techniques and inputs of financial assets and liabilities which are disclosed by the carrying amounts because it is a reasonable approximation of fair value are not subject to be disclosed.

Valuation techniques and inputs of financial assets and liabilities whose fair values are disclosed and classified as Level 2 as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018	
-		Valuation	
	Fair value	technique	Inputs
Financial assets			
Securities at amortized			
cost	8,697,370	DCF Model	Discount rate
Financial liabilities			
Debentures	23,445,303	DCF Model	Discount rate
(In millions of Korean won)		2017	
(III TIIIIIIOTIS OF NOICEIT WORL)		Valuation	
	Fair value	technique	Inputs
Financial assets	raii value	technique	IIIputs
Held-to-maturity financial			
assets	7,577,180	DCF Model	Discount rate
Financial liabilities			

Valuation techniques and inputs of financial assets and liabilities whose fair values are disclosed and classified as Level 3 as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018	
		Valuation		
	Fair value	technique	Inputs	Unobservable inputs
Financial assets				
Cash and due from			Credit spread, other	Credit spread, other
financial institutions	1,000,908	DCF Model	spread, interest rates	spread
			Credit spread, other spread, prepayment	Credit spread, other spread, prepayment
Loans at amortized cost	276,957,040	DCF Model	rate, interest rate	rate
	277,957,948			
Financial liabilities				
			Other spread,	
			prepayment rate,	Other spread,
Deposits	149,352,509	DCF Model	interest rates	prepayment rate
			Other spread, interest	
Debts	17,485,005	DCF Model	rates	Other spread
			Other spread, interest	
Other financial liabilities	8,055	DCF Model	rates	Other spread
	166,845,569			
•				

(In millions of Korean won) 2017 Valuation technique Fair value Inputs Unobservable inputs **Financial assets** Cash and due from Credit spread, other Credit spread, financial institutions 826.019 DCF Model spread, interest rates other spread Credit spread, other Credit spread, spread, prepayment other spread, 251,173,805 DCF Model Loans rate, interest rates prepayment rate 251,999,824 **Financial liabilities** Other spread, Other spread, prepayment rate, DCF Model **Deposits** 130,402,646 interest rates prepayment rate Other spread, Debts 15,788,939 DCF Model interest rates Other spread Other spread, 1,648 Other financial liabilities DCF Model interest rates Other spread 146,193,233

6.2 Level 3 of the Fair Value Hierarchy Disclosure

6.2.1 Valuation Policy and Process of Level 3 Fair Value

The Group uses external, independent and qualified third-party valuation service in addition to internal valuation models to determine the fair value of the Group's assets at the end of every reporting period.

Where a reclassification between the levels of the fair value hierarchy occurs for a financial asset or liability, the Group's policy is to recognize such transfers as having occurred at the beginning of the reporting period.

6.2.2 Changes in Fair Value (Level 3) Measured using Valuation Technique based on Unobservable Inputs in Market

Changes in Level 3 of the fair value hierarchy for the year ended December 31 2018 and 2017, are as follows:

(In millions of Korean won)

2018

	Financial assets at fair value through profit or loss		Financial investments	Net derivatives financial instruments	
	Securities at fair value through profit or loss	Loans at fair value through profit or loss	Equity securities at fair value through other comprehensive income	Derivatives held for trading	Derivatives held for hedging
Beginning balance ¹	1,277,304	132,722	750,036	(771)	704
Total gains or losses					
- Profit or loss	19,789	4,347	-	4,295	(116)
- Other comprehensive					
income	-	-	124,633	-	-
Purchases	460,309	184,655	53,388	-	-
Sales	(236,705)	(109,128)	(480)	-	-
Settlements	-	-	-	(1,220)	(588)
Transfers into Level 32	-	-	-	(3,012)	-
Transferred from Level 32	(66)	-	-	-	-
Ending balance	1,520,631	212,596	927,577	(708)	

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)

2017

		Financial			
	Financial assets	investments	Net derivatives financial instruments		
	at fair value	Available-for-sale			
	through profit or	financial assets	Derivatives held	Derivatives held	
	loss	Equity securities	for trading	for hedging	
Beginning balance	129,535	1,845,455	9,825	1,277	
Total gains or losses					
- Profit or loss	5,638	5,946	(3,543)	(408)	
- Other comprehensive-					
income (expenses)	-	(27,332)	-	-	
Purchases	225,000	334,436	16,452	-	
Sales	-	(226,709)	-	-	
Settlements	(264,816)	-	(5,666)	(164)	
Transferred from Level 3 1	-	-	(642)	-	
Ending balance	95,357	1,931,796	16,426	705	

¹ Transfers between in levels for the financial instruments have occurred due to the change in the availability of observable market data.

² Transfers between in levels for the financial instruments have occurred due to the change in the availability of observable market data.

In relation to changes in Level 3 of the fair value hierarchy, total gains or losses recognized in profit or loss for the period, and total gains or losses for the period included in profit or loss for financial instruments held at the end of the reporting period in the statements of comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2	2018	
	Net losses from financial instruments at fair value through profit or loss	Other operating income	Net interest income
Total gains or losses included in profit or loss for the period Total gains or losses for the period included in profit or loss for financial instruments held at	28,103	(4	617
the end of the reporting period	22,187	(2	289) 43
(In millions of Korean won)		2017	
	Net gains on fi instruments at t through profit (under Korean I	fair value or loss	Other operating income
Total gains or losses included in profit for the period		2,095	5,538
Total gains or losses for the period inc profit or loss for financial instrument the end of the reporting period		1,573	(2,023)

6.2.3 Sensitivity Analysis of Changes in Unobservable Inputs

Information about fair value measurements using unobservable inputs as at December 31, 2018, is as follows:

(In millions of Korean won)		2018						
	Fair value	Valuation techniques	Inputs	Unobservable inputs	Range of unobservable inputs (%)	Relationship of unobservable inputs to fair value		
Financial asset		_						
Financial asse	ts at fair value t	hrough profit or loss						
	-			Volatilities of the underlying asset	19.61 ~ 27.62	Higher the volatility, higher the fair value fluctuation Higher the correlation,		
	-		Price of underlying asset, interest rate,	Correlation of underlying asset	24.57 ~ 69.18	higher the fair value fluctuation		
	-		dividend yield, volatilities and correlation of underlying asset,	Discount rate	1.95 ~ 4.82	Lower the discount rate, higher the fair value Higher the liquidation value, higher the fair		
		Monte Carlo Simulation, Net	discount rate,	Liquidation value	0.00	value fluctuation		
Debt securities	1,481,141	Asset Value, DCF Model	volatility of the real estate price	Volatility of the real estate price	0.00	Higher real estate price, higher the fair value		
		DCF Model, Comparable Company Analysis,		Growth rate	0.00	Higher the growth rate, higher the fair value		
Equity securities	39,488	Adjusted discount rate method	Growth rate, discount rate	Discount rate	7.58 ~ 14.14	Lower the discount rate, higher the fair value		
Loans	212,596	Tree Model	Stock price, volatility of the stock price	Volatility of the stock price	17.66 ~ 49.28	Higher the volatility, higher the fair value fluctuation		
Derivatives hel	d for trading							
Stock and index	78	Tree Model	Stock price, volatility of the stock price, dividend yield	Volatility of the stock price	25.29	Higher the volatility, higher the fair value fluctuation		
			Interest rate, foreign exchange rate,			Higher the loss given default, lower the fair		
Currency Financial asset	- es at fair value ti	DCF Model hrough other comprehe	loss given default	Loss given default	100	value		
1 11/41/0/41 43300	o at iaii vaide ti	inough office complete	TIOTAC ILICOTTIC					
Equity		DCF Model, Comparable Company Analysis, Adjusted discount	Growth rate.	Growth rate	0.00	Higher the growth rate, higher the fair value Lower the discount rate, higher the fair		
securities	927,577	rate method	discount rate	Discount rate	3.87 ~ 17.40	value		
	2,660,880							

						Higher the volatility,
				Volatility of the		higher the fair value
			Stock price, interest	stock price	20.85	fluctuation
			rate, volatility of			Higher the volatility,
			the stock price,	Volatility of the	0.69	higher the fair value
		Monte Carlo	volatility of the	interest rate		fluctuation
		Simulation, DCF	interest rate,			Higher the discount rate
Others	786	Model	discount rate	Discount rate	2.19 ~ 2.26	lower the fair value
	786					

Information about fair value measurements using unobservable inputs as at December 31, 2017, is as follows:

(In millions of K	Korean won)			2017		
	Fair value	Valuation techniques	Inputs	Unobservable inputs	Range of unobservable inputs (%)	Relationship of unobservable inputs to fair value
Financial asset			<i>C</i>			
Financial asset	ts designated at	t fair value through pro	Price of the			High on the confetility
			underlying asset, interest rate, dividend yield,	Volatility of the underlying asset	15.93 ~ 18.35	Higher the volatility, higher the fair value fluctuation
Derivative linked		MonteCarlo	volatility and correlation of the	Correlation of the underlying		Higher the correlation, higher the fair value
securities	95.357	Simulation	underlying asset	assets	20.18 ~ 57.10	fluctuation
Derivatives held	,		,gg			
Stock and index	307	Tree model	Stock price, volatility of the stock price, dividend yield	Volatility of the underlying asset	12.15 ~ 17.12	Higher the volatility higher the fair value fluctuation
			Interest rate, loss	Loss given	-	Higher the loss rate,
Interest rate	59	DCF model	given default	default	0.56	lower the fair value
Others	16.953	MonteCarlo Simulation, Tree model	Stock price, interest rate, volatility of the stock price, volatility of the interest rate	Volatility of the stock price Volatility of the interest rate	12.16 ~ 29.72 0.47	Higher the volatility, higher the fair value fluctuation Higher the volatility, higher the fair value fluctuation
Derivatives held	- ,	model	intorout rate	intoroot rato	0.47	naotaation
Interest rate	775	DCF model, Closed Form, Monte Carlo Simulation, FDM	Price of the underlying asset, interest rate, volatility of the underlying asset	Volatility of the underlying asset	3.02	Higher the volatility, higher the fair value fluctuation
Available-for-sa	ale financial ass					
		DCF Model, Comparable Company Analysis, Risk		Growth rate	0.00 ~ 0.50	Higher the growth rate, higher the fair value
Equity securities	1,931,796	Adjusted Discount Rate Method	Growth rate, discount rate	Discount rate	1.98 ~ 20.51	Lower the discount rate, higher the fair value
<u> </u>	2,045,247					

Financial	liabilit	ties	
Derivative	s held	for	trading

				Volatility of the		Higher the volatility, higher the fair value
			Stock price, interest	stock price	15.84	fluctuation
			rate, volatility of	Valatility of the		Higher the volatility,
		MonteCarlo	the stock price, volatility of the	Volatility of the interest rate	0.47	higher the fair value fluctuation
		Simulation, DCF	interest rate,	interest rate	0.47	Higher the discount rate
Others	893	Model	discount rate	Discount rate	2.57 ~ 2.69	lower the fair value
Derivatives held f	or hedging					
		DCF model, Closed	Price of the			
		Form, FDM,	underlying asset,			
		MonteCarlo	interest rate,			Higher the volatility,
Interest		Simulation,	volatility of the	Volatility of the		higher the fair value
rate	70	Tree model	underlying asset	underlying asset	2.64	fluctuation
	963					

Sensitivity analysis of changes in unobservable inputs

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the amounts represent the most favorable or unfavorable. Amongst Level 3 financial instruments subject to sensitivity analysis, there are debt securities, loans, equity-related derivatives, currency-related derivatives, interest rate-related derivatives and other derivatives whose fair value changes are recognized in profit or loss as well as equity securities and beneficiary certificates whose fair value changes are recognized in profit or loss or other comprehensive income or loss.

Sensitivity analysis by type of instrument as a result of varying input parameters are as follows:

(In millions of Korean won)	2018					
	Recognition i	in profit or loss	Other compre	hensive income		
	Favorable	Unfavorable	Favorable	Unfavorable		
	changes	changes	changes	changes		
Financial assets						
Financial assets at fair value through						
profit or loss						
Debt securities 1, 2, 6	4,231	(4,311)	-	-		
Equity securities ³	5,299	(2,794)	-	-		
Loans ⁴	129	(46)	-	-		
Derivatives held for trading ⁵	20	(1)	-	-		
Financial assets at fair value through other comprehensive income						
Equity securities ³	_	_	140,516	(70,691)		
_qay ocoaoo	9,679	(7,152)	140,516	(70,691)		
Financial liabilities	3,073	(7,132)	140,310	(70,091)		
_						
Derivatives held for trading ⁵	88	(124)				
	88	(124)				

(In millions of Korean won)	2017					
-	Recognition in	profit or loss	Other compreh	ensive income		
-	Favorable	Unfavorable	Favorable	Unfavorable		
	changes	changes	changes	changes		
Financial assets	_					
Financial assets designated						
at fair value through profit or loss						
Derivative linked securities ¹	54	(112)	-	-		
Derivatives held for trading 5	112	(94)	-	-		
Available-for-sale financial assets 2, 3	-	-	100,653	(54,892)		
-	166	(206)	100,653	(54,892)		
Financial liabilities						
Derivatives held for trading ⁵	86	(92)	-	-		
Derivatives held for hedging ⁵	2	(2)				
	88	(94)		-		

¹ For derivative linked securities, the changes in fair value are calculated by shifting principal unobservable input parameters such as the volatility of the underlying asset and the correlation of the underlying assets by ± 10%.

6.2.4 Day One Gain or Loss

If the Group uses a valuation technique that incorporates data not obtained from observable markets for the fair value at initial recognition of financial instruments, there could be a difference between the transaction price and the amount determined using that valuation technique. In these circumstances, the fair value of financial instruments is recognized as the transaction price and the difference is deferred and not recognized in profit or loss, and is amortized by using the straight-line method over the life of the financial instrument. If the fair value of the financial instruments is subsequently determined using observable market inputs, the remaining deferred amount is recognized in profit or loss.

² For beneficiary certificates, it is difficult to measure the sensitivity amounts per changes in input factor for practical reasons; only for those consisted with real properties, the sensitivity amounts are calculated by increasing and decreasing the correlations between the discount rates (-1~1%), and the rate of increase in property disposal price (-1~1%). For equity investments, the sensitivity amounts are calculated by increasing and decreasing the correlations between the liquidation value (-1~1%) and the discount rates (-1~1%). There were no significant correlation among major unobservable inputs.

³ For equity securities, the changes in fair value are calculated by shifting principal unobservable input parameters such as discount rate (-1~1%) and growth rate (0~0.5%).

⁴ For loans, the changes in fair value are calculated by shifting principal unobservable input parameters such as stock prices and volatilities of stock prices by ± 10%

⁵ For derivatives, the changes in fair value are calculated by shifting principal unobservable input parameters such as the price of the underlying asset and the volatility by ± 10%, the loss given default ratio by ± 1%, or discount rate by ± 1%.

⁶ The amounts of ₩ 1,437,513 million and ₩ 1,192,054 million of financial assets classified as level 3 as at December 31, 2018 and 2017, respectively, are excluded because it is impracticable to calculate sensitivity amounts.

The aggregate deferred differences yet to be recognized in profit or loss at the beginning and end of the periods and changes in the balances of these differences are as follows:

(In millions of Korean won)	2018	2017
Balance at the beginning of the period (A)	(4,054)	(3,494)
New transactions (B)	-	(1,574)
Amounts recognized in profit or loss during the period		
(C= a+b)	1,138	1,014
a. Amortization	1,138	1,014
b. Settlement	-	-
Balance at the end of the period (A+B+C)	(2,916)	(4,054)

6.3 Carrying Amounts of Financial Instruments by Category

Financial assets and liabilities are measured at fair value or amortized cost. The carrying amounts of financial assets and liabilities by category as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018			
	Financial instruments at fair value through profit or loss	Financial instruments measured at fair value through other comprehensive income	Financial instruments designated at fair value through other comprehensive income	Financial instruments at amortized cost	Derivatives held for hedging	Total
Financial assets						
Cash and due from						
financial institutions	-	-	-	14,889,010	-	14,889,010
Financial assets at fair value through profit or						
loss	12,257,005	-	-	-	-	12,257,005
Derivatives	1,533,650	-	-	-	80,320	1,613,970
Loans at amortized cost	-	-	-	276,944,202	-	276,944,202
Financial investments	-	28,032,010	1,898,944	12,792,526	-	42,723,480
Other financial assets	-	-	-	4,199,197	-	4,199,197
	13,790,655	28,032,010	1,898,944	308,824,935	80,320	352,626,864

(In millions of Korean won)	2018					
	Financial instruments at fair value through profit or loss	Financial instruments at amortized cost	Derivatives held for hedging	Total		
Financial liabilities						
Financial liabilities at fair						
value through profit or loss	87,168	-	-	87,168		
Derivatives	1,553,858	-	88,551	1,642,409		
Deposits	-	272,484,528	-	272,484,528		
Debts	-	17,496,055	-	17,496,055		
Debentures	-	23,163,585	-	23,163,585		
Other financial liabilities	-	13,297,404	-	13,297,404		
	1,641,026	326,441,572	88,551	328,171,149		

(In millions of Korean won)

2017 Financial assets at

Financial assets at fair value through profit or loss (under Korean IFRS 1039)

	Held for trading	Financial assets designated at fair value through profit or loss	Loans and receivables	Available- for-sale financial assets	Held-to- maturity financial assets	Derivatives held for hedging	Total
Financial assets							
Cash and due from							
financial institutions	-	-	15,646,318	-	-	-	15,646,318
Financial assets at							
fair value through							
profit or loss	8,313,373	95,357	-	-	-	-	8,408,730
Derivatives	2,527,190	-	-	-	-	80,469	2,607,659
Loans	-	-	251,710,605	-	-	-	251,710,605
Financial investments	-	-	-	32,078,524	8,737,150	-	40,815,674
Other financial assets	-	-	6,341,463	-	-	-	6,341,463
-	10,840,563	95,357	273,698,386	32,078,524	8,737,150	80,469	325,530,449
-							

(In millions of Korean won)	2017						
	Financial liabilities at fair value through profit or loss Held for trading	Financial liability at amortized cost	Derivatives held for hedging	Total			
Financial liabilities	Tield for trading	amortized cost	neid for fledging	Total			
Financial liabilities at fair value							
through profit or loss	74,191	-	-	74,191			
Derivatives	2,558,788	-	50,032	2,608,820			
Deposits	-	252,478,931	-	252,478,931			
Debts	-	15,810,753	-	15,810,753			
Debentures	-	19,183,798	-	19,183,798			
Other financial liabilities	-	12,733,354	-	12,733,354			
	2,632,979	300,206,836	50,032	302,889,847			

6.4 Transfer of Financial Assets

6.4.1 Transferred Financial Assets that are Derecognized in Their Entirety

The Group transferred loans and other financial assets that are derecognized in their entirety to SPEs, while the maximum exposure to loss (carrying amount) from its continuing involvement in the derecognized financial assets as at December 31, 2018 and 2017, are as follows:

(In millions of K	orean won)		2018	
	Type of continuing involvement	Classification of financial instruments	Carrying amount of continuing involvement in statement of financial position	Fair value of continuing involvement in statement of financial position
Discovery 2nd Securitization		Financial assets at fair		
Specialty Co.,	Subordinated	value through		
Ltd.	debt	profit or loss Financial assets at fair	6,205	6,205
FK 1411 ABS	Subordinated	value through		
Ltd.	debt	profit or loss Financial assets at fair	8,883	8,883
AP 3B ABS	Subordinated	value through		
Ltd.	debt	profit or loss Financial assets at fair	5,512	5,512
	Subordinated	value through		
AP 4D ABS Ltd.	debt	profit or loss	13,494	13,494
			34,094	34,094

¹ The recovered portion in excess of the consideration paid attributable to adjustments based on the agreement with the National Happiness Fund for non-performing loans amounts to ₩ 13,731 million as at December 31, 2018.

(In millions of Korean won)		2017					
	Type of continuing involvement	Classification of financial instruments	Carrying amount of continuing involvement in statement of financial position	Fair value of continuing involvement in statement of financial position			
Discovery 2nd Securitization Specialty Co., Ltd. EAK 2nd Securitization	Subordinated debt	Available-for-sale financial assets	6,022	6,022			
Specialty Co., Ltd. FK 1411 ABS	Subordinated debt Subordinated	Available-for-sale financial assets Available-for-sale	5,339	5,339			
Ltd. AP 3B ABS Ltd.	debt	financial assets Available-for-sale	9,601	9,601			
	debt	financial assets Loans and	9,902	9,902			
AP 4D ABS Ltd.1	Senior debt Subordinated	receivables Available-for-sale	2,248	2,251			
	debt	financial assets	14,160	14,160			
			47,272	47,275			

¹ The recovered portion in excess of the consideration paid attributable to adjustments based on the agreement with the National Happiness Fund for non-performing loans amounts to ₩ 2,989 million as at December 31, 2017.

6.4.2 Securities under Repurchase Agreements and Loaned Securities

The Group continues to recognize the financial assets related to repurchase agreements and securities lending transactions on the statements of financial position since those transactions are not qualified for derecognition even though the Group transfers the financial assets. A financial asset is sold under a reverse repurchase agreement to repurchase the same asset at a fixed price, or loaned under a securities lending agreement to be returned as the same asset. Thus, the Group substantially retains all the risks and rewards of ownership of the financial asset. The amounts of transferred assets and related liabilities as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018				
	Carrying amount of transferred assets	Carrying amount of related liabilities			
Securities under repurchase					
agreements	452,487	436,471			
Loaned securities	674,431	-			
Government and public bonds	674,431	-			
	1,126,918	436,471			

(In millions of Korean won)	2017	,
_	Carrying amount of transferred assets	Carrying amount of related liabilities
Securities under repurchase		
agreements	740,618	700,466
Loaned securities	109,379	-
Government and public bonds	109,379	-
_	849,997	700,466

6.5 Offsetting Financial Assets and Financial Liabilities

The Group enters into International Swaps and Derivatives Association ("ISDA") master netting agreements and other similar netting arrangements with the Group's derivative and spot exchange counterparties. Similar netting agreements are also entered into with the Group's reverse repurchase, securities and others. Pursuant to these agreements, in the event of default by one party, contracts are to be terminated and receivables and payables are to be offset. Further, as the law allows for the right to offset, domestic uncollected receivables balances and domestic accrued liabilities balances are shown in its net settlement balance in the statement of financial position. Account receivables and account payables related to listed securities and derivatives or OTC derivatives settled by the central counterparty are included in the other financial instruments. As the Group has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis, the net amounts of the other financial instruments balances are presented in the statement of financial position.

Details of financial assets subject to offsetting, enforceable master netting arrangements or similar agreements as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018					
_		Gross amounts	Net amounts	Related amounts	not offset in	
		of recognized	of financial	the statement	of financial	
		financial	assets	posi	tion	
	Gross	liabilities offset				•
	amounts of	in the	the statement			
	recognized	statement of	of			
	financial	financial	financial	Financial	Cash	
_	assets	position	position	instruments	collateral	Net amount
Derivatives held for trading	1,533,572	-	1,533,572	(1,128,951)	(5,101)	399,520
Derivatives held for hedging	80,321	-	80,321	(41,634)	-	38,687
Receivable spot exchange	1,879,572	-	1,879,572	(1,876,844)	-	2,728
Reverse repurchase	3,021,400	-	3,021,400	(3,021,400)	-	-
Domestic exchange						
settlement debits	27,413,384	(26,937,034)	476,350	-	-	476,350
Other financial instruments	3,261	(2,098)	1,163		-	1,163
	33,931,510	(26,939,132)	6,992,378	(6,068,829)	(5,101)	918,448

(In millions of Korean won) 2017

	Gross amounts of recognized		Net amounts of financial assets	Related amounts not offset in the statement of financial position		
	Gross amounts of recognized	financial liabilities offset in the statement	presented in the statement of			
	financial assets	of financial position	financial position	Financial instruments	Cash collateral	Net amount
Derivatives held for trading	2,509,930	-	2,509,930	(1,888,558)	(191,349)	430,023
Derivatives held for hedging	80,469	-	80,469	(17,840)	(21,830)	40,799
Receivable spot exchange	3,447,424	-	3,447,424	(3,447,048)	-	376
Reverse repurchase Domestic exchange	2,579,900	-	2,579,900	(2,579,900)	-	-
settlement debits	30,904,611	(29,959,914)	944,697	_	-	944,697
Other financial instruments	1,580	(1,578)	2	-	-	2
	39,523,914	(29,961,492)	9,562,422	(7,933,346)	(213,179)	1,415,897

Details of financial liabilities subject to offsetting, enforceable master netting arrangements or similar agreements as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	

	Gross	Gross amounts of recognized Gross financial assets		Net amounts of financial liabilities presented	Related amount in the state financial p		
	amounts of recognized financial liabilities	offset in the statement of financial position	in the statement of financial position	Financial instruments	Cash collateral	Net amount	
Derivatives held for trading	1,553,072	-	1,553,072	(1,075,427)	(46,768)	430,877	
Derivatives held for hedging	88,551	-	88,551	(37,564)	(977)	50,010	
Payable spot exchange	1,877,400	-	1,877,400	(1,876,844)	-	556	
Repurchase ¹ Domestic exchange	445,724	-	445,724	(445,724)	-	-	
settlement credits	28,616,949	(26,937,034)	1,679,915	(1,679,915)	-	-	
Other financial instruments	5,154	(2,098)	3,056	-	-	3,056	
_	32,586,850	(26,939,132)	5,647,718	(5,115,474)	(47,745)	484,499	

(In millions of Korean won)	2017						
	Gross amounts of recognized	Gross amounts of recognized financial assets offset in the statement of	Net amounts of financial liabilities presented in the statement of	Related amour in the state financial p	ement of		
	financial liabilities	financial position	financial position	Financial instruments	Cash collateral	Net amount	
Derivatives held for trading	2,557,702	-	2,557,702	(1,051,514)	(32,585)	1,473,603	
Derivatives held for hedging	50,032	-	50,032	(7,287)	(9,139)	33,606	
Payable spot exchange	3,448,848	-	3,448,848	(3,447,048)	-	1,800	
Repurchase ¹ Domestic exchange	700,466	-	700,466	(700,466)	-	-	
settlement credits	29,999,359	(29,959,914)	39,445	(39,445)	-	-	
Other financial instruments	1,871	(1,578)	293	(194)	-	99	
	36,758,278	(29,961,492)	6,796,786	(5,245,954)	(41,724)	1,509,108	

¹ Includes repurchase agreements sold to customers.

7. Due from Financial Institutions

Details of due from financial institutions as at December 31, 2018 and 2017, are as follows:

(In millions of K	(orean won)		Interest		
		Financial Institution	rate (%)	2018	2017
Due from financial	Due from Bank of Korea	Bank of Korea	0.00 ~ 1.78	8,723,761	8,511,295
institutions in Korean won	Due from banking institutions	KEB Hana Bank and others	0.00 ~ 1.87	268,222	111,396
	Due from others	NH Securities Co., Ltd. and others	-	5,618	1,917,633
			_	8,997,601	10,540,324
Due from financial	Due from banks in foreign currencies	Wells Fargo Bank, N.A and others	-	1,733,095	1,670,111
institutions in foreign currencies	Time deposits in foreign currencies	Bank of Shanghai, Beijing Branch and others	1.05 ~ 4.10	876,596	711,347
	Due from others	Morganstanley Bank International and others	-	225,944	127,111
				2,835,635	2,508,569
			_	11,833,236	13,048,893
			_		

¹ Before netting of allowance

Restricted due from financial institutions as at December 31, 2018 and 2017, are as follows:

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Changes in the allowances for due from financial institutions losses

Changes in the allowances for due from financial institutions losses for the year ended December 31, 2018, are as follows:

2018				
Financial instruments	Financial instruments applying lifetime expected credit losses			
expected credit losses	Non-impaired	Impaired		
1,530	-			
-	-	-		
10	-	-		
8	-	-		
1,548				
	applying 12-month expected credit losses 1,530 - 10	Financial instruments applying 12-month expected credit losses 1,530		

¹ Restated based on Korean IFRS 1109.

8. Assets Pledged as Collaterals

Details of assets pledged as collaterals as at December 31, 2018 and 2017, are as follows:

(In millions of Kore	ean won)	2018		
		Carrying		
Assets pledged	Pledgee	amount	Reason for the pledge	
Securities at fair	Korea Exchange and others	210,345	Repurchase agreements	
value through	Korea Securities Finance Corp			
profit or loss	and others	50,806	Securities lending transactions	
	Samsung Futures Inc. and			
	others	20,535	Derivatives transactions	
		281,686		
Securities at fair			Borrowings from Bank of	
value through	Bank of Korea	49,948	Korea	
other			Settlement risk of Bank of	
comprehensive	Bank of Korea	479,784	Korea	
income	Korea Development Bank and			
	others		Derivatives transactions	
		867,047		
Securities at	Meritz Securities and others	276,688	Repurchase agreements	
amortized cost			Borrowings from Bank of	
	Bank of Korea	1,911,160	Korea	
			Settlement risk of Bank of	
	Bank of Korea	1,474,529	Korea	
	Samsung Futures Inc. and	404.050	5	
	others	- ,	Derivatives transactions	
	Others	156,150	Others	
		4,012,785		
Mortgage loans	Others	4,060,863	Covered Bond	
Building / Land	Samsung Life Insurance Co.,	222.452	0.0	
	Ltd. and others	209,459	Others	
		9,431,840		

(In millions of Korean wor	n)		2017
Assets pledged	Pledgee	Carrying amount	Reason for the pledge
Financial assets held for			
trading	KB Securities Co., Ltd.	29,508	Derivatives transactions
		29,508	
Available-for-sale	Mizuho Bank, Ltd. and		
financial assets	others	740,132	Repurchase agreements
	Deal of Kees	054 004	Borrowings from Bank of
	Bank of Korea	651,284	Korea
	Bank of Korea	750 054	Settlement risk of Bank of Korea
		750,254	
	Deutsche Bank. AG	, -	Derivatives transactions
	Others		Others
		2,220,179	
Held-to-maturity	Korea Securities		
financial assets	Depository and others	35,026	Repurchase agreements
			Borrowings from Bank of
	Bank of Korea	1,326,558	Korea
			Settlement risk of Bank of
	Bank of Korea	1,204,990	Korea
	KB Securities Co., Ltd.		
	and others	,	Derivatives transactions
	Others	133,389	Others
		2,936,644	
Mortgage loans	Others	4,950,490	Covered Bond
Building / Land	Samsung Life Insurance		
	Co., Ltd. and others	319,064	Others
		10,455,885	

The fair value of collateral available to sell or repledge regardless of debtor's default as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018			
	Fair value of collateral	Fair value of collateral sold or repledged		
Securities	3,131,496	-		
(In millions of Korean won)	2017			
	Fair value of collateral	Fair value of collateral sold or repledged		
Securities	2,640,078	-		

9. Derivative Financial Instruments and Hedge Accounting

The Group engages in derivative trading activities to hedge the interest rate and foreign currency risk exposures arising from the Group's own assets and liabilities.

In particular, the Group applies fair value hedge accounting to interest rate swaps that hedge the risk of changes in fair values due to the changes in interest rates of debentures, structured deposits denominated in foreign currencies and debt securities at fair value through other comprehensive income. Also, the Group applies cash flow hedge accounting to interest rate swaps to hedge cash flow risk of floating rate notes denominated in Korean won and borrowings denominated in foreign currencies. In addition, the Group applies net investment hedge accounting by designating debentures denominated in foreign currencies and spot components of the currency forward as hedging instruments that hedge foreign exchange risks on net investments in foreign operations.

Details of derivative financial instruments for trading as at December 31, 2018 and 2017, are as follows:

(In millions of Kore	an won)	2018			2017	
	Notional amount	Assets	Liabilities	Notional amount	Assets	Liabilities
Interest rate						
Futures ¹	857,748	-	-	1,194,766	-	-
Swaps	126,608,935	370,004	351,607	107,934,385	389,926	328,072
Options	13,259,000	158,295	252,243	12,615,000	130,013	226,931
	140,725,683	528,299	603,850	121,744,151	519,939	555,003
Currency						
Forwards	65,534,154	533,435	481,187	62,354,931	1,142,066	1,228,052
Futures ¹	419,802	-	-	440,903	-	-
Swaps	35,977,216	465,774	454,216	28,386,919	843,854	767,344
Options	2,450,186	6,064	13,608	695,848	4,071	6,998
	104,381,358	1,005,273	949,011	91,878,601	1,989,991	2,002,394
Stock and index						
Futures ¹	2,006	-	-	23,458	-	-
Options	51,282	78	211	84,742	307	498
	53,288	78	211	108,200	307	498
Others	745,160	-	786	1,073,316	16,953	893
	245,905,489	1,533,650	1,553,858	214,804,268	2,527,190	2,558,788

¹ Gains or losses arising from daily mark-to-market futures are reflected in the margin accounts.

The average hedge ratio for future nominal cash flows by type of hedge accounting as at December 31, 2018, are as follows:

(In millions of Korean won)

	2018						
	1 year	2 years	3 years	4 years	5 years	Over 5 years	Total
Fair value hedge							
The nominal amount of							
the hedged item	59,134	696,513	1,347,597	567,030	195,392	979,889	3,845,555
The nominal amount of							
the hedging instrument	69,134	686,513	1,347,597	567,030	195,392	979,889	3,845,555
Average ratio of hedging	116.91	98.56	100.00	100.00	100.00	100.00	100.00
Cash flow hedge							
The nominal amount of							
the hedged item	2,167,227	491,964	-	503,145	-	-	3,162,336
The nominal amount of							
the hedging instrument	2,167,227	491,964	-	503,145	-	-	3,162,336
Average ratio of hedging	100.00	100.00	-	100.00	-	-	100.00
Net investment in							
a foreign operation hedges							
The nominal amount of							
the hedged item	461,104	-	-	-	-	-	461,104
The nominal amount of							
the hedging instrument	461,104	-	-	-	-	-	461,104
Average ratio of hedging	100.00	-	-	-	-	-	100.00

Fair value hedge

Details of fair value hedged items as at December 31, 2018, are as follows:

(In millions of Korean won)			2018					
		Carrying	Carrying amount		Accumulated adjusted amount			
		Assets	Liabilities	Assets	Liabilities	value		
Interest rate	Debt securities in Korean							
	won Debt securities in foreign	465,213	-	1,214	-	6,001		
	currencies Deposits in foreign	702,727	-	(9,790)	-	(1,233)		
	currencies Debts in Korean	-	805,215	-	(89,265)	38,232		
	won Debts in foreign	-	349,252	-	19,252	(2,308)		
	currencies	-	1,429,457	-	(24,073)	(1,868)		
		1,167,940	2,583,924	(8,576)	(94,086)	38,824		

Details of derivative instruments designated as fair value hedge as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018			
	Notional amount	Assets	Liabilities	Changes in the fair value
Interest rate				
Swaps	3,845,555	58,934	88,017	(37,637)
(In millions of Korean won)	2017			
	Notional amount	Ass	ets	Liabilities
Interest rate				
Swaps	2,919,93	5	47,856	49,962
Other	50,00	0	775	70
	2,969,93	5	48,631	50,032

The fair value of non-derivative financial instruments designated as hedging instruments as at December 31, 2018 and 2017 are as follows:

(In millions of Korean won)	2018	2017
Deposit in foreign currencies	-	32.051

Details of the ineffective portion of changes in fair value of derivatives recognized in profit or loss for the year ended December 3', 2018, are as follows:

(In millions of Korean won)	2018
	Hedge ineffectiveness recognized in profit or loss
Interest rate	1,186

Gains and losses from fair value hedging instruments and hedged items attributable to the hedged risk for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Gains (losses) on hedging instruments	(41,472)	16,195
Gains (losses) on the hedged item attributable to the hedged risk	37,305	(16,368)
	(4,167)	(173)

Cash flow hedge

Details of cash flow hedged items as at December 31, 2018, are as follows:

(In millions of Korean won)	201	8
	Changes in fair value	Other comprehensive income for cash flow hedge
Interest rate risk	(7,031)	11,539

The fair value of derivative financial instruments designated as hedging instruments as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		201	8	
· -	Notional amount	Assets	Liabilities	Changes in fair value
Interest rate				
Swaps	3,162,336	17,022	534	6,961
(In millions of Korean won)		2017	,	
	Notional amour	nt Asse	ts L	iabilities
Interest rate				
Swaps	1,660,	670	10,440	-

Gains and losses from cash flow hedging instruments and hedged items attributable to the hedged risk for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Gains on hedging instruments	6,961	10,694
Effective gains from cash flow hedging instruments		
(recognized in other comprehensive income or loss)	6,980	10,691
Ineffective gains from cash flow hedging instruments		
(recognized in profit or loss)	(19)	3

Amounts recognized in other comprehensive income and reclassified from equity to profit or loss for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Other comprehensive income or loss	6,980	10,691
Reclassification to profit or loss	(1,755)	(444)
Income tax effect	(1,437)	(2,833)
	3,788	7,414

As at December 31, 2018, the hedged items subject to cash flow hedge are exposed to the risk of changes in cash flows until June 9, 2022.

Hedges of a net investment in a foreign operation

Details of net investment in a foreign operation as at December 31, 2018, are as follows:

(In millions of Korean won)		2018
		Other comprehensive income (loss)
		for hedges of a net investment
	Changes in fair value	in a foreign operation
Currency (foreign currency risk)	22,787	(30,960)

Details of derivative financial instruments designated as hedging instruments in hedge of net investment in a foreign operation as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018		
	Notional amount	Assets	Liabilities	Changes in the fair value
Forward exchange contract Debentures in foreign	461,104	4,365	-	(19,466)
currencies	89,448	-	89,109	(3,321)
	550,552	4,365	89,109	(22,787)
(In millions of Korean won)		2017		
•	Notional amount	Assets	Liabilit	ies
Forward exchange contract	471,416	21,3	398	-
The fair value of non-derivative December 31, 2018 and 2017		signated as hedgiı	ng instruments as	at

(In millions of Korean won) 2018 2017

Debentures in foreign currencies 88,785 99,994

Gains or losses from hedging instruments in hedge of net investment in a foreign operation and hedged items attributable to the hedged risk for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Gains (losses) on hedging instruments	(35,015)	36,044
Effective gains (losses) from cash flow hedging instruments	,	
(recognized in other comprehensive income or loss)	(35,015)	34,915
Ineffective gains (losses) from cash flow hedging instruments		
(recognized in profit or loss)	-	1,129

Gains or losses on the hedging instruments relating to the effective portion of the hedge recognized in other comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Other comprehensive income (loss)	(35,015)	34,915
Income tax effect	9,629	(8,196)
Other comprehensive income (loss) after tax	(25,386)	26,719

10. Loans at Amortized Cost

Loans as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Loans	277,916,607	252,572,981
Deferred loan origination fees and costs	581,997	551,345
Allowances	(1,554,402)	(1,413,721)
Carrying amount	276,944,202	251,710,605

Loans to banks as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Loans	3,484,211	5,314,577
Allowances	(620)	(77)
Carrying amount	3,483,591	5,314,500

Loans to customers other than banks as at December 31, 2018 and 2017 are as follows:

(In millions of Korean won)			
_	Retail	Corporate	Total
Loans in Korean won	142,003,442	116,673,099	258,676,541
Loans in foreign currencies	189,582	4,238,278	4,427,860
Domestic import usance bills	-	2,817,174	2,817,174
Off-shore funding loans	-	899,741	899,741
Call loans	-	1,473,397	1,473,397
Bills bought in Korean won	-	3,057	3,057
Bills bought in foreign			
currencies	-	3,427,368	3,427,368
Guarantee payments under			
payment guarantee	-	4,104	4,104
Reverse repurchase			
agreements	-	2,951,400	2,951,400
Privately placed bonds	-	333,751	333,751
_	142,193,024	132,821,369	275,014,393
Proportion (%)	51.70	48.30	100.00
Allowances	(445,527)	(1,108,255)	(1,553,782)
_	141,747,497	131,713,114	273,460,611
-			

(In millions of Korean won)		2017	
	Retail	Corporate	Total
Loans in Korean won	130,390,627	105,300,767	235,691,394
Loans in foreign currencies	95,492	3,042,565	3,138,057
Domestic import usance bills	-	2,128,868	2,128,868
Off-shore funding loans	-	750,102	750,102
Call loans	-	335,000	335,000
Bills bought in Korean won	-	4,168	4,168
Bills bought in foreign			
currencies	-	3,875,550	3,875,550
Guarantee payments under			
payment guarantee	-	6,373	6,373
Reverse repurchase			
agreements	-	1,159,900	1,159,900
Privately placed bonds	-	720,337	720,337
_	130,486,119	117,323,630	247,809,749
Proportion (%)	52.66	47.34	100.00
Allowances	(318,533)	(1,095,111)	(1,413,644)
_	130,167,586	116,228,519	246,396,105

Changes in deferred loan origination fees and costs for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won) 2018 Beginning¹ Increase Decrease Other Ending **Deferred loan origination costs** Loans in Korean won (304,083)562,425 333,833 592,175 Other origination costs 456 528 (499)1 486 562,881 334,361 1 592,661 (304,582)Deferred loan origination fees Loans in Korean won 6,793 2,271 6,322 (2,742)Other origination fees 4,749 832 (1,240)4,342 11,542 3,103 10,664 (3,982)1 551,339 331,258 (300,600)581,997

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)			2017		
	Beginning	Increase	Decrease	Other	Ending
Deferred loan origination costs					
Loans in Korean won	582,479	267,116	(287,170)	-	562,425
Other origination costs	295	497	(328)	(2)	462
-	582,774	267,613	(287,498)	(2)	562,887
Deferred loan origination fees	-				-
Loans in Korean won	9,968	1,776	(4,951)	-	6,793
Other origination fees	2,356	3,672	(1,269)	(10)	4,749
	12,324	5,448	(6,220)	(10)	11,542
	570,450	262,165	(281,278)	8	551,345

11. Allowances for Loan Losses

Changes in the allowances for loan losses for the years ended December 31, 2018 and 2017, are as follows:

In millions of Korean won)				20	18			
	Retails Cor			Corpo	rporates			
	Financial instruments applying 12-	applying	instruments Financial g lifetime instruments credit losses applying	ments instruments	Financial instruments applying lifetime expected credit losses		Financial instruments applying	
	month expected credit losses	Non- impaired	Impaired	credit impaired approach	month Non-	Impaired	credit impaired approach	
Beginning ¹ Transfer	162,111	155,623	133,002	-	193,359	263,721	759,367	-
between stages								
Transfer to 12-month expected credit losses	101,441	(101,375)	(66)	-	37,149	(36,251)	(897)	-
Transfer to lifetime								
expected credit losses (Non-impaired)	(90,045)	102,159	(12,114)	-	(34,450)	44,741	(10,291)	-
Transfer to lifetime								
expected credit losses (Impaired)	(753)	(43,126)	43,880	-	(2,289)	(30,694)	32,982	-
Write-offs	-	(2)	(297,228)	-	-	(5)	(228,900)	-
Disposal	(248)	(5)	(1,003)	-	(73)	-	(14,172)	-
Provision (reversal) for loan losses ^{2,3}	(2,075)	43,621	250,848	-	3,438	53,762	51,051	-
Others (change of currency ratio, etc.)	140	319	423		732	654	25,941	
Ending	170,571	157,214	117,742	-	197,866	295,928	615,081	-

¹ Restated based on Korean IFRS 1109.

² Provision for credit losses in statement of comprehensive income also includes provision (reversal) for unused commitments and guarantees (Note 22), provision (reversal) for financial guarantee contracts (Note 22), provision (reversal) of allowance for other financial assets (Note 17), provision (reversal) of allowance for due from financial institutions (Note 7) and provision (reversal) of allowance for debt securities (Note 12).

³ Recovery of written-off loans amounting to ₩ 284,493 million is included.

(In millions of Korean won)	2017			
	Retail	Corporate	Total	
Beginning	333,269	1,262,342	1,595,611	
Written-off	(274,714)	(375,705)	(650,419)	
Recoveries				
from written-off loans	136,765	272,979	409,744	
Sale	(682)	(17,560)	(18,242)	
Other changes	1,769	(88,835)	(87,066)	
Provision ¹	122,126	41,967	164,093	
Ending	318,533	1,095,188	1,413,721	

¹ Provision (reversal) for credit losses in statement of comprehensive income also includes provision (reversal) for unused commitments and guarantees (Note 22), provision (reversal) for financial guarantee contracts (Note 22), and provision (reversal) of allowance for other financial assets (Note 17).

The loan and receivables which were written-off but the claims has not been forfeited (i.e. its extinctive prescription did not occur, and that are not collected) amounts to \forall 9,712,704 million as at December 31, 2018.

Changes in the gross carrying amounts of loans

Changes in the gross carrying amounts of loans that significantly affect allowances for loan losses for the year ended December 31, 2018, are as follows:

(In millions of Korean won)	2018					
	Financial Financial instruments applying lifetim expected credit losses			Financial instruments		
	12-month expected credit losses	Non-impaired	Impaired	applying credit impaired approach		
Beginning ¹	229,155,046	22,264,683	1,536,734			
Transfer between stages						
Transfer to 12-month expected credit losses Transfer to lifetime expected credit losses	7,505,305	(7,465,523)	(39,782)	-		
(Non-impaired) Transfer to lifetime expected credit losses	(10,092,301)	10,144,226	(51,926)	-		
(Impaired)	(638,686)	(761,893)	1,400,579	-		
Write-offs	-	(7)	(526,127)	-		
Sale	(484,646)	(3,817)	(190,401)	-		
Net increase(decrease) (Execution, repayment	30,425,623	(2,938,516)	(739,967)			
and others) Ending			, , ,			
Lituing	255,870,341	21,239,153	1,389,110	-		

¹Restated based on Korean IFRS 1109.

12. Financial Assets at Fair Value through Profit or Loss and Financial Investments

Details of financial assets at fair value through profit or loss and financial investments as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018
Financial assets at fair value through profit or loss	
Debt securities	
Government and public bonds	1,948,984
Financial bonds	4,933,859
Corporate bonds	1,897,070
Asset-backed securities	59,807
Beneficiary certificates	2,341,301
Equity investments	164,777
Derivative-linked securities	126,417
Other debt securities	410,810
Equity securities	
Stocks	82,576
Loans	
Private placed corporate bonds	179,714
Other loans	32,882
Others	
Financial instruments indexed to the price of gold	78,808
_	12,257,005
Financial Investments	
Financial assets at fair value through other comprehensive income	
Debt securities	
Government and public bonds	2,941,069
Financial bonds	16,902,114
Corporate bonds	6,971,282
Asset-backed securities	867,998
Equity securities	
Stocks	1,861,901
Equity investments	37,043
Loans	
Private placed corporate bonds	349,547
_	29,930,954
Financial assets at amortized cost	
Debt securities	
Government and public bonds	544,926
Financial bonds	6,245,768
Corporate bonds	1,413,022
Asset-backed securities	4,590,107
Allowance	(1,297)
_	12,792,526
	42,723,480
-	

Financial assets held for trading Debt securities Government and public bonds 1,63	
Government and public bonds	20.400
	39,136
	27,349
·	25,492 48,995
	59,641
Equity securities	J9,04 I
	21,949
	16,955
•	73,856
	13,373
Financial assets designated at fair value through profit or loss	10,070
	95,357
	08,730
	50,700
Available-for-sale financial assets	
Debt securities	
	20,398
	38,948
	41,055
·	05,360
Equity securities	
Stocks 1,92	23,152
Equity investments 14	43,685
Beneficiary certificates 2,40	05,426
Others	500
32,07	78,524
Held-to-maturity financial assets	
Debt securities	
•	02,836
	78,005
·	60,836
	95,473
<u></u>	37,150
40,81	15,674

Dividend incomes from the equity securities designated at fair value through other comprehensive income for the year ended December 31, 2018 are as follows:

(In millions of Korean won)		201	8
		From the financial asset derecognized	From the holding financial asset
Stocks	Listed	_	22,173
	Unlisted	-	14,508
Equity inve	stments	-	2,256
			38,937

The derecognized equity securities at fair value through other comprehensive income for the year ended December 31, 2018, are as follows:

(In millions	of Korean won)	2018	
			Accumulated OCI as at
		Disposal price	disposal date
Stocks	Listed	26,877	18,330
	Unlisted	480	480
		27,357	18,810

¹ In accordance with joint resolution along with the stock price increase, the Group disposed of stocks acquired by a debt to equity swap.

Provision, and reversal for the allowance of financial investments for the year ended December 31, 2018, are as follows:

(In millions of Korean won)		2018	
	Impairment losses	Reversal of impairment	Total
Debt instruments at fair value through other comprehensive			
income	(877)	342	(535)
Loans at fair value through			
other comprehensive income	(905)	825	(80)
Securities at amortized cost	(202)	282	80
	(1,984)	1,449	(535)

The impairment losses and the reversal of impairment losses in financial investments for the year ended December 31, 2017, are as follows:

(In millions of Korean won)	2017		
	Impairment	Reversal	Net
Available-for-sale financial assets	(12,405)		(12,405)

Changes in the allowances for financial investments for the year ended December 31, 2018, are as follows:

(In millions of Korean won)	2018		
	Financial	struments	
	instruments	applying lifetime	•
	applying 12-	loss	es
	month		
	expected credit losses	Non-impaired	Impaired
Beginning ¹	3,042	482	-
Transfer between stages			
Transfer to 12-month			
expected credit losses	125	(125)	-
Transfer to lifetime			
expected credit losses	-	-	-
Disposal	(171)	-	-
Provision (reversal) for loan			
losses	715	(180)	-
Others (change of currency			
ratio, etc.)	48	16	
Ending	3,759	193	-

¹ Prepared in accordance with Korean IFRS 1109.

13. Investments in Associates

Investments in associates as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)				2018		
	Ownership (%)	Acquisition cost	Share of net asset amount	Carrying amount	Industry	Location
Korea Credit Bureau Co., Ltd.1	9.00	4,500	5,941	5,941	Credit information	Korea
Balhae Infrastructure Fund ¹	12.61	104,621	108,050	108,050	Investment finance	Korea
KB GwS Private Securities Investment Trust	20.93	89,124	106,613	106,613	Investment finance	Korea
Incheon Bridge Co., Ltd. ¹	14.99	9,159	(16,689)	-	Operation of highways and related facilities	Korea
KB Digital innovation & Growth					Discovery of and	
New Technology Business Investment Fund ¹	45.00	1,125	1,079	1,079	investment in promising FinTech-business venture	Korea
KB12-1 Venture Investment Partnership ²	80.00	17,400	49,912	49,912	Investment finance	Korea
Future Planning KB Start-up Creation Fund ²	50.00	14,300	18,069	18,069	Investment finance	Korea
KoFC KBIC Frontier Champ 2010-5(PEF)	30.00	90	140	140	Investment finance	Korea
KoFC POSCO HANWHA KB Shared Growth No.2. Private Equity Fund	20.00	10,376	11,681	11,681	Investment finance	Korea
KB High-tech Company	50.00	20,300	22,563	22,563	Investment finance	Korea

Investment Fund ²						
Aju Good Technology	38.46	18,038	18,134	18,134	Investment finance	Korea
Venture Fund KB-KDBC New Technology	22.22		7.007	7 007	lavoratura est Caraca	IZ
Business Investment Fund ²	33.33	7,500	7,297	7,297	Investment finance	Korea
KBTS Technology Venture Private Equity Fund ²	30.00	7,620	7,381	7,381	Investment finance	Korea
KB IP Investment Fund II ²	37.50	3,000	2,942	2,942	Investment finance	Korea
KB Digital Innovation Investment Fund Limited partnership ²	25.74	7,700	7,617	7,617	Investment finance	Korea
KB-Brain KOSDAQ Scale-up Fund ²	21.28	4,000	3,966	3,966	Investment finance	Korea
KB Star office private real estate Investment Trust No.1	21.05	20,000	20,252	20,252	Investment finance	Korea
Shinla Construction Co., Ltd. ³	20.17	-	(551)	-	Specialty construction Manufacture of fabricated	Korea
Terra Corporation ³	24.06	-	2	-	and processed metal products	Korea
MJT&I Corp. ³	22.89	-	(606)	122	Wholesale of other merchandise	Korea
Jungdong Steel Co., Ltd. ³	42.65	-	(433)	-	Wholesale of primary metal	Korea
Doosung Metal Co., Ltd ³	26.49	-	(16)	-	Manufacture of metal door, windows, shutter and relevant products	Korea
Shinhwa Underwear Co., Ltd. ³	26.05	_	(57)	182	Manufacture of underwear	Korea
DPAPS Co., Ltd. ³	38.62		14	102	and sleepwear Wholesale of paper	Korea
		-		_	Manufacture of pouches,	
Jaeyang Industry Co., Ltd. ³	20.86	-	(552)	-	cases, and bags	Korea
Kendae Co., Ltd. ³	41.01	-	(252)	98	Screen Printing Manufacture of other	Korea
Jinseung Tech Co., Ltd. ³	30.04	-	(176)	-	general-purpose machinery n.e.c.	Korea
Dongjo Co., Ltd. ³	29.29	-	806	115	Wholesale of agricultural and forestry machinery	Korea
					and equipment Manufacture of motor	
Korea NM Tech Co., Ltd. ³	22.41	-	552	-	vehicles, trailers and semitrailers	Korea
					Office, commercial and	
Jungdo Co., Ltd. ³	25.34	-	1,492	-	institutional building construction	Korea
Dae-A Leisure Co., Ltd. ³	49.36	-	1,613	578	Earth works	Korea
Chong II Machine & Tools Co., Ltd. ³	20.40	-	(107)	-	Wholesale machinery and equipment	Korea
Imt Technology Co., Ltd. ³	25.29	-	18	-	Computer Peripherals distribution	Korea
Iwon Alloy Co., Ltd. ³	23.20	-	394	-	Manufacture of smelting, refining and alloys	Korea
Carlife Co., Ltd. ³	24.39	-	(75)	-	Publishing of magazines and periodicals (publishing industry)	Korea
Computerlife Co., Ltd. ³	45.71	-	(329)	-	Publishing of magazines and periodicals (publishing	Korea

SKYDIGITAL INC. ³ Jo Yang Industrial Co., Ltd. ³ PT Bank Bukopin TBK ^{4,5}	20.40 22.77 22.00	116,422 455,275	(142) 75 106,484 483,102	- 113,932 506,664	industry) Manufacture of multimedia and video devices Manufacture of special glass Banking	Korea Korea Indonesia
(In millions of Korean won)				2017		
	Ownership (%)	Acquisition cost	Share of net asset amount	Carrying amount	Industry	Location
Balhae Infrastructure Fund ¹ Korea Credit Bureau Co., Ltd. ¹	12.61 9.00	101,794 4,500	105,190 5,056	105,190 5,056	Investment finance Credit information	Korea Korea
KB12-1 Venture Investment Partnership ²	80.00	22,800	37,239	37,239	Investment finance	Korea
KoFC KBIC Frontier Champ 2010-5(PEF)	30.00	3,891	4,504	4,137	Investment finance	Korea
KB GwS Private Securities Investment Trust	20.93	89,124	105,567	104,310	Investment finance	Korea
Incheon Bridge Co., Ltd. ¹	14.99	9,159	(16,202)	-	Operation of highways and related facilities	Korea
KoFC POSCO HANWHA KB Shared Growth No.2. Private Equity Fund	20.00	10,376	13,770	13,770	Investment finance	Korea
Future Planning KB Start-up Creation Fund ²	50.00	14,700	18,093	18,093	Investment finance	Korea
KB-KDBC New Technology Business Investment Fund ²	33.33	2,500	2,486	2,486	Investment finance	Korea
Shinla Construction Co., Ltd. ³	20.17	-	(551)	-	Specialty construction	Korea
Terra Corporation ³	24.06	-	36	20	Manufacture of fabricated and processed metal products	Korea
MJT&I Corp. ³	22.89	-	(601)	127	Wholesale of other merchandise	Korea
Jungdong Steel Co., Ltd. ³	42.65	-	(433)	-	Wholesale of primary metal Manufacture of metal door,	Korea
Doosung Metal Co., Ltd. ³	26.49	-	(20)	-	windows, shutter and relevant products	Korea
Shinhwa Underwear Co., Ltd. ³	26.05	-	(102)	138	Manufacture of underwear and sleepwear	Korea
DPAPS Co., Ltd. ³	38.62	-	155	-	Wholesale of paper	Korea
Jaeyang Industry Co., Ltd. ³	20.86	-	(522)	-	Manufacture of luggage and other protective cases	Korea
Keundae Printing Co., Ltd. ³	41.01	-	(223)	127	Screen Printing Manufacture of other	Korea
Jinseung Tech Co., Ltd. ³	30.04	-	(173)	-	general-purpose machinery n.e.c.	Korea
Dong Jo Co., Ltd. ³	29.29	-	691	-	Wholesale of agricultural and forestry machinery and equipment Manufacture of motor	Korea
Korea NM Tech Co., Ltd. 3	22.41	-	580	-	vehicles, trailers and semitrailers	Korea
Jungdo Co., Ltd. ³	25.34	-	1,652	-	Office, commercial and	Korea

					institutional building construction	
Dae-A Leisure Co., Ltd. ³	49.36	-	1,017	-	Earth works	Korea
Daesang Techlon Co., Ltd. ³	47.73	-	96	-	Manufacture of Plastic, Teflon etc.	Korea
KB High-tech Company Investment Fund ²	50.00	25,000	26,847	26,847	Investment finance	Korea
Aju Good Technology Venture Fund	38.46	8,230	7,856	8,230	Investment finance	Korea
KB Star office private real estate Investment Trust No.1	21.05	20,000.	20,122.	20,122	Investment finance	Korea
		312,074	332,130	345,892		

¹ As at December 31, 2018 and 2017, the Group is represented in the governing bodies of its associates. Therefore, the Group has significant influence over the decision-making process relating to their financial and business policies.

Summarized financial information on the main associates, the carrying amount of the Group's interest in the main associates and dividends received from the main associates is as follows:

(In millions of Korean won)

20	11	Q

					Chara of	Unrealized	
	Total assets	Total liabilities	Paid-in capital	Equity	Share of net asset amount	gains and losses and others	Carrying amount
Korea Credit Bureau Co., Ltd.	88,797	22,788	10,000	66,009	5,941	-	5,941
Balhae Infrastructure Fund KB GwS Private Securities	859,040	1,843	829,995	857,197	108,050	-	108,050
Investment Trust	516,115	741	425,814	515,374	106,613	-	106,613
Incheon Bridge Co., Ltd. KB Digital Innovation & Growth New Technology Business	617,560	728,896	61,096	(111,336)	(16,689)	16,689	-
Investment Fund KB12-1 Venture Investment	2,398	-	2,500	2,398	1,079	-	1,079
Partnership Future Planning KB Start-up	63,628	1,238	21,750	62,390	49,912	-	49,912
Creation Fund KoFC KBIC Frontier Champ	38,889	2,751	28,600	36,138	18,069	-	18,069
2010-5(PEF) KoFC POSCO HANWHA KB Shared Growth No.2. Private	469	3	300	466	140	-	140
Equity Fund	59,464	1,061	51,880	58,403	11,681	-	11,681
KB High-tech Company	45,402	276	40,600	45,126	22,563	-	22,563

² As at December 31, 2018 and 2017, the Group is a partner in a limited partnership and does not have the right to control over these entities.

³ The investment in associates was reclassified from financial instruments at fair value through other comprehensive income (available-for-sale financial assets) due to termination of rehabilitation procedures.

⁴ The Group has entered into an agreement with PT Bosowa Corporindo, the major shareholder of PT Bank Bukopin TBK. Under this agreement, both partiesin have a right of first refusal, a tag-along right and a drag-along right. The Group additionally has the drag-along right can be exercised for the duration of two years after three-years from acquisition date, subject to the occurrence of certain situations as defined in the agreement.

⁵ The fair value of PT Bank Bukopin TBK's common stock based on its quoted market price is ₩ 53,540 million as at December 31, 2018.

Investment Fund Aju Good Technology Venture							
Fund	47,216	66	46,900	47,150	18,134	-	18,134
KB-KDBC New Technology							
Business Investment Fund	22,492	602	22,500	21,890	7,297	-	7,297
KBTS Technology Venture							
Private Equity Fund	24,810	208	25,400	24,602	7,381	-	7,381
KB IP Investment FundⅡ	7,848	3	8,000	7,845	2,942	-	2,942
KB Digital Innovation Investment Fund Limited							
partnership	29,601	3	29,920	29,598	7,617	-	7,617
KB-Brain KOSDAQ Scale-up							
Fund	18,820	181	18,800	18,639	3,966	-	3,966
KB Star office private real							
estate Investment Trust No.1	218,025	121,828	95,000	96,197	20,252	-	20,252
PT Bank Bukopin TBK ²	7,195,249	6,711,233	106,536	484,016	106,484	7,448	113,932

(In millions of Korean won)			2018¹		
			Other		
	Operating	Profit	comprehensive	Comprehensive	
	revenues	(Loss)	income	income (loss)	Dividends
Korea Credit Bureau Co., Ltd.	78,018	9,901	-	9,901	113
Balhae Infrastructure Fund	61,525	54,241	-	54,241	6,804
KB GwS Private Securities					
Investment Trust	42,502	41,524	-	41,524	6,385
Incheon Bridge Co., Ltd.	94,373	(2,757)	-	(2,757)	-
KB Digital Innovation & Growth New					
Technology Business Investment					
Fund	7	(82)	(21)	(103)	-
KB12-1 Venture Investment					
Partnership	38,942	35,556	-	35,556	10,640
Future Planning KB Start-up					
Creation Fund	6,826	5,467	-	5,467	2,600
KoFC KBIC Frontier Champ 2010-					
5(PEF)	1,460	1,453	-	1,453	999
KoFC POSCO HANWHA KB Shared					
Growth No.2. Private Equity Fund	2,401	(12,313)	-	(12,313)	-
KB High-tech Company Investment					
Fund	5,025	86	-	86	-
Aju Good Technology Venture Fund	2,491	1,356	-	1,356	-
KB-KDBC New Technology Business					
Investment Fund	39	(568)	-	(568)	-
KBTS Technology Venture Private					
Equity Fund	-	(798)	-	(798)	-
KB IP Investment Fund∏	9	(155)		(155)	
KB Digital Innovation Investment	9	(133)	-	(133)	-
Fund Limited partnership	24	(322)		(322)	
KB-Brain KOSDAQ Scale-up Fund	20	(322) (161)	-	(322)	-
ND-DIAITI NOODAQ OCAIE-up Fulid	20	(101)	-	(101)	-

KB Star office private real estate					
Investment Trust No.1	14,092	6,135	-	6,135	1,162
PT Bank Bukopin TBK	148,793	(8,843)	(2,325)	(11,168)	-

¹ The amounts included in the financial information of the associates are adjusted to reflect adjustments made by the Group, such as fair value adjustments made at the time of acquisition and adjustments for differences in accounting policies.

(In millions of Korean won)

						Unrealized	
					Share of	gains and	
	Total	Total	Paid-in		net asset	losses and	Carrying
	assets	liabilities	capital	Equity	amount	others	amount
Balhae Infrastructure Fund	836,309	1,800	807,567	834,509	105,190	-	105,190
Korea Credit Bureau Co., Ltd.	75,504	19,323	10,000	56,181	5,056	-	5,056
KB12-1 Venture Investment							
Partnership	47,454	905	28,500	46,549	37,239	-	37,239
KoFC KBIC Frontier Champ							
2010-5(PEF)	15,017	4	12,970	15,013	4,504	(367)	4,137
KB GwS Private Securities							
Investment Trust	505,115	741	425,814	504,374	105,567	(1,257)	104,310
Incheon Bridge Co., Ltd.	646,811	754,900	61,096	(108,089)	(16,202)	16,202	-
KoFC POSCO HANWHA KB							
Shared Growth No.2. Private							
Equity Fund	70,166	1,315	51,880	68,851	13,770	-	13,770
Future Planning KB Start-up							
Creation Fund	37,730	1,544	29,400	36,186	18,093	-	18,093
KB High-tech Company							
Investment Fund	53,949	255	50,000	53,694	26,847	-	26,847
Aju Good Technology							
Venture Fund	20,676	250	21,400	20,426	7,856	374	8,230
KB-KDBC Pre-IPO New							
Technology Business							
Investment Fund	7,503	45	7,500	7,458	2,486	-	2,486
KB Star office private real							
estate Investment Trust							
No.1	216,041	120,462	95,000	95,579	20,122	-	20,122

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	Other						
	Operating	Profit	comprehensive	Comprehensive			
	revenues	(Loss)	income	income(loss)	Dividends		
Balhae Infrastructure Fund	113,441	104,942	-	104,942	12,842		
Korea Credit Bureau Co., Ltd.	68,750	3,580	-	3,580	149		
KB12-1 Venture Investment							
Partnership	4,762	(774)	4,326	3,552	-		
KoFC KBIC Frontier Champ 2010-							
5(PEF)	2,728	(294)	142	(152)	-		

² The goodwill of PT Bank Bukopin TBK amounts to ₩ 4,101 million.

KB GwS Private Securities Investment					
Trust	35,002	34,004	-	34,004	5,753
Incheon Bridge Co., Ltd.	90,691	(8,719)	-	(8,719)	-
KoFC POSCO HANWHA KB Shared					
Growth No.2. Private Equity Fund	21,916	8,624	129	8,753	-
Future Planning KB Start-up Creation					
Fund	1,298	(2,221)	4	(2,217)	-
KB High-tech Company Investment Fund	4,408	1,978	1,437	3,415	-
Aju Good Technology Venture					
Fund	660	(841)	-	(841)	-
KB-KDBC Pre-IPO New Technology					
Business Investment Fund	3	(42)	-	(42)	-
KB Star office private real estate					
Investment Trust No.1	13,071	5,684	-	5,684	1,295

¹ The amounts included in the financial information of the associates are adjusted to reflect adjustments made by the Group, such as fair value adjustments made at the time of acquisition and adjustments for differences in accounting policies.

Changes in investments in associates for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)				2018			
					Gains (losses)		
		Acquisition	Disposal		_	comprehensive	
	Beginning ¹	and others	and others	Dividends	equity method	income	Ending
Korea Credit Bureau Co., Ltd.	5,056	-	-	(113)) 998	-	5,941
Balhae Infrastructure Fund	105,190	4,645	(1,818)	(6,804)	6,837	-	108,050
KB GwS Private Securities							
Investment Trust	104,310	-	-	(6,386)	8,689	-	106,613
KB Digital Innovation & Growth							
New Technology Business							
Investment Fund	-	1,125	-	-	- (37)	(9)	1,079
KB12-1 Venture							
Investment Partnership	37,507	-	(5,400)	(10,640)	28,445	-	49,912
Future Planning KB Start-up							
Creation Fund	18,336	-	(400)	(2,600)) 2,733	-	18,069
KoFC KBIC Frontier Champ							
2010-5(PEF)	4,137	-	(3,138)	(999)) 140	-	140
KoFC POSCO HANWHA KB							
Shared Growth No.2. Private							
Equity Fund	14,171	-	-	-	(1,498)	(992)	11,681
KB High-tech Company							
Investment Fund	27,220	-	(4,700)	-	- 43	-	22,563
Aju Good Technology Venture							
Fund	8,230	9,808	-	-	- 96	-	18,134
KB-KDBC New Technology							
Business Investment Fund	2,486	5,000	-	-	- (189)	-	7,297
KBTS Technology Venture							
Private Equity Fund	-	7,620	-	-	- (239)	-	7,381
KB IP Investment FundⅡ	-	3,000	_		- (58)	-	2,942
KB Digital Innovation		,,,,,,,			()		,-
Investment Fund Limited	-	7,700	-		- (83)	-	7,617

Partnership KB-Brain KOSDAQ Scale-up							
Fund	-	4,000	-	-	(34)	-	3,966
KB Star office private real							
estate Investment Trust No.1	20,122	-	-	(1,162)	1,292	-	20,252
Terra Corporation	20	-	-	-	(20)	-	-
MJT&I Corp.	127	-	-	-	(5)	-	122
Shinhwa Underwear Co., Ltd.	138	-	-	-	44	-	182
Kendae Co.,Ltd.	127	-	-	-	(29)	-	98
Dongjo Co., Ltd.	-	-	-	-	115	-	115
Dae-A Leisure Co., Ltd.	-	-	-	-	3,698	(3,120)	578
PT Bank Bukopin TBK	-	116,422	-	-	(1,946)	(544)	113,932
	347,177	159,320	(15,456)	(28,704)	48,992	(4,665)	506,664

¹Restated based on Korean IFRS 1109.

(In millions of Korean won)				2017			
	Beginning	Acquisition and others	Disposal and others	Dividends	Gains (losses) from using equity method	Other comprehensive income	Ending
Balhae Infrastructure Fund	133,200	807	(29,202)	(12,842)	13,227	-	105,190
Korea Credit Bureau Co., Ltd. KB12-1 Venture	4,853	-	-	(149)	352	-	5,056
Investment Partnership KoFC KBIC Frontier Champ	38,797	-	(4,400)	-	(619)	3,461	37,239
2010-5(PEF) KB GwS Private Securities	14,696	-	(10,500)	-	(102)	43	4,137
Investment Trust	102,949	-	-	(5,753)	7,114	-	104,310
Incheon Bridge Co., Ltd. KoFC POSCO HANWHA KB Shared Growth No.2. Private	728	-	(728)	-	· -	-	-
Equity Fund	19,831	-	(7,784)	_	1,698	25	13,770
Future Planning KB Start-up							
Creation Fund KB-KDBC Pre-IPO New Technology Business	15,202	4,000	-	-	(1,110)	1	18,093
Investment Fund	-	2,500	-	-	(14)	-	2,486
Terra Corporation	28	-	-	-	(8)	-	20
MJT&I Corp.	232	-	-	-	(105)	-	127
Shinhwa Underwear Co., Ltd.	103	-	-	-	35	-	138
Kendae Co.,Ltd. KB High-tech Company	-	-	-	-	127	-	127
Investment Fund	15,140	10,000	-	-	988	719	26,847
Aju Good Technology							
Venture Fund	1,997	6,233	-	-	-	-	8,230
KB Star office private real							
estate Investment Trust No.1	20,220	-		(1,295)			20,122
_	367,976	23,540	(52,614)	(20,039)	22,780	4,249	345,892

The tables below provide unrecognized share of losses of associates, both for the reporting period and cumulatively, because the Group has stopped recognizing its share of losses of associates when applying the equity method.

(In millions of Korean won)	2018		2017		
		Accumulated		Accumulated	
	Unrecognized	unrecognized	Unrecognized	unrecognized	
	loss (gain)	loss	loss (gain)	loss	
Incheon Bridge Co., Ltd.	487	16,689	16,202	16,202	
Shinla Construction Co., Ltd.	-	183	7	183	
Doosung Metal Co., Ltd	(4)	19	(31)	23	
Jungdong Steel Co., Ltd	-	487	13	487	
DPAPS Co., Ltd.	141	325	(4)	184	
Jinseung Tech Co., Ltd.	3	3	-	-	
Korea NM Tech Co., Ltd.	28	28	-	-	
Jungdo Co., Ltd.	160	160	-	-	
Jaeyang Industry Co., Ltd.	30	30	-	-	
Terra Corporation	14	14	-	-	
EJADE Co., Ltd. ¹	-	-	(1,112)	-	
JSC Bank CenterCredit ¹	-	-	(108,761)	-	

¹ Disposal of an investment in an associate was completed during the year ended December 31, 2017.

14. Property and Equipment, and Investment Properties

Details of property and equipment as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	ns of Korean won) 2018							
		Accumulated						
	Acquisition cost	Accumulated depreciation	impairment losses	Carrying amount				
Land	1,979,811	-	(1,018)	1,978,793				
Buildings	1,256,234	(442,318)	(5,859)	808,057				
Leasehold improvements	794,814	(700,046)	-	94,768				
Equipment and vehicles	1,147,644	(993,785)	-	153,859				
Construction in-progress	81,268	-	-	81,268				
Finance lease assets	32,709	(21,788)	-	10,921				
	5,292,480	(2,157,937)	(6,877)	3,127,666				

(In millions of Korean won)	2017					
	Accumulated					
	Acquisition	Accumulated	impairment	Carrying		
	cost	depreciation	losses	amount		
Land	1,973,230	-	(1,018)	1,972,212		
Buildings	1,223,088	(416,165)	(5,859)	801,064		
Leasehold improvements	715,631	(639,555)	-	76,076		
Equipment and vehicles	1,161,199	(1,012,373)	-	148,826		
Construction in-progress	12,187	-	-	12,187		
Finance lease assets	23,069	(17,840)	-	5,229		
	5,108,404	(2,085,933)	(6,877)	3,015,594		

Changes in property and equipment for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

				2018			
	Beginning	Acquisition	Transfers ¹	Disposal	Depreciation	Others	Ending
Land	1,972,212	124	7,129	(691)		19	1,978,793
Buildings	801,064	-	40,956	(4,079)	(29,928)	44	808,057
Leasehold							
improvements Equipment	76,076	1,086	69,646	(242)	(62,035)	10,237	94,768
and vehicles Construction	148,826	102,974	246	(795)	(97,423)	31	153,859
in-progress Finance	12,187	229,765	(160,684)	-	-	-	81,268
lease assets	5,229	9,640			(3,948)		10,921
	3,015,594	343,589	(42,707)	(5,807)	(193,334)	10,331	3,127,666

(In millions of Korean won)

				2017			
	Beginning	Acquisition	Transfers ¹	Disposal	Depreciation	Others	Ending
Land	2,059,956	16,647	(104,345)	(19)		(27)	1,972,212
Buildings	825,958	-	5,838	(1,023)	(29,647)	(62)	801,064
Leasehold							
improvements	63,656	586	57,548	(757)	(57,896)	12,939	76,076
Equipment							
and vehicles	155,847	90,502	-	(170)	(97,134)	(219)	148,826
Construction							
in-progress	4,013	110,345	(102,160)	-	-	(11)	12,187
Finance							
lease assets	7,961	678			(3,410)		5,229
	3,117,391	218,758	(143,119)	(1,969)	(188,087)	12,620	3,015,594

¹ Including transfers from investment properties and assets held for sale.

Changes in accumulated impairment losses of property and equipment for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

Beginning	Impairment	Reversal	Others	Ending
(6,877)	-	-	-	(6,877)

(In millions of Korean won)

2018

Beginning	Impairment	Reversal	Others	Ending
(6,877)	-	-	-	(6,877)

Details of investment properties as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

	Accumulated					
	Acquisition cost	depreciation	Carrying amount			
Land	166,737	-	166,737			
Buildings	107,554	(16,367)	91,187			
	274,291	(16,367)	257,924			

(In millions of Korean won)

		Accumulated				
	Acquisition cost	depreciation	Carrying amount			
Land	205,723	-	205,723			
Buildings	152,841	(21,064)	131,777			
	358,564	(21,064)	337,500			

The valuation technique and input variables that are used to measure the fair value of investment property as at December 31, 2018, are as follows:

(In millions of Korean won)

2018

2018

2017

	Fair Value	Valuation technique	Inputs
	57,025	Cost approach value	- Price per square meter - Replacement cost
Land and Buildings	229,450	Income approach	Discount rateCapitalization rateVacancy rate

Rental income from the above investment properties for the years ended December 31, 2018 and 2017, amounts to \forall 18,162 million and \forall 17,714 million, respectively.

Changes in investment properties for the years ended December 31, 2018 and 2017, are as follows:

(In millions	of	Korean	won)
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	Beginning	Acquisitions	Transfers	Disposal	Depreciation	Ending
Land	205,723	_	17,069	(56,055)	_	166,737
Buildings	131,777	179	13,349	(50,872)		91,187
	337,500	179	30,418	(106,927)	(3,246)	257,924
(In millions of Korean won)			2017			
	Beginning	Acquisitions	Transfer	rs Dep	reciation	Ending
Land	230,25	54	- (24,	531)	-	205,723
Buildings	142.62	26 262	2 (6.3	326)	(4.785)	131.777

262

15. Intangible Assets

Details of intangible assets as at December 31, 2018 and 2017, are as follows:

372,880

(In	millions	of Korean	won)

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/U		Λ.

(30,857)

(4,785)

337,500

(iii iiiiiii eiie ei i tereaii ii eii)	=						
	Acquisition	Accumulated	Accumulated	Carrying			
	cost	amortization	impairment losses	amount			
Goodwill	66,490	-	(1,202)	65,288			
Other intangible assets	935,208	(771,182)	(5,106)	158,920			
	1,001,698	(771,182)	(6,308)	224,208			
(In millions of Korean won)		2017					
	Acquisition	Accumulated	Accumulated	Carrying			
	cost	amortization	impairment losses	amount			
Goodwill	66,490	-	(1,202)	65,288			
Other intangible assets	878,285	(722,368)	(3,597)	152,320			
	944,775	(722,368)	(4,799)	217,608			

Details of goodwill as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018		2017	
	Acquisition cost	Carrying amount	Acquisition cost	Carrying amount
Housing & Commercial Bank	65,288	65,288	65,288	65,288
KB Cambodia Bank	1,202	-	1,202	-
	66,490	65,288	66,490	65,288

Changes in goodwill for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018		
_				Impairment	
	Beginning	Acquisition	Disposal	loss	Ending
Housing & Commercial					
Bank	65,288	-	-	-	65,288
_	65,288	-	-	-	65,288
_					
(In millions of Korean won)			2017		
				Impairment	
	Beginning	Acquisition	Disposal	loss	Ending
Housing & Commercial					
Bank	65,288	-	-	-	65,288
KB Cambodia Bank	1,202	-	-	(1,202)	-
-	66,490		_		65,288

Changes in accumulated impairment losses for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018		
	Beginning	Impairment	Reversal	Others	Ending
Accumulated impairment losses on other intangible assets	(1,202)	-	-	-	(1,202)
(In millions of Korean won)			2017		
	Beginning	Impairment	Reversal	Others	Ending
Accumulated impairment losses on other intangible assets	-	(1,202)		-	(1,202)

Details of allocation of goodwill to cash-generating units and related information for impairment testing as at December 31, 2018, are as follows:

(In millions of Korean won)	2018				
_	Retail Banking	Corporate Banking	Total		
Carrying amounts Recoverable amount exceeded	49,315	15,973	65,288		
carrying amount Discount rate (%) Permanent growth rate (%)	4,281,676 15.51 1.00	2,875,939 15.74 1.00	7,157,615		

(In millions of Korean won)

The recoverable amount of a cash-generating unit is measured at the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell is the amount obtainable from the sale in an arm's length transaction between knowledgeable, willing parties, less the costs of disposal. If it is difficult to measure the amount obtainable from the sale of the cash-generating unit, the Group measures the fair value less costs to sell by reflecting the characteristics of the measured cash-generating unit. If it is not possible to obtain the reliable information to measure the fair value less costs to sell, the Group uses the asset's value in use as its recoverable amount. Value in use is the present value of the future cash flows expected to be derived from an asset or cash-generating unit. The projections of the future cash flows are based on the most recent financial budget approved by management and generally cover a period of five years. The future cash flows after projection period are estimated on the assumption that the future cash flows will increase by 1.0% annually for Retail Banking, Corporate Banking. The key assumptions used for the estimation of the future cash flows are the market size and the Group's market share. The discount rate is a pre-tax rate that reflects assumptions regarding risk-free interest rate, market risk premium and the risks specific to the asset for which the future cash flow estimates have not been adjusted.

Details of intangible assets, excluding goodwill, as at December 31, 2018 and 2017, are as follows:

2018

(722, 368)

(3.597)

(
	Acquisition cost	Accumulated amortization	Accumulated impairment losses	Carrying amount			
Industrial property rights	1,858	(1,608)	-	250			
Software	769,244	(673,475)	-	95,769			
Other intangible assets	129,975	(77,129)	(5,106)	47,740			
Finance leases assets	34,131	(18,970)	-	15,161			
	935,208	(771,182)	(5,106)	158,920			
(In millions of Korean won)		201	17				
	Acquisition	Accumulated	Accumulated	Carrying			
	cost	amortization	impairment losses	amount			
Industrial property rights	1,784	(1,503)		281			
Software	713,034	(624,399)	-	88,635			
Other intangible assets	137,361	(82,899)	(3,597)	50,865			
Finance leases assets	26,106	(13,567)		12,539			

878,285

152,320

Changes in intangible assets, excluding goodwill, for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

•	Beginning	Acquisition	Disposal	Amortization	Others	Ending
Industrial property						
rights	281	58	-	(89)	-	250
Software	88,635	45,839	-	(38,707)	2	95,769
Other intangible						
assets	50,865	7,160	(2,825)	(5,710)	(1,750)	47,740
Finance leases assets	12,539	8,024	-	(5,402)	-	15,161
	152,320	61,081	(2,825)	(49,908)	(1,748)	158,920

(In millions of Korean won)

2017

	Beginning	Acquisition	Disposal	Amortization	Others	Ending
Industrial property						
rights	136	244	(8)	(103)	12	281
Software	83,761	37,725	-	(32,779)	(72)	88,635
Other intangible						
assets	43,998	13,429	(306)	(6,099)	(157)	50,865
Finance leases assets	16,329	793	-	(4,583)	-	12,539
	144,224	52,191	(314)	(43,564)	(217)	152,320

Changes in accumulated impairment losses on other intangible assets for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018		
	Beginning	Impairment	Reversal	Others	Ending
Accumulated impairment losses on other intangible assets	(3,597)	(1,806)	31	266	(5,106)
(In millions of Korean won)			2017		
	Beginning	Impairment	Reversal	Others	Ending
Accumulated impairment losses on other intangible assets	(4,179)		35	547	(3,597)

From 2018, the Group has to pay the fine, if the actual emission exceeds the targeted emission amount; therefore, the emission rights (intangible asset) do not occur even if it is below the targeted emission amount.

Changes in emission rights for the year ended December 31, 2017, are as follows:

(KAU, in millions of Korean won)

		cable r 2016	Appli under		To	otal
		Carrying	_	Carrying		Carrying
	Quantity	amount	Quantity	amount	Quantity	amount
Beginning Additional	99,283	-	104,920	-	204,203	-
allocation Borrowings of	578	-	17,046	-	17,624	-
emission permits Surrender of	18,306	-	(18,306)	-	-	-
emission permits Revocation of	(117,484)	-	-	-	(117,484)	-
allocation	(683)	-	(398)	-	(1,081)	-
Ending		-	103,262	-	103,262	_

16. Deferred Income Tax Assets and Liabilities

Details of deferred income tax assets and liabilities as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018				
	Assets	Liabilities	Net amount		
01.	00.470		00.470		
Other provisions	62,179	-	62,179		
Impairment losses on property and equipment	4,132	-	4,132		
Share-based payments	11,868	-	11,868		
Provisions for guarantees	20,298	-	20,298		
Gains on valuation of derivatives	-	(13,188)	(13,188)		
Present value discount	-	(34)	(34)		
Losses on fair value hedged item	-	(25,873)	(25,873)		
Accrued interest	-	(41,687)	(41,687)		
Deferred loan origination fees and costs	-	(139,697)	(139,697)		
Gains on revaluation	-	(286,739)	(286,739)		
Investments in subsidiaries and associates	29,410	(67,358)	(37,948)		
Gains on valuation of security investment	-	(53,384)	(53,384)		
Defined benefit liabilities	387,667	-	387,667		
Accrued expenses	202,220	-	202,220		
Retirement insurance expense	-	(343,176)	(343,176)		
Adjustments to the prepaid contributions	-	(19,033)	(19,033)		
Others	183,561	(28,902)	154,659		
	901,335	(1,019,071)	(117,736)		
Offsetting of deferred income tax assets and					
liabilities	(898,204)	898,204	-		
	3,131	(120,867)	(117,736)		

(In millions of Korean won)	2017				
· · · · · · · · · · · · · · · · · · ·	Assets	Liabilities	Net amount		
Other provisions	71,870	-	71,870		
Impairment losses on property and equipment	5,411	-	5,411		
Interest on equity index-linked deposits	43	-	43		
Share-based payments	17,014	-	17,014		
Provisions for guarantees	24,341	-	24,341		
Gains on valuation of derivatives	-	(19,239)	(19,239)		
Present value discount	-	(58)	(58)		
Losses on fair value hedged item	-	(15,698)	(15,698)		
Accrued interest	-	(43,328)	(43,328)		
Deferred loan origination fees and costs	-	(131,911)	(131,911)		
Gains on revaluation	-	(306,344)	(306,344)		
Investments in subsidiaries and associates	16,697	(100,238)	(83,541)		
Gains on valuation of security investment	21,483	-	21,483		
Defined benefit liabilities	332,930	-	332,930		
Accrued expenses	128,700	-	128,700		
Retirement insurance expense	-	(301,261)	(301,261)		
Adjustments to the prepaid contributions	-	(16,236)	(16,236)		
Others	164,322	(18,579)	145,743		
-	782,811	(952,892)	(170,081)		
Offsetting of deferred income tax assets and					
liabilities	(780,761)	780,761	-		
	2,050	(172,131)	(170,081)		

Unrecognized deferred income tax liabilities

No deferred income tax liabilities have been recognized for the taxable temporary difference of \forall 42,404 million associated with investments in subsidiaries and associates as at December 31, 2018, due to the following reasons:

- The Group is able to control the timing of the reversal of the temporary difference.
- It is probable that the temporary difference will not be reversed in the foreseeable future.

As at December 31, 2018, no deferred income tax liabilities have been recognized for the taxable temporary difference of \forall 65,288 million arising from the initial recognition of goodwill from the merger of Housing and Commercial Bank as in 2001.

Unrecognized deferred income tax assets

No deferred income tax assets have been recognized for the deductible temporary difference of ₩ 8,938 million associated with investments in subsidiaries and associates as at December 31, 2018, because it is not probable that the temporary differences will be reversed in the foreseeable future.

No deferred income tax assets have been recognized for deductible temporary differences of $\mbox{$W$}$ 363 million and $\mbox{$W$}$ 15,029 million associated with accrued expenses and others, respectively, as at December 31, 2018, due to the uncertainty that these will be realized in the future.

Changes in cumulative temporary differences for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018					
	Beginning ¹	Decrease	Increase	Ending			
Deductible temporary differences							
Other provisions	256,282	256,282	226,103	226,103			
Impairment losses on property	200,202	200,202	220,100	220,100			
and equipment	19,678	19,678	15,027	15,027			
Interest on equity index-linked	,	,	,	,			
deposits	155	155	-	_			
Share-based payments	61,870	61,870	43,156	43,156			
Provisions for guarantees	98,294	98,294	73,809	73,809			
Loss on SPE repurchase	80,204	80,204	-	-			
Investment in subsidiaries and							
associates	81,336	13,835	48,382	115,883			
Gains on valuation of security							
investment	75,642	75,642	-	-			
Defined benefit liabilities	1,210,654	114,562	313,608	1,409,700			
Accrued expenses	467,999	467,999	735,712	735,712			
Others	881,600	353,386	154,307	682,521			
	3,233,714	1,541,907	1,610,104	3,301,911			
Unrecognized deferred income							
tax assets							
Accrued expenses	-			363			
Loss on SPE repurchase	80,204			-			
Investment in subsidiaries and							
associates	18,084			8,938			
Others	12,500		_	15,030			
	3,122,926			3,277,580			
Tax rate (%) ²	27.50			27.50			
Total deferred income tax assets			·				
from deductible temporary							
differences	858,805		_	901,335			

(In millions of Korean won)	2018				
	Beginning ¹	Decrease	Increase	Ending	
Taxable temporary differences					
Losses from fair value hedge	(57,083)	(57,083)	(94,085)	(94,085)	
Accrued interest	(157,556)	(116,532)	(110,564)	(151,588)	
Deferred loan origination					
fees and costs	(479,671)	(479,671)	(507,988)	(507,988)	
Gains on valuation of derivatives	(52,764)	(52,764)	(47,956)	(47,956)	
Present value discount	(209)	(209)	(124)	(124)	
Goodwill from merger	(65,288)	-	-	(65,288)	
Gains on revaluation	(1,113,979)	(71,292)	-	(1,042,687)	
Investment in subsidiaries and					
associates	(370,348)	(130,476)	(47,472)	(287,344)	
Gains on valuation of security					
investment	-	-	(194,124)	(194,124)	
Retirement insurance expense	(1,095,495)	(82,468)	(234,884)	(1,247,911)	
Adjustments to the prepaid					
contributions	(59,040)	(59,040)	(69,212)	(69,212)	
Others	(72,737)	(12,708)	(45,069)	(105,098)	
	(3,524,170)	(1,062,243)	(1,351,478)	(3,813,405)	
Unrecognized deferred income					
tax liabilities					
Goodwill from merger	(65,288)			(65,288)	
Investments in subsidiaries and					
associates	(4,901)			(42,404)	
	(3,453,981)			(3,705,713)	
Tax rate (%) ²	27.50			27.50	
Total deferred income tax					
liabilities from taxable					
temporary differences	(949,845)		_	(1,019,071)	

¹Restated based on Korean IFRS 1109.

² As the corporate tax rate was changed due to the revision of the tax law at the end of 2017, deferred tax assets (liabilities) expected to be realized after 2018 are calculated using 27.5%.

(In millions of Korean won)	2017					
	Beginning	Decrease	Increase	Ending		
Deductible temporary differences						
Other provisions	291,350	291,350	261,346	261,346		
Impairment losses on property	291,330	291,330	201,040	201,040		
and equipment	20,812	20,812	19,678	19,678		
Interest on equity index-linked	20,012	20,012	13,070	13,070		
deposits	168	168	155	155		
Share-based payments	43,008	43,008	61,870	61,870		
Provisions for guarantees	126,319	126,319	88,512	88,512		
Loss on SPE repurchase	80,204	-	-	80,204		
Investment in subsidiaries and	00,20			00,20		
associates	814,685	801,876	64,499	77,308		
Gains on valuation of security	,	,	- 1, 100	,		
investment	282,872	282,872	78,120	78,120		
Defined benefit liabilities	1,239,914	205,084	175,824	1,210,654		
Accrued expenses	959,532	959,532	467,999	467,999		
Others	759,606	219,134	70,541	611,013		
_	4,618,470	2,950,155	1,288,544	2,956,859		
Unrecognized deferred income				_		
tax assets						
Loss on SPE repurchase	80,204			80,204		
Investment in subsidiaries and						
associates	788,196			18,084		
Others	21,797			12,500		
_	3,728,273		-	2,846,071		
Tax rate (%)	24.20			27.50		
Total deferred income tax assets			-			
from deductible temporary						
differences	903,002		_	782,811		

(In millions of Korean won)	2017				
	Beginning	Decrease	Increase	Ending	
Taxable temporary differences					
Losses from fair value hedge	(59,235)	(59,235)	(57,083)	(57,083)	
Accrued interest	(181,165)	(136, 158)	(112,549)	(157,556)	
Deferred loan origination fees					
and costs	(497,149)	(497,149)	(479,677)	(479,677)	
Gains on valuation of derivatives	(42,294)	(42,294)	(69,960)	(69,960)	
Present value discount	(92)	(92)	(209)	(209)	
Goodwill from merger	(65,288)	-	-	(65,288)	
Gains on revaluation	(1,119,379)	(5,399)	-	(1,113,980)	
Investment in subsidiaries and					
associates	(387,268)	(71,768)	(52,887)	(368,387)	
Retirement insurance expense	(1,119,041)	(170,469)	(146,923)	(1,095,495)	
Adjustments to the prepaid					
contributions	(62,569)	(61,034)	(57,505)	(59,040)	
Others	(84,577)	(28,893)	(11,898)	(67,582)	
_	(3,618,057)	(1,072,491)	(988,691)	(3,534,257)	
Unrecognized deferred income					
tax liabilities					
Goodwill from merger	(65,288)			(65,288)	
Investments in subsidiaries and					
associates	(17,205)			(4,901)	
	(3,535,564)		·	(3,464,068)	
Tax rate (%)	24.20			27.50	
Total deferred income tax	_		-	_	
liabilities from taxable					
temporary differences	(855,330)			(952,892)	

17. Other Assets

Details of other assets as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Other financial assets		
Other receivables	1,921,593	3,570,556
Accrued income	793,340	777,629
Guarantee deposits	1,019,169	1,041,519
Domestic exchange settlement debits	476,349	944,697
Others	11,843	59,294
Allowances for loan losses	(21,775)	(50,823)
Present value discount	(1,322)	(1,409)
	4,199,197	6,341,463
Other non-financial assets		
Other receivables	61	49
Prepaid expenses	130,432	108,685
Guarantee deposits	3,061	3,131
Others	74,649	68,829
Allowances on other assets	(16,992)	(22,575)
	191,211	158,119
	4,390,408	6,499,582

Changes in allowances for loan losses on other assets for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018		
	Other financial	Other non-	
	assets	financial assets	Total
Beginning ¹	54,190	22,575	76,765
Provision	1,179	(3,720)	(2,541)
Written-off	(34,773)	(1,863)	(36,636)
Others	1,179	-	1,179
Ending	21,775	16,992	38,767

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)	2017		
	Other financial	Other non-	
	assets	financial assets	Total
Beginning	60,062	23,305	83,367
Provision	2,042	1,239	3,281
Written-off	(12,413)	(1,969)	(14,382)
Others	1,132	-	1,132
Ending	50,823	22,575	73,398

18. Assets Held for Sale

Details of assets held for sale as at December 31, 2018 and 2017, are as follows:

Accumulated
(In millions of Korean won) 2018

Accumulated				
	Acquisition cost ¹	impairment losses	Carrying amount	Fair value less costs to sell
Land	16,048	(3,442)	12,606	16,552
Buildings	9,054	(4,708)	4,346	4,403
	25,102	(8,150)	16,952	20,955

(In millions of Korean won) 2017

	Accumulated			
	Acquisition cost ¹	impairment losses	Carrying amount	Fair value less costs to sell
Land	133,445	(1,492)	131,953	251,520
Buildings	34,862	(11,309)	23,553	24,548
	168,307	(12,801)	155,506	276,068

¹ Acquisition cost of buildings held for sale is net of accumulated depreciation before classified as assets held for sale.

The valuation technique and input variables that are used to measure the fair value of assets held for sale as at December 31, 2018, are as follows:

(In millions of Kore	ean won)
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20	18
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(,				
	Fair value	Valuation technique ¹	Unobservable inputs ²	Estimated range of unobservable inputs(%)	Effect of unobservable inputs on fair value
		Market comparison	Adjustment index	0.30 ~ 1.08	Fair value increases as the adjustment index rises
Land and buildings	20,955	approach model and others	Adjustment ratio	-20.00 ~ 0.00	Fair value decreases as the absolute value of adjustment ratio rises

¹ The appraisal value is adjusted by the adjustment ratio in the event the public sale is unsuccessful.

The fair values of assets held for sale were measured by qualified independent appraisers with experience in valuing similar properties in the same area. In addition, per the fair value hierarchy on Note 6.1, the fair value hierarchy of all investment properties has been categorized and classified as Level 3.

² Adjustment index is calculated using the real estate index, the producer price index, or land price volatility.

Changes in accumulated impairment losses of assets held for sale for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

Beginning	Provision	Reversal	Others	Ending
(12,801)	(5,281)	286	9,646	(8,150)

(In millions of Korean won)

2018

Beginning	Provision	Reversal	Others	Ending
(13,935)	(16,994)	5,138	12,990	(12,801)

As at December 31, 2018, assets held for sale consist of eight real estates of closed offices, which were committed to sell by the management, but not yet sold as at December 31, 2018. Negotiation with buyers is in process for the two assets and the remaining six assets are also being actively marketed.

19. Deposits

Details of deposits as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Demand deposits		
Demand deposits in Korean won	112,746,957	111,232,743
Demand deposits in foreign currencies	6,242,996	6,677,710
	118,989,953	117,910,453
Time deposits		
Time deposits in Korean won	144,387,450	126,778,455
Time deposits in foreign currencies	5,664,671	4,622,516
Fair value adjustments on fair value hedged time		
deposits in foreign currencies	(89,265)	(51,033)
	5,575,406	4,571,483
	149,962,856	131,349,938
Certificates of deposits	3,531,719	3,218,540
	272,484,528	252,478,931

20. Debts

Details of debts as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Borrowings	16,689,574	14,114,645
Bonds sold under repurchase agreements		
and others	444,066	710,370
Call money	362,415	985,738
	17,496,055	15,810,753

Details of borrowings as at December 31, 2018 and 2017, are as follows:

(In millions of P	Korean won)		Annual interest rate		
		Lenders	(%)	2018	2017
Borrowings in Korean won	Borrowings from the Bank of Korea Borrowings from the	Bank of Korea	0.50 ~ 0.75	1,672,714	1,888,880
	government Borrowings from non- banking financial	SEMAS and others	0.00 ~ 3.00	1,745,939	1,726,543
	institutions	Korea Development Bank Korea Development Bank	0.22 ~ 2.70	372,853	342,376
	Other borrowings	and others	$0.00 \sim 3.90$	3,965,534	3,300,884
			-	7,757,040	7,258,683
Borrowings in	1	Bank of America N.A. and	- -		
foreign currencies	Due to banks Borrowings from	others Central Bank of Uzbekistan	-	13,353	19,820
	banking institutions Borrowings from	and others	0.00 ~ 3.53	7,110,028	5,463,262
	other financial	Export Import Bank			
	institutions Other borrowings in	of Korea and others Standard Chartered Bank	3.20 ~ 3.94	18,725	76,134
	foreign currencies	and others	-	1,790,428	1,296,746
			-	8,932,534	6,855,962
			-	16,689,574	14,114,645
			-		

Details of bonds sold under repurchase agreements and others as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

		Annual interest rate		
	Lenders	(%)	2018	2017
Bonds sold under repurchase	Individuals, groups,			
agreements	corporations	1.23~1.73	436,471	700,466
Bills sold	Counter sale	0.10~1.20	7,595	9,904
			444,066	710,370

Details of call money as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

		Annual interest rate		
	Lenders	(%)	2018	2017
Call money in Korean won Call money in	-	-	-	577,100
foreign currencies	Standard Chartered Bank and others	2.42~4.70	362,415	408,638
		_	362,415	985,738

21. Debentures

Details of debentures as at December 31, 2018 and 2017, are as follows:

Debentures in Korean won Structured debentures 5.65 ~ 5.86 34,320 135,800 Subordinated fixed rate debentures 2.96 ~ 4.35 3,422,729 2,888,411 Fixed rate debentures 1.48 ~ 2.44 15,024,545 13,236,365 Floating rate debentures 1.72 ~ 1.77 640,000 -	(In millions of Korean won)	Annual interest rate (%)	2018	2017
Subordinated fixed rate debentures 2.96 ~ 4.35 3,422,729 2,888,411 Fixed rate debentures 1.48 ~ 2.44 15,024,545 13,236,365 Floating rate debentures 1.72 ~ 1.77 640,000 - 19,121,594 16,260,576 Fair value adjustments on fair value hedged debentures in Korean won 19,252 19,891 Discount on debentures in Korean won (11,792) (36,920) 19,129,054 16,243,547 Debentures in foreign currencies 1.63 ~ 3.63 2,725,700 2,142,800 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) Discount on debentures in foreign currencies (11,724) (12,300) Currencies (11,724) (29,40,251)	Debentures in Korean won	(73)		
Fixed rate debentures 1.48 ~ 2.44 15,024,545 13,236,365 Floating rate debentures 1.72 ~ 1.77 640,000 - 19,121,594 16,260,576 Fair value adjustments on fair value hedged debentures in Korean won 19,252 19,891 Discount on debentures in Korean won (11,792) (36,920) 19,129,054 16,243,547 Debentures in foreign currencies 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) Currencies (11,724) (12,300) 4,034,531 2,940,251	Structured debentures	5.65 ~ 5.86	34,320	135,800
Total Floating rate debentures 1.72 ~ 1.77 640,000 19,121,594 16,260,576	Subordinated fixed rate debentures	2.96 ~ 4.35	3,422,729	2,888,411
19,121,594 16,260,576	Fixed rate debentures	1.48 ~ 2.44		13,236,365
Fair value adjustments on fair value hedged debentures in Korean won 19,252 19,891 Discount on debentures in Korean won (11,792) (36,920) 19,129,054 16,243,547 Debentures in foreign currencies Value adjustments on fair value hedged debentures 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 4,070,328 2,978,492 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) 4,034,531 2,940,251	Floating rate debentures	1.72 ~ 1.77	640,000	-
hedged debentures in Korean won 19,252 19,891 Discount on debentures in Korean won (11,792) (36,920) 19,129,054 16,243,547 Debentures in foreign currencies Floating rate debentures 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 4,070,328 2,978,492 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) 4,034,531 2,940,251			19,121,594	16,260,576
Discount on debentures in Korean won (11,792) (36,920) 19,129,054 16,243,547 Debentures in foreign currencies Value adjustments 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) 4,034,531 2,940,251	Fair value adjustments on fair value			
Debentures in foreign currencies Floating rate debentures 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) Comparison of the comparison of the currencies (11,724) (12,300) Comparison of the comparison of the currencies (11,724) (12,300) Comparison of the cu	hedged debentures in Korean won		19,252	19,891
Debentures in foreign currencies Floating rate debentures 0.00 ~ 3.72 1,344,628 835,692 Fixed rate debentures 1.63 ~ 3.63 2,725,700 2,142,800 4,070,328 2,978,492 Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) 4,034,531 2,940,251	Discount on debentures in Korean won		(11,792)	(36,920)
Floating rate debentures $0.00 \sim 3.72$ $1,344,628$ $835,692$ Fixed rate debentures $1.63 \sim 3.63$ $2,725,700$ $2,142,800$ $4,070,328$ Fair value adjustments on fair value hedged debentures in foreign currencies $(24,073)$ $(25,941)$ Discount on debentures in foreign currencies $(11,724)$ $(12,300)$ $4,034,531$ $2,940,251$			19,129,054	16,243,547
Floating rate debentures $0.00 \sim 3.72$ $1,344,628$ $835,692$ Fixed rate debentures $1.63 \sim 3.63$ $2,725,700$ $2,142,800$ $4,070,328$ Fair value adjustments on fair value hedged debentures in foreign currencies $(24,073)$ $(25,941)$ Discount on debentures in foreign currencies $(11,724)$ $(12,300)$ $4,034,531$ $2,940,251$	Debentures in foreign currencies			
A,070,328 2,978,492	_	0.00 ~ 3.72	1,344,628	835,692
Fair value adjustments on fair value hedged debentures in foreign currencies (24,073) (25,941) Discount on debentures in foreign currencies (11,724) (12,300) 4,034,531 2,940,251	Fixed rate debentures	1.63 ~ 3.63	2,725,700	2,142,800
hedged debentures in foreign (24,073) (25,941) currencies (11,724) (12,300) currencies 4,034,531 2,940,251			4,070,328	2,978,492
Discount on debentures in foreign (11,724) (12,300) (12,300) (10,301)			·	
currencies (11,724) (12,300) 4,034,531 2,940,251	currencies		(24,073)	(25,941)
4,034,531 2,940,251	Discount on debentures in foreign		,	
<u> </u>	currencies		(11,724)	(12,300)
23,163,585 19,183,798			4,034,531	2,940,251
			23,163,585	19,183,798

Changes in debentures based on face value for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018		
	Beginning	Issues	Repayments	Others	Ending
Debentures in Korean won					
Structured debentures Subordinated fixed rate	135,800	-	(101,480)	-	34,320
debentures	2,888,411	600,000	(65,682)	-	3,422,729
Fixed rate debentures	13,236,365	11,761,400	(9,973,220)	-	15,024,545
Floating rate debentures	-	640,000	-	-	640,000
	16,260,576	13,001,400	(10,140,382)		19,121,594
Debentures in foreign currencies					
Floating rate debentures	835,692	725,638	(274,130)	57,428	1,344,628
Fixed rate debentures	2,142,800	493,022	-	89,877	2,725,699
	2,978,492	1,218,660	(274,130)	147,305	4,070,327
	19,239,068	14,220,060	(10,414,512)	147,305	23,191,921
(In millions of Korean won)			2017		
(In millions of Korean won)	Beginning	Issues	2017 Repayments	Others	Ending
(In millions of Korean won) Debentures in Korean won	Beginning	Issues		Others	Ending
	Beginning 337,500	Issues		Others	Ending 135,800
Debentures in Korean won Structured debentures		Issues -	Repayments	Others -	
Debentures in Korean won Structured debentures Subordinated fixed rate	337,500	Issues - 12,198,200	(201,700)	Others -	135,800
Debentures in Korean won Structured debentures Subordinated fixed rate debentures	337,500 3,196,993	-	(201,700) (308,582)	Others	135,800 2,888,411
Debentures in Korean won Structured debentures Subordinated fixed rate debentures Fixed rate debentures	337,500 3,196,993 7,259,095	-	(201,700) (308,582) (6,220,930)	Others	135,800 2,888,411
Debentures in Korean won Structured debentures Subordinated fixed rate debentures Fixed rate debentures	337,500 3,196,993 7,259,095 680,000	- 12,198,200 -	(201,700) (308,582) (6,220,930) (680,000)	Others	135,800 2,888,411 13,236,365
Debentures in Korean won Structured debentures Subordinated fixed rate debentures Fixed rate debentures Floating rate debentures Debentures in foreign	337,500 3,196,993 7,259,095 680,000	- 12,198,200 -	(201,700) (308,582) (6,220,930) (680,000)	Others (79,241)	135,800 2,888,411 13,236,365
Debentures in Korean won Structured debentures Subordinated fixed rate debentures Fixed rate debentures Floating rate debentures Debentures in foreign currencies	337,500 3,196,993 7,259,095 680,000 11,473,588	12,198,200 - 12,198,200	(201,700) (308,582) (6,220,930) (680,000) (7,411,212)	- - - - - -	135,800 2,888,411 13,236,365 - 16,260,576
Debentures in Korean won Structured debentures Subordinated fixed rate debentures Fixed rate debentures Floating rate debentures Debentures in foreign currencies Floating rate debentures	337,500 3,196,993 7,259,095 680,000 11,473,588	- 12,198,200 - 12,198,200 884,239	(201,700) (308,582) (6,220,930) (680,000) (7,411,212)	- - - - - - (79,241)	135,800 2,888,411 13,236,365 - 16,260,576 835,692

22. Provisions

Details of provisions as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Provisions for unused loan commitments	103,882	106,963
Provisions for acceptances and guarantees	73,897	88,808
Provisions for asset retirement obligation	95,396	85,575
Others	35,199	76,846
	308,374	358,192

Changes in provisions for unused loan commitments, acceptances and guarantees for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018

	Provisions for unused loan commitments			Provisions for acceptances and guarantees			
	12-month	credit losses		12-month		Lifetime expected credit losses	
	expected credit losses	Non- impaired	Impaired	expected credit losses	Non- impaired	Impaired	
Beginning ¹	74,885	27,178		40,277	39,628	18,744	
Transfer between stages							
Transfer to 12-month expected credit							
losses	10,001	(9,935)	(66)	661	(661)	-	
Transfer to lifetime expected credit							
losses	(7,701)	7,784	(83)	(534)	676	(142)	
Impairment	(201)	(667)	867	(6)	(87)	93	
Provision (reversal) for							
loan losses	(2,204)	4,377	(718)	(14,515)	(10,174)	(898)	
Others (effects of							
changes in foreign							
exchange rate, etc.)	207	158	-	408	243	184	
Ending	74,987	28,895		26,291	29,625	17,981	

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)

2017

- \$				
Provisions for unused loan commitments	Provisions for acceptances and guarantees	Total		
124,991	126,428	251,419		
(1,317)	(3,370)	(4,687)		
(16,711)	(34,250)	(50,961)		
106,963	88,808	195,771		
	unused loan commitments 124,991 (1,317) (16,711)	unused loan commitments acceptances and guarantees 124,991 126,428 (1,317) (3,370) (16,711) (34,250)		

Changes in provisions for asset retirement obligation for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Beginning	85,575	77,810
Increase	1,780	2,778
Reversal	(154)	(336)
Used	(2,534)	(6,712)
Unwinding of discount	2,305	1,746
Effects of changes in foreign exchange rate	8,424	10,289
Ending	95,396	85,575

Provisions for asset retirement obligation are present value of estimated costs to be incurred for restoration of the leased properties. Actual expenses are expected to be incurred at the end of each lease contract. Three-year historical data of expired leases were used to estimate the average lease year. Also, the average restoration expense based on actual three-year historical data and the three-year historical average inflation rate were used to estimate the present value of estimated costs.

Changes in other provisions for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018

•					Greenhouse		
	Membership rewards program	Dormant accounts	Litigations	Financial guarantee liabilities ¹	Gas Emission liabilities	Others	Total
Beginning Provision	138	5,050	7,482	2,218	177	62,137	77,202
(Reversal) Used and	111	2,657	184	173	(177)	(10,620)	(7,672)
Others	(188)	(3,332)	(1,188)	-	-	(29,623)	(34,331)
Ending	61	4,375	6,478	2,391	_	21,894	35,199

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)

2017

					Greenhouse		
	Membership			Financial	Gas		
	rewards	Dormant		guarantee	Emission		
	program	accounts	Litigations	liabilities	liabilities1	Others	Total
Beginning	115	50,396	8,537	1,870	358	34,779	96,055
Provision							
(Reversal)	185	5,133	1,390	(8)	(181)	27,781	34,300
Used and							
Others	(162)	(50,479)	(2,445)			(423)	(53,509)
Ending	138	5,050	7,482	1,862	177	62,137	76,846

¹ As at December 31, 2017, the estimated greenhouse gas emission is 112,121 tons.

23. Net Defined Benefit Liabilities

Defined benefit plan

The Group operates defined benefit plans which have the following characteristics:

- The Group has the obligation to pay the agreed benefits to all its current and former employees.
- Actuarial risk (that benefits will cost more than expected) and investment risk fall, in substance, on the Group.

The net defined benefit liability recognized in the statements of financial position is calculated in accordance with actuarial valuation methods. Data such as discount rates, future salary growth rates, and mortality rates based on market data and historical data are used. Actuarial assumptions may differ from actual results, due to changes in the market, economic trends and mortality trends.

Changes in the net defined benefit liabilities for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018		
	Present value of		Net defined
	defined benefit	Fair value of	benefit
	obligation	plan assets	liabilities
Beginning	1,318,665	(1,310,097)	8,568
Current service cost	136,279	-	136,279
Past service cost ¹	26,663	-	26,663
Interest expense (income)	37,568	(37,327)	241
Remeasurements :			
-Actuarial loss arising from			
experience adjustment	26,780	-	26,780
-Actuarial loss arising from			
changes in demographic assumptions	9,775	-	9,775
-Actuarial loss arising from changes			
in financial assumptions	77,611	-	77,611
-Return on plan assets (excluding			
amounts included in interest income)	-	17,967	17,967
Contributions	-	(133,000)	(133,000)
Payments from plans (benefit payments)	(77,785)	77,785	-
Payments from the Group	(4,476)	-	(4,476)
Transfer in	2,677	(2,497)	180
Transfer out	(4,682)	4,682	-
Effects of changes in foreign exchange rate	17	-	17
Ending	1,549,092	(1,382,487)	166,605

¹ The amount of ₩ 22,306 million was transferred from other provisions as at December 31, 2017.

(In millions of Korean won)	2017		
	Present value of		Net defined
	defined benefit	Fair value of	benefit
	obligation	plan assets	liabilities
Beginning	1,380,236	(1,309,069)	71,167
Current service cost	141,486	-	141,486
Past service cost	4,185	-	4,185
Interest expense (income)	30,159	(28,360)	1,799
Remeasurements :			
-Actuarial loss arising from			
experience adjustment	11,520	-	11,520
-Actuarial gain arising from changes			
in financial assumptions	(42,579)	-	(42,579)
-Return on plan assets (excluding			
amounts included in interest income)	-	12,356	12,356
Contributions	-	(187,500)	(187,500)
Payments from plans (benefit payments)	(199,522)	199,522	-
Payments from the Group	(3,978)	-	(3,978)
Transfer in	2,744	(2,608)	136
Transfer out	(5,562)	5,562	-
Effects of changes in foreign exchange rate	(24)		(24)
Ending	1,318,665	(1,310,097)	8,568

Details of the net defined benefit liabilities as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Present value of defined benefit obligation	1,549,092	1,318,665
Fair value of plan assets	(1,382,487)	(1,310,097)
Net defined benefit liabilities	166,605	8,568

Details of post-employment benefits recognized in profit or loss as employee compensation and benefits for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Current service cost	136,279	141,486
Past service cost	4,357	4,185
Interest expenses of net defined benefit liabilities	241	1,799
Total	140,877	147,470

Remeasurements of net defined benefit liabilities recognized as other comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Remeasurements:		
- Actuarial gain arising from		
changes in demographic assumptions	(9,775)	-
 Actuarial loss arising from experience adjustment 	(26,780)	(11,520)
 Actuarial gain arising from changes 		
in financial assumptions	(77,611)	42,579
- Return on plan assets (excluding amounts included		
in interest income)	(17,967)	(12,356)
Income tax effects	36,336	(4,526)
Remeasurements after income tax	(95,797)	14,177

Details of fair value of plan assets as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018	
	Assets quoted	Assets not quoted	
	in an active market	in an active market	Total
Time deposits		1,382,487	1,382,487
(In millions of Korean won)		2017	
	Assets quoted	Assets not quoted	
	in an active market	in an active market	Total
Time deposits	-	1,310,097	1,310,097

Key actuarial assumptions used as at December 31, 2018 and 2017, are as follows:

	Ratio (%)	
	2018	2017
Discount rate	2.30	2.90
Salary growth rate	3.75	3.75
Turnover	1.00	1.00

Mortality assumptions are based on the 8th experience-based mortality table of Korea Insurance Development Institute of 2015.

The sensitivity of the defined benefit obligation to changes in the principal assumptions as at December 31, 2018, is as follows:

		Effect on defined benefit obligation		
	Changes in principal assumption	Increase in principal assumption	Decrease in principal assumption	
Discount rate	0.5% p	4.18% decrease	4.49% increase	
Salary growth rate	0.5% p	4.12% increase	3.89% decrease	
Turnover	0.5% p	0.39% decrease	0.41% increase	

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to significant actuarial assumptions is calculated using the projected unit credit method which is used to calculate the defined benefit obligation.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2018, is as follows:

(In millions of Korean won)

		Between	Between	Between		
	Less than	1 and 2	2 and 5	5 and 10	Over	
	1 year	years	years	years	10 years	Total
Pension benefits	34.207	83.204	465.152	937.292	2.708.298	4.228.153

The weighted average duration of the defined benefit obligations is 8.86 years.

Expected contributions to plan assets for the period after December 31, 2018, are estimated to be approximately \forall 150,000 million.

24. Other Liabilities

Details of other liabilities as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Other financial liabilities		
Other payables	2,253,535	4,006,412
Prepaid card and debit cards	2,351	2,018
Accrued expenses	2,679,685	2,356,270
Financial guarantee liabilities	29,867	24,337
Deposits for letter of guarantees and others	156,364	351,455
Domestic exchange settlement credits	1,679,914	39,445
Foreign exchanges settlement credits	102,187	124,728
Borrowings from other business accounts	13,166	5,408
Payables to trust accounts	5,285,108	5,018,031
Liabilities incurred from agency relationship	605,076	518,955
Account for agency businesses	460,949	257,760
Others	29,202	28,535
	13,297,404	12,733,354
Other non-financial liabilities		
Other payables	847,347	384,875
Unearned revenue	48,188	50,139
Accrued expenses	450,493	324,694
Withholding taxes	93,856	145,921
Others	78,776	104,583
_	1,518,660	1,010,212
	14,816,064	13,743,566

25. Equity

25.1 Capital Stock

Details of outstanding shares as at December 31, 2018 and 2017, are as follows:

	Ordinary shares	
•	2018	2017
Number of shares authorized	1,000,000,000	1,000,000,000
Face value per share		
(in Korean won)	5,000	5,000
Number of shares	404,379,116	404,379,116
Capital stock ¹	2,021,896	2,021,896

¹ In millions of Korean won.

25.2 Capital Surplus

Details of capital surplus as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Paid-in capital in excess of face value	4,604,417	4,604,417
Gain on business combination	397,669	397,669
Revaluation increment	177,229	177,229
Other capital surplus	39,473	40,378
	5,218,788	5,219,693

The gain on business combination is a gain from a bargain purchase related to the merger with Korea Long Term Credit Bank on December 31, 1998, in accordance with previous Korean GAAP.

25.3 Accumulated Other Comprehensive Income

Details of accumulated other comprehensive income as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018
Remeasurements of net defined benefit liabilities	(175,698)
Currency translation differences	(10,328)
Net losses on debt instruments at fair value through other	
comprehensive income	22,475
Net gains on equity instruments at fair value through other	
comprehensive income	302,014
Share of other comprehensive income	
of associates	(3,259)
Gains on cash flow hedging instruments	11,539
Losses on hedges of	
a net investment in a foreign operations	(30,959)
	115,784

(In millions of Korean won)	2017
Remeasurements of net defined benefit liabilities	(79,902)
Currency translation differences	(39,597)
Gains on valuation of	
available-for-sale financial assets	791,153
Share of other comprehensive income	
of associates	4,262
Gains on cash flow hedging instruments	7,751
Losses on hedges of	
a net investment in a foreign operations	(5,573)
	678,094

25.4 Retained Earnings

Retained earnings as at December 31, 2018 and 2017, consist of:

(In millions of Korean won)	2018	2017
Legal reserves	2,034,015	2,033,716
Regulatory reserve for credit losses	2,150,772	2,001,063
Voluntary reserves	12,522,628	11,044,972
Retained earnings before appropriation	2,603,983	2,324,000
	19,311,398	17,403,751

With respect to the allocation of net profit earned in a fiscal term, the Bank must set aside in its legal reserve an amount equal to at least 10% of its net income after tax as reported in the statement of comprehensive income each time it pays dividends on its net profits earned until its legal reserve reaches at least the aggregate amount of its paid-in capital in accordance with Article 40 of the Banking Act. The reserves can only be transferred to capital stock or be used to reduce deficit. With respect to the Group's branches overseas, a portion of the branch's net income is appropriated into legal reserves, in line with the financial legislation of the country where the overseas branch is located.

Regulatory Reserve for Credit Losses

Measurement and Disclosure of Regulatory Reserve for Credit Losses are required in accordance with Articles 29.1 through 29.2 of Regulation on Supervision of Banking Business.

Details of the regulatory reserve for credit losses as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Beginning	2,150,772	2,001,063
Amounts estimated to be appropriated	140,247	149,709
Ending	2,291,019	2,150,772

Adjustments to the regulatory reserve for credit losses for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Provision of regulatory reserve		
for credit losses1	247,207	149,709
Adjusted profit after provision of		
regulatory reserve for credit losses ²	2,011,991	2,024,996

¹ The amount expected to be appropriated is the amount required to reserve for credit losses, calculated based on the beginning balance of regulatory reserve for credit losses (including unearned reserves) that reflects the effect of adoption of Korean IFRS 1109 retrospectively.

26. Interest Income and Expense

Details of interest income, expense, and net interest income for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018
Interest income	
Securities at fair value through profit or loss	214,455
Loans at fair value through profit or loss	7,850
Securities at fair value through other comprehensive income	502,093
Loans at fair value through other comprehensive income	2,138
Due from financial institutions at amortized cost	68,029
Securities at amortized cost	320,361
Loans at amortized cost	8,798,656
Others	106,306
	10,019,888
Interest expense	
Deposits	3,019,866
Debts	319,017
Debentures	501,892
Others	78,391
	3,919,166
Net interest income	6,100,722

² Adjusted profit after provision of regulatory reserve for credit losses is calculated on the assumption that expected provision of regulatory reserve for credit losses which is measured in accordance with Banking Supervision Regulations would be reflected in net profit for the periods without consideration of income tax effect.

(In millions of Korean won)	2017 ¹
Interest income	
Due from financial institutions	72,959
Loans	7,503,022
Financial assets at fair value through profit or loss (under	
Korean IFRS 1039)	170,469
Financial investments	
Available-for-sale financial assets	389,570
Held-to-maturity financial assets	276,756
Others	96,117
	8,508,893
Interest expense	
Deposits	2,300,198
Debts	219,743
Debentures	369,224
Others	54,944
	2,944,109
Net interest income	5,564,784

¹ Interest income for the year ended December 31, 2017 has been restated according to changes in accounting policy concerning interest income reclassification.

27. Net Fee and Commission Income

Details of fee and commission income, and fee and commission expense for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Fee and commission income		
Banking activity fees	209,499	194,624
Lending activity fees	73,005	73,549
Credit card related fees	1,030	1,279
Debit card related fees		
and commissions	554	649
Agent activity fees	312,497	350,037
Trust and other fiduciary fees	287,385	305,989
Guarantee fees	32,423	29,419
Foreign currency related fees	92,140	93,096
Security activity commissions	146,883	176,209
Other business account commission		
on consignment	36,947	33,793
Others	230,428	212,836
	1,422,791	1,471,480
Fee and commission expense		
Trading activity related fees ¹	12,427	13,277
Lending activity fees	30,661	27,510
Credit card related fees	18,478	1,888

Outsourcing related fees 78,986	60,753
Foreign currency related fees 21,402	19,410
Management fees of written-off loans 12,680	10,359
Contributions to external institutions 23,949	25,037
Others 101,460	88,557
300,043	246,791
Net fee and commission income 1,122,748 1	,224,689

¹ Fees from financial assets/liabilities at fair value through profit or loss.

28. Net Gains or Losses from Financial Assets/Liabilities at Fair Value through Profit or Loss

28.1 Net Gains or Losses from Financial Assets/Liabilities at Fair Value through Profit or Loss

Net gains or losses from financial assets/liabilities at fair value through profit or loss are composed of dividend income and gains or losses arising from changes in the fair values, sales and redemptions.

Details for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018
Revenue from financial instruments at fair value through profit or loss	
Financial assets at fair value through profit or loss	
Debt instruments	249,860
Equity instruments	31,327
	281,187
Derivatives held for trading	
Interest rate	1,509,811
Currency	3,463,934
Stock or stock index	7,048
Others	987
	4,981,780
Financial liabilities at fair value through profit or loss	377
Other financial instruments	22
	5,263,366
Expense from financial instruments at fair value through profit or loss	
Financial assets at fair value through profit or loss	
Debt instruments	169,248
Equity instruments	37,844
	207,092
Derivatives held for trading	
Interest rate	1,554,325
Currency	3,169,608
Stock or stock index	4,473
Others	1,210
	4,729,616
Financial liabilities at fair value through profit or loss	203
Other financial instruments	60

	4,936,971
Net gains or losses from financial assets/liabilities at fair value through profit or loss	326,395
(In millions of Korean won)	2017 ¹
Gains related to financial instruments held for trading	
Financial assets held for trading Debt instruments	27,652
Equity instruments	24,142
_44,	51,794
Derivatives held for trading	· · · · · · · · · · · · · · · · · · ·
Interest rate	1,203,802
Currency	5,494,382
Stock or stock index	496
Others –	1,658
Financial Babildian hald for Anadian	6,700,338
Financial liabilities held for trading Other financial instruments	78 109
	6,752,319
-	0,752,519
Losses related to financial instruments held for trading Financial assets held for trading	
Debt instruments	79,391
Equity instruments	6,396
	85,787
Derivatives held for trading	
Interest rate	1,163,749
Currency Stock or stock index	5,573,651
Others	3,088
- Cuiers	2,647 6,743,135
Financial liabilities held for trading	125
Other financial instruments	117
<u> </u>	6,829,164
Net gains or losses from financial instruments held for trading	(76,845)
	(10,040)

¹ Interest income for the year ended December 31, 2017 has been restated according to changes in accounting policy concerning interest income reclassification.

28.2 Net Gains or Losses on Financial Instruments Designated at Fair Value through Profit or Loss

Net gain or loss from financial instruments designated at fair value through profit or loss includes dividend income and gains or losses arising from changes in the fair values, sales and redemptions.

There is no financial instruments designated at fair value through profit or loss for the year ended December 31, 2018.

Details of net gains or losses on financial instruments designated at fair value through profit or loss for the year ended December 31, 2017 are as follows:

(In millions of Korean won)	2017
Gains from financial assets designated at fair value through	
profit or loss	
Financial assets designated at fair value through profit or loss	6,022
Losses from financial assets designated at fair value through	
profit or loss	
Financial assets designated at fair value through profit or loss	384
Net gains or losses from financial assets designated at fair	
value through profit or loss	5,638

29. Other Operating Income and Expenses

Details of other operating income and expenses for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018
Other operating income	
Revenue related to financial assets at fair value through other	
comprehensive income	
Gains on redemption of the securities	
at fair value through other comprehensive income	230
Gains on sale of the securities	
at fair value through other comprehensive income	94,984
	95,214
Revenue related to financial assets at amortized cost	
Gains on sale of loans at amortized cost	15,691
	15,691
Gains on foreign exchange transactions	1,147,691
Dividend income	38,937
Others	86,307
	1,383,840
Other operating expense	-
Expenses related to financial assets at fair value through other comprehensive income	
Losses on sale of the securities	
at fair value through other comprehensive income	7,135
	7,135
Expenses related to financial assets at amortized cost	0.074
Losses on sale of loans at amortized cost	6,674

Losses on foreign exchanges transactions Others Net other operating expense	6,674 1,211,920 854,597 2,080,326 (696,486)
(In millions of Korean won)	2017
Other operating income	
Revenue related to available-for-sale financial assets	
Gains on redemption of available-for-sale financial assets	5
Gains on sale of available-for-sale financial assets	90,568
	90,573
Gains on foreign exchange transactions	2,257,371
Dividend income	112,781
Others	91,854
	2,552,579
Other operating expense	
Expense related to available-for-sale financial assets	
Losses on sale of available-for-sale financial assets	147,558
Impairment losses on available-for-sale financial assets	12,405
	159,963
Losses on foreign exchange transactions	1,909,984
Others	770,719
	2,840,666
Net other operating expense	(288,087)

30. General and Administrative Expenses

30.1 General and Administrative Expenses

Details of general and administrative expenses for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Employee Benefits		
Salaries and short-term employee benefits - salaries Salaries and short-term employee benefits - welfare	1,522,003	1,531,078
expense	652,781	644,881
Post-employment benefits - defined benefit plans	140,877	147,470
Post-employment benefits - defined contribution plans	6,719	3,594
Termination benefits	209,737	151,172
Share-based payments	4,051	33,148
	2,536,168	2,511,343
Depreciation and amortization	246,488	236,436
Other general and administrative expenses		
Rental expense	259,194	233,780
Tax and dues	108,389	97,786
Communication	23,163	22,281
Electricity and utilities	21,641	22,093
Publication	9,771	11,338
Repairs and maintenance	11,263	11,193
Vehicle	7,367	7,074
Travel	4,096	4,307
Training	17,521	16,764
Service fees	107,678	92,478
Others	414,256	398,949
	984,339	918,043
	3,766,995	3,665,822

30.2 Share-based Payments

30.2.1 Share Grants

The Group changed the scheme of share-based payment from share option to share grants in November 2007. The share grant award program is an incentive plan that sets, on grant date, the maximum number of shares that can be awarded. Actual shares to be granted is determined in accordance with achievement of performance targets over the vesting period.

Details of the share grants as at December 31, 2018, are as follows:

(In number of shares)

Share grants	Grant date	Number of granted shares ^{1, 2}	Vesting conditions
Series 69			Service provision, TSR 30~50%, Performance of
	2017.01.01	173,030	the company and responsibilities 50~70%
			Service provision, TSR 30~50%, Performance of
Series 71	2017.08.26	4,372	the company and responsibilities 50~70%
			Service provision, TSR 30~50%, Performance of
Series 72	2017.08.28	5,601	the company and responsibilities 50~70%
			Service provision, TSR 30~50%, EPS and Asset
Series 73	2017.11.21	27,786	Quality 50~70%
			Service provision, TSR 30~50%, Performance of
Series 74	2018.01.01	190,536	the company and responsibilities 50~70%
Deferred grant in 2015	-	33,050	
Deferred grant in 2016	-	110,967	
Deferred grant in 2017	-	139,697	
		685,039	

¹ Granted shares in relation to Series 69, 71 ~ 74 represent the total number of shares granted to directors and employees but not vested at the end of reporting period. The number of deferred grants represents residual shares that have been vested at the end of reporting period.

Details of share grants linked to short-term performance as at December 31, 2018, are as follows:

Share grants ¹	Grant date	Number of vested shares	Vesting conditions
Granted shares for 2015	2015.01.01	58,366	Vested
Granted shares for 2016	2016.01.01	83,794	Vested
Granted shares for 2017	2017.01.01	80,331	Vested
Granted shares for 2018	2018.01.01	109,871	Proportion to service period

¹ Options are given to the executives and employees during the year for deferred payment schedule (after the retirement date), payment proportion and payment period. Due to these given options, the deferred payment period might be a maximum of five years after the retirement date.

² Certain percentages among the granted shares are deferred for over three years to five years from the time of initial exercising.

Share grants are measured at fair value using the Monte Carlo Simulation Model and assumptions used in determining the fair value as at December 31, 2018, are as follows:

(In Korean won)	Expected exercise period (Years)	Risk free rate (%)	Fair value (Market performance condition)	Fair value (Non-market performance condition)
Linked to long-term perfo	rmance			
Series 69	0.00~5.00	1.75%	40,224~47,153	40,224~47,153
Series 71	1.00~4.00	1.75%	41,473~45,236	41,473~45,236
Series 72	1.00~4.00	1.75%	41,473~45,236	41,473~45,236
Series 73	0.89~3.89	1.75%	41,614~45,382	41,614~45,382
Series 74	1.00~6.00	1.75%	38,510~44,580	39,077~45,236
Grant deferred in 2015	0.00~3.00	1.75%	-	42,682~47,153
Grant deferred in 2016	0.00~5.00	1.75%	-	40,224~47,153
Grant deferred in 2017	0.00~4.00	1.75%	-	41,473~47,153
Linked to short-term perfo	ormance			
Share granted in 2015	0.00~5.00	1.75%	-	40,224~47,153
Share granted in 2016	0.00~6.00	1.75%	-	39,077~47,153
Share granted in 2017	0.00~6.00	1.75%	-	39,077~47,153
Share granted in 2018	1.00~6.00	1.75%	-	39,077~45,236

Expected volatility is based on the historical volatility of the share price over the most recent period that is generally commensurate with the expected term of the grant and the current stock price as at December 31, 2018, was used for the underlying asset price. Also, the average three-year historical dividend rate was used as the expected dividend rate.

As at December 31, 2018 and 2017, the accrued expenses related to share-based payments, including share grants, amounted to $\mbox{$\mbox{$$\psi}$}$ 40,873 million and $\mbox{$\mbox{$$\mbox{$$\mbox{$$\mbox{$}$}$}}$ 58,897 million, respectively, and the compensation costs from share grants amounting to $\mbox{$\mbox{$$\mbox{$$\mbox{$}$}$}}$ 4,051 million and $\mbox{$\mbox{$$\mbox{$$\mbox{$}$}$}$ 33,148 million were incurred during the years ended December 31, 2018 and 2017, respectively.

30.2.2 Mileage Stock

Details of Mileage Stock as at December 31, 2018, are as follows:

(In number of shares)	Grant date	Number of granted shares ¹	Expected exercise period (Years) ¹	Number of exercisable shares ²
	2016.01.23		0.00~0.06	12,334
	2016.04.29	33,829 60	0.00~0.00	12,334
	2016.07.07	280	0.00~0.52	62
	2016.07.18	767	0.00~0.55	-
	2016.08.03	107	0.00~0.59	38
	2016.08.17	51	0.00~0.63	23
	2016.08.30	256	0.00~0.66	168
Share granted in 2016	2016.09.06	206	0.00~0.68	103
· ·	2016.10.07	105	0.00~0.77	69
	2016.11.01	118	0.00~0.84	24
	2016.12.07	211	0.00~0.93	96
	2016.12.08	43	0.00~0.94	32
	2016.12.15	12	0.00~0.96	12
	2016.12.20	309	0.00~0.97	169
	2016.12.28	76	0.00~0.99	40
	2016.12.30	210	0.00~1.00	79
	2017.01.09	28,925	0.00~1.02	13,198
	2017.02.03	43	0.00~1.09	28
	2017.04.03	82	0.00~1.25	61
	2017.05.22	20	0.00~1.39	20
	2017.07.03	52	0.00~1.50	52
	2017.08.07	29	0.00~1.60	19
	2017.08.08	5	0.00~1.60	2
	2017.08.16	204	0.00~1.62	166
Share granted in 2017	2017.08.17	40	0.00~1.63	32
Onare granted in 2017	2017.08.24	387	0.00~1.65	323
	2017.09.08	82	0.00~1.69	73
	2017.10.20	9	0.00~1.80	75
	2017.10.20	120	0.00~1.84	103
	2017.11.06			
		106	0.00~1.85	106
	2017.12.06	105	0.00~1.93	91
	2017.12.26	254	0.00~1.99	215
	2017.12.29	114	0.00~1.99	98
	2018.01.10	19,197	0.00~2.03	18,663
	2018.02.12	9	0.00~2.12	9
	2018.04.02	115	0.00~2.25	115
	2018.04.30	86	0.00~2.33	86
	2018.05.08	170	0.00~2.35	166
Share granted in 2018	2018.06.01	140	0.00~2.42	140
	2018.07.02	180	0.00~2.50	180
	2018.08.07	194	0.00~2.60	194
	2018.08.09	47 30	0.00~2.61 0.00~2.62	47 30
	2018.08.14 2018.08.16	30 130	0.00~2.62	30 130
	2018.09.07	106	0.00~2.62	106
	2010.00.01	100	0.00 2.00	100

2018.10.04	129	0.00~2.76	129
2018.11.01	258	0.00~2.84	258
2018.11.06	236	0.00~2.85	236
2018.12.04	21	0.00~2.93	21
2018.12.07	91	0.00~2.93	91
2018.12.03	132	0.00~2.92	132
2018.12.12	64	0.00~2.95	64
2018.12.18	271	0.00~2.96	271
2018.12.19	42	0.00~2.97	42
2018.12.31	127	0.00~3.00	127
	88,992		49,094

¹ Mileage stock is exercisable for two years after one year from the grant date. When the mileage stock is exercised, the closing price of prior month is applied. However, in case of transfer or retirement during the vesting period, mileage stock is exercisable at the closing price of the last month prior to transfer or retirement.

31. Non-operating Income and Expenses

Details of non-operating income and expenses for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Non-operating income		
Gains on disposal in property and		
equipment and assets held for sale	152,852	3,597
Rental income	26,429	25,063
Others	17,515	42,203
_	196,796	70,863
Non-operating expenses		
Losses on disposal in property and		
equipment and assets held for sale	5,590	6,006
Donation	91,943	39,752
Restoration cost	1,854	3,323
Others	53,237	95,249
_	152,624	144,330
Net non-operating income (expenses)	44,172	(73,467)

² The exercisable shares are assessed based on the stock price as at December 31, 2018. These shares are vested immediately at grant date.

32. Income Tax Expense

Income tax expense for the years ended December 31, 2018 and 2017, are as follows:

Current tax expense 806,618 Adjustments recognized in the period for current tax of prior years (4,856) Changes in deferred income tax assets (liabilities) 26,696 Income tax recognized directly in equity 36,863 Income tax recognized directly in equity 31,660 Net losses on equity instruments at fair value through other comprehensive income 13,660 Net losses on debt instruments at fair value through other comprehensive income (21,703) Exchange difference in foreign operation (9,346) Remeasurements of net defined benefit liabilities 36,336 Gain on hedges of a net investment in a foreign operations 9,629 Loss on cash flow hedging instruments (1,437) Share of other comprehensive income of associates 1,283 Consolidated tax effect (31,431) Tax expense 827,140 (In millions of Korean won) 2017 Tax payable 323,096 Current tax expense Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 217,754 Income tax recognized directly in equity 323,096	(In millions of Korean won)	2018
Adjustments recognized in the period for current tax of prior years 801,762 801,762 10,000 1	Tax payable	
Changes in deferred income tax assets (liabilities) 26,696 Income tax expense of overseas branches 6,863 Income tax recognized directly in equity 13,660 Net losses on equity instruments at fair value through other comprehensive income (21,703) Net losses on debt instruments at fair value through other comprehensive income (21,703) Exchange difference in foreign operation (9,346) Remeasurements of net defined benefit liabilities 36,336 Gain on hedges of a net investment in a foreign operations 9,629 Loss on cash flow hedging instruments (1,437) Share of other comprehensive income of associates 1,283 Reclassification of sale of securities at fair value through other comprehensive income (5,172) Consolidated tax effect (31,431) Tax expense 827,140 Consolidated tax effect (31,431) Tax payable 2017 Current tax expense 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 11,754 Income tax expense of overseas branches (2,27)	·	
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Net losses on equity instruments at fair value through other comprehensive income	· · · · · · · · · · · · · · · · · · ·	
Net losses on equity instruments at fair value through other comprehensive income Net losses on debt instruments at fair value through other comprehensive income Exchange difference in foreign operation Exchange difference in foreign operation Remeasurements of net defined benefit liabilities Gain on hedges of a net investment in a foreign operations Loss on cash flow hedging instruments Share of other comprehensive income of associates Reclassification of sale of securities at fair value through other comprehensive income Consolidated tax effect (In millions of Korean won) Tax expense Current tax expense Adjustments recognized in the period for current tax of prior years Changes in deferred income tax assets (liabilities) Changes in value of available-for-sale financial assets Exchange difference in foreign operation Loss on cash flow hedging instruments (A,526) Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments (A,526) Changes in oremeasurements of net defined benefit liabilities (A,526) Loss on cash flow hedging instruments (A,526) (B,7635) Consolidated tax effect (19,346)		6,863
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Gain on hedges of a net investment in a foreign operations 9,629 Loss on cash flow hedging instruments (1,437) Share of other comprehensive income of associates 1,283 Reclassification of sale of securities at fair value through other comprehensive income (5,172) Consolidated tax effect (31,431) Tax expense 827,140 (In millions of Korean won) 2017 Tax payable 342,256 Current tax expense 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 217,754 Income tax expense of overseas branches 4,721 Income tax recognized directly in equity 82,670 Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)		, ,
Loss on cash flow hedging instruments (1,437) Share of other comprehensive income of associates 1,283 Reclassification of sale of securities at fair value through other comprehensive income (5,172) Consolidated tax effect (31,431) Tax expense 827,140 (In millions of Korean won) 2017 Tax payable 2017 Current tax expense 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 217,754 Income tax expense of overseas branches 4,721 Income tax recognized directly in equity (82,670) Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)		
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Reclassification of sale of securities at fair value through other comprehensive income (5,172) Consolidated tax effect (31,431) Tax expense 827,140 (In millions of Korean won) 2017 Tax payable 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Adjustments recognized in the period for current tax of prior years 4,71 Income tax expense of overseas branches 4,721 Income tax recognized directly in equity (82,670) Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)		, ,
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Tax payable Current tax expense 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 217,754 Income tax expense of overseas branches 4,721 Income tax recognized directly in equity Changes in value of available-for-sale financial assets (82,670) Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	Tax expense	827,140
Current tax expense 342,256 Adjustments recognized in the period for current tax of prior years (19,160) Changes in deferred income tax assets (liabilities) 217,754 Income tax expense of overseas branches 4,721 Income tax recognized directly in equity Changes in value of available-for-sale financial assets (82,670) Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	(In millions of Korean won)	2017
Adjustments recognized in the period for current tax of prior years (19,160) 323,096 Changes in deferred income tax assets (liabilities) Income tax expense of overseas branches Income tax recognized directly in equity Changes in value of available-for-sale financial assets Exchange difference in foreign operation Changes in remeasurements of net defined benefit liabilities Changes in remeasurements of a net investment in a foreign operation Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	Tax payable	
Changes in deferred income tax assets (liabilities) Income tax expense of overseas branches Income tax recognized directly in equity Changes in value of available-for-sale financial assets Exchange difference in foreign operation Changes in remeasurements of net defined benefit liabilities Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments Share of other comprehensive loss of associates Consolidated tax effect 323,096 4,721 1,245 (82,670) Exchanges in remeasurements of net defined benefit liabilities (4,526) (81,966) (87,635) Consolidated tax effect (19,346)	Current tax expense	342,256
Changes in deferred income tax assets (liabilities)217,754Income tax expense of overseas branches4,721Income tax recognized directly in equity(82,670)Changes in value of available-for-sale financial assets(82,670)Exchange difference in foreign operation11,835Changes in remeasurements of net defined benefit liabilities(4,526)Loss on hedging investment of a net investment in a foreign operation(8,196)Loss on cash flow hedging instruments(2,833)Share of other comprehensive loss of associates(1,245)Consolidated tax effect(19,346)	Adjustments recognized in the period for current tax of prior years	(19,160)
Income tax expense of overseas branches Income tax recognized directly in equity Changes in value of available-for-sale financial assets (82,670) Exchange difference in foreign operation Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (87,635) Consolidated tax effect (19,346)		323,096
Income tax recognized directly in equity Changes in value of available-for-sale financial assets Exchange difference in foreign operation Changes in remeasurements of net defined benefit liabilities Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments Share of other comprehensive loss of associates (82,670) (82,670) (82,670) Exchanges in value of available-for-sale financial assets (4,526) (8,196) (8,196) (8,196) (87,635) Consolidated tax effect (19,346)	Changes in deferred income tax assets (liabilities)	217,754
Changes in value of available-for-sale financial assets Exchange difference in foreign operation Changes in remeasurements of net defined benefit liabilities Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (82,670) (4,526) (8,196) (2,833) (87,635) (87,635)	Income tax expense of overseas branches	4,721
Exchange difference in foreign operation 11,835 Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation (8,196) Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	Income tax recognized directly in equity	
Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	Changes in value of available-for-sale financial assets	(82,670)
Changes in remeasurements of net defined benefit liabilities (4,526) Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) Consolidated tax effect (19,346)	Exchange difference in foreign operation	11,835
Loss on hedging investment of a net investment in a foreign operation Loss on cash flow hedging instruments Share of other comprehensive loss of associates (8,196) (2,833) (1,245) (87,635) Consolidated tax effect (19,346)	Changes in remeasurements of net defined benefit liabilities	(4,526)
Loss on cash flow hedging instruments (2,833) Share of other comprehensive loss of associates (1,245) (87,635) Consolidated tax effect (19,346)		
Share of other comprehensive loss of associates (1,245) (87,635) Consolidated tax effect (19,346)		, ,
(87,635) Consolidated tax effect (19,346)		, ,
Consolidated tax effect (19,346)		<u> </u>
	Consolidated tax effect	
	Tax expense	

¹ The Group did not recognize deferred income tax assets regarding the loss on valuation of JSC Bank Center Credit's shares due to the low possibility of the disposal of its shares. Notwithstanding,

the Group recognized \forall 158,264 million as the reduction of income tax expenses since the sale of its shares was completed during the year ended December 31, 2017.

An analysis of the net profit before income tax and income tax expense for the years ended December 31, 2018 and 2017, follows:

(In millions of Korean won)	2018	2017
Profit before income tax	3,086,338	2,613,295
Tax at the applicable tax rate ¹	838,381	631,955
Non-taxable income	(2,967)	(189,687)
Non-deductible expense	12,964	8,991
Tax credit and tax exemption	(275)	(296)
Temporary difference for which no deferred tax is		
recognized	1,112	1,166
Tax supplementary pay (rebate) for tax of prior		
years	(2,771)	(8,334)
Income tax expense of overseas branch	6,863	4,721
Tax effect of investments in subsidiaries	1,878	21,167
Foreign subsidiary tax rate difference effect	(1,470)	589
Consolidated tax effect	(31,431)	(19,347)
Change in tax rates effect	-	(14,299)
Others	4,856	1,964
Tax expense	827,140	438,590
Tax expense / Profit before income tax (%)	26.80	16.78

¹ Applicable income tax rate for ₩200 million and below is 11%, for over ₩200 million to ₩20 billion is 22%, and for over ₩20 billion to ₩300 billion is 24.2%, for over ₩300 billion is 27.5% as at December 31, 2018 and ₩200 million and below is 11%, for over ₩200 million to ₩20 billion is 22%, and for over ₩20 billion is 24.2% as at December 31, 2017.

Details of current tax liabilities (income tax payables) and current tax assets (income tax refund receivables) before offsetting, as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Tax payables after offsetting ^{1, 2} Adjustment on consolidated tax payable and	623,867	232,423
others ³	(31,431)	(19,347)
Accounts payables ⁴	(586,699)	(209,533)
Current tax payable	5,737	3,543

¹ Excludes current tax assets of ₩ 486 million (December 31, 2017: ₩ 486 million) from uncertain tax position, which do not qualify for offsetting.

² Includes income tax payable of ₩ 5,736 million (December 31, 2017: ₩ 3,543 million) under current tax liabilities as at December 31, 2018, which are not to be offset against any income tax refund receivables, such as those of overseas branches.

33. Dividends

The dividend to the shareholder of the Bank in respect of the year ended December 31, 2018, of $\mbox{$W1,650$}$ per share, amounting to total dividends of $\mbox{$W667,226$}$ million, is to be proposed at the annual general shareholder's meeting on March 21, 2019. The Group's financial statements as at December 31, 2018, do not reflect this dividend payable.

³ Tax expense reduced due to the adoption of consolidated tax return was recognized as tax benefit.

⁴ The amount of income tax payable by the Bank is reclassified as accounts payable, not to the tax authority, but to KB Financial Group Inc. due to the adoption of consolidated tax return.

34. Accumulated Other Comprehensive Income

Details of accumulated other comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

(e.e.e.e.e.e.e.e.e.e.e.e.e.e.e	_	Changes			Transfer to	_
		(excluding	Reclassification		retained	
	Beginning ¹	reclassification)	to profit or loss	Tax effect	earnings	Ending
Remeasurements of net						
defined benefit liabilities	(79,902)	(132,132)	-	36,336	-	(175,698)
Currency translation						
differences	(37,711)	21,672	15,057	(9,346)	-	(10,328)
Net gains (losses) on debt						
instruments at fair value						
through other comprehensive						
income	(34,713)	72,415	6,476	(21,703)	-	22,475
Net gains (losses) on equity						
instruments at fair value						
through other comprehensive		(00.000)		40.000	(40.040)	
income	338,027	(30,863)	-	13,660	(18,810)	302,014
Share of other comprehensive income of associates	404	(4.000)		4 000		(2.050)
Gains(losses) on cash flow	124	(4,666)	-	1,283	-	(3,259)
hedging instruments	7,751	6,980	(1,755)	(1,437)		11,539
Gains (losses) on hedges of a	7,751	0,900	(1,755)	(1,437)	-	11,559
net investment in a foreign						
operations	(5,573)	(22,685)	(12,330)	9,629	_	(30,959)
•	188,003	(89,279)	7,448	28,422	(18,810)	115,784
	. 50,000	(00,210)	7,110	_0, ILL	(13,010)	0,1 0 1

¹ Restated based on Korean IFRS 1109.

(In millions of Korean won)

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_	u		•

	Changes		Classified as			
		(excluding	Reclassification		assets held	
	Beginning	reclassification)	to profit or loss	Tax effect	for sale	Ending
Remeasurements of net						
defined benefit liabilities	(94,079)	40.700		(4.500)		(70,000)
	(94,079)	18,703	-	(4,526)	-	(79,902)
Currency translation	07.500					
differences	27,509	(78,941)	-	11,835	-	(39,597)
Gains (losses) on valuation of						
available-for-sale financial						
assets	680,965	146,757	46,101	(82,670)	-	791,153
Share of other comprehensive				, ,		
income of associates	(87,577)	4,249	_	20,253	67,337	4,262
Gains (losses) on cash flow		,		,	,	,
hedging instruments	337	10,691	(444)	(2,833)	_	7,751
Gains (losses) on hedges of a		10,001	(111)	(2,000)		7,701
net investment in a foreign						
operations	(32,292)	24.045		(0.406)		(F F70)
Accumulated other	(32,232)	34,915	-	(8,196)	-	(5,573)
comprehensive income						
related to held for sale			88,835	(21,498)	(67,337)	
	494,863	136,374	134,492	(87,635)		678,094
		·				

35. Trust Accounts

Financial information of the trust segments the Group manages as at December 31, 2018 and 2017, and for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	Total assets		Operating r	evenues
	2018	2017	2018	2017
Consolidated	4,259,441	4,148,600	127,994	110,487
Unconsolidated	47,644,193	43,256,371	1,609,587	2,590,728
	51,903,634	47,404,971	1,737,581	2,701,215

¹ Financial information of the trust accounts are not based on Korean IFRS; it has been prepared in accordance with the Statement of Korea Accounting Standard 5004, Trust Accounts and enforcement regulations of Financial Investment Services under the Financial Investment Services and Capital Markets Act.

Significant receivables and payables related to the Group's trust accounts as at December 31, 2018 and 2017, are as follows:

(In millions of K	(orean won)	2018	2017
Trust	Assets		
Segment	Accrued trust fees	36,172	30,030
	Other accrued income	23,658	21,250
	_	59,830	51,280
	Liabilities		
	Due to trust accounts	1,160,152	1,156,354
	Accrued interest on due to trust		
	accounts	6,267	4,224
	Deposits	345,873	385,596
	Accrued interest on deposits	24,867	25,543
		1,537,159	1,571,717
Custody	Assets		
Segment	Accrued trust fees	5,549	4,982
	Liabilities		
	Due to trust accounts	4,124,955	3,861,677
	Accrued interest on due to trust		
	accounts	4,280	3,408
	_	4,129,235	3,865,085

Significant revenue and expenses related to the Group's trust accounts for the years ended December 31, 2018 and 2017, are as follows:

(In millions of I	Korean won)	2018	2017
Trust	Revenues		
Segment	Fees and commissions from trust accounts Management fees and	259,170	280,727
	commissions from		
	retirement pension	25,321	24,590
	Commissions from early		
	termination in trust accounts	88	92
		284,579	305,409
	Expenses		
	Interest expenses on		
	due to trust accounts	17,842	15,440
	Interest expenses on deposits	21,389	29,005
		39,231	44,445
Custody	Revenues		
Segment	Fees and commissions		
	from trust accounts	28,215	25,261
	Commissions from early		
	termination in trust accounts	-	-
	<u> </u>	28,215	25,261
	Expenses		
	Interest expenses on due to trust		
	accounts	43,612	28,504

36. Supplemental Cash Flow Information

Cash and cash equivalents as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Cash	2,185,156	2,167,172
Checks with other banks	872,166	430,253
Due from Bank of Korea	8,911,607	8,981,665
Due from other financial institutions	2,920,081	4,067,228
	14,889,010	15,646,318
Restricted due from financial institutions	(9,203,801)	(9,239,813)
Due from financial institutions with original		
maturities over three months	(828,714)	(328,551)
	(10,032,515)	(9,568,364)
	4,856,495	6,077,954

Significant non-cash transactions for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Decrease in loans due to the write-offs	526,134	650,419
Changes in accumulated other comprehensive income		
due to gains and losses on debt instruments at fair value		
through other comprehensive income	57,188	-
Changes in accumulated other comprehensive income due to		
valuation of financial investments	-	110,188
Changes in accumulated other comprehensive income due to		
investment in associates	(4,665)	3,004
Changes in financial investments due to debt-for-equity swap	22,286	10,250

Cash inflows and outflows from income tax, interest and dividends for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	Activities	2018	2017
Income tax paid	Operating	396,072	401,530
Interest received	Operating	10,162,987	8,766,970
Interest paid	Operating	3,483,064	2,937,348
Dividends received	Operating	97,440	102,328
Dividends paid	Financing	640,132	359,493

Changes in liabilities arising from financial activities for the year ended December 31, 2018 are as follows:

(In millions of Korean won)

	Derivative financial instrument for hedging purposes ¹	Debts	Debentures	Payables to trust accounts	Finance lease liabilities	Deposits for letter of guarantees and others	Other payable	Total
Beginning	(3,659)	15,810,753	19,183,798	5,018,031	1,642	351,455	144,636	40,506,656
Cash flow	(17,698)	1,517,014	3,795,428	267,076	(11,242)	(205,302)	(3,170)	5,342,106
Lease newly acquired	-	-	-	-	17,555	-	-	17,555
Exchange								
differences	-	169,122	147,306	-	-	-	-	316,428
Changes in fair								
values	30,679	-	4,019	-	-	-	-	34,698
Changes from business combination	-	_	_	-	-	-	(48,711)	(48,711)
Other changes from non-cash								
transactions	5,321	(833)	33,034	-	110	10,211	11,429	59,272
Ending	14,643	17,496,056	23,163,585	5,285,107	8,065	156,364	104,184	46,228,004

¹ Derivative financial instruments held for hedging are shown at net amounts of liabilities and assets.

37. Contingent Liabilities and Commitments

Acceptances and guarantees as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Confirmed acceptances and guarantees		
Confirmed acceptances and guarantees		
in Korean won		
Acceptances and guarantees for KB purchasing		
loan	196,517	252,817
Others	597,636	530,272
	794,153	783,089
Confirmed acceptances and guarantees		
in foreign currencies		
Acceptances of letter of credit	208,926	147,987
Letter of guarantees	53,210	60,853
Bid bond	51,528	46,984
Performance bond	604,311	563,506
Refund guarantees	592,925	778,779
Others	2,539,900	1,960,769
	4,050,800	3,558,878
Financial guarantees		
Acceptances and guarantees for mortgage	50,497	57,445
Overseas debt guarantees	311,796	285,577
International financing guarantees in foreign		
currencies	110,070	46,953
Others	270,000	270,000
	742,363	659,975
	5,587,316	5,001,942
Unconfirmed acceptances and guarantees		
Guarantees of letter of credit	1,745,340	2,250,543
Refund guarantees	686,843	384,958
	2,432,183	2,635,501
	8,019,499	7,637,443
-		

Guarantee exposure by credit ratings

The credit quality of the guarantees exposure as at December 31, 2018 can be categorized as follows:

(In millions of Korean won)

2018

	Financial instruments applying 12-month	Financial instrume		
	expected credit losses	Non-impaired	Impaired	Total
Confirmed acceptances				
and guarantees				
Grade 1	3,726,259	179	-	3,726,438
Grade 2	1,571,258	29,034	-	1,600,292
Grade 3	84,251	13,585	-	97,836
Grade 4	30,443	117,166	420	148,029
Grade 5	-	171	14,550	14,721
	5,412,211	160,135	14,970	5,587,316
Unconfirmed acceptances				
and guarantees				
Grade 1	1,102,478	1,747	-	1,104,225
Grade 2	1,180,137	17,795	-	1,197,932
Grade 3	25,749	16,225	-	41,974
Grade 4	9,627	66,186	-	75,813
Grade 5	-	219	12,020	12,239
	2,317,991	102,172	12,020	2,432,183
	7,730,202	262,307	26,990	8,019,499

¹ Applied same criteria as the credit quality classification of loans.

Acceptances and guarantees by counterparty as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018

	Confirmed	Unconfirmed		Proportion
	guarantees	guarantees	Total	(%)
Large companies	4,775,838	1,901,951	6,677,789	83.27
Small and medium				
sized companies	617,458	423,947	1,041,405	12.99
Public and others	194,020	106,285	300,305	3.74
	5,587,316	2,432,183	8,019,499	100.00

(In millions of Korean won)

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	Confirmed	Unconfirmed		Proportion
	guarantees	guarantees	Total	(%)
Large companies	4,185,975	1,913,114	6,099,089	79.86
Small and medium				
sized companies	621,835	492,369	1,114,204	14.59
Public and others	194,132	230,018	424,150	5.55
	5,001,942	2,635,501	7,637,443	100.00

Acceptances and guarantees by industry as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018

	Confirmed	Unconfirmed		
	guarantees	guarantees	Total	Proportion (%)
Financial institutions	72,071	3,736	75,807	0.95
Manufacturing	2,981,245	1,451,657	4,432,902	55.27
Service	931,680	84,586	1,016,266	12.67
Wholesale and retail	998,333	723,367	1,721,700	21.47
Construction	280,146	40,988	321,134	4.00
Public	165,571	36,256	201,827	2.52
Others	158,270	91,593	249,863	3.12
	5,587,316	2,432,183	8,019,499	100.00

(In millions of Korean won)

2017

	Confirmed	Unconfirmed		
	guarantees	guarantees	Total	Proportion (%)
Financial institutions	23,317	7,353	30,670	0.40
Manufacturing	2,799,593	1,270,721	4,070,314	53.29
Service	655,057	100,004	755,061	9.89
Wholesale and retail	935,647	837,230	1,772,877	23.21
Construction	335,156	198,996	534,152	6.99
Public	165,249	129,944	295,193	3.87
Others	87,923	91,253	179,176	2.35
	5,001,942	2,635,501	7,637,443	100.00

Commitments as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

2018	2017
36,929,404	32,786,234
41,283,734	15,935,382
1,300,000	1,000,000
1,765,445	1,129,408
81,278,583	50,851,024
1,956,426	1,953,579
436,800	354,800
2,393,226	2,308,379
83,671,809	53,159,403
	36,929,404 41,283,734 1,300,000 1,765,445 81,278,583 1,956,426 436,800 2,393,226

Other Matters (including litigation)

- a) The Group has filed 50 lawsuits (excluding minor lawsuits in relation to the collection or management of loans), as the plaintiff, involving aggregate claims of \forall 361,685 million, and faces 93 lawsuits as the defendant (excluding minor lawsuits in relation to the collection or management of loans) involving aggregate damages of \forall 205,557 million, which arose in the normal course of the business and are still pending as at December 31, 2018.
- b) As at December 31, 2018, the Group has entered into construction contracts amounting to \forall 151,280 million related to the construction of integrated headquarters building and payments made up to December 31, 2018 amount to \forall 7,605 million.
- c) As at December 31, 2018, the Group has entered into construction contracts amounting to ₩ 116,563 million related to the construction of integrated IT center, and payments made up to December 31, 2018 amount to ₩ 42.857 million.
- d) The face values of the securities sold to general customers through tellers' sale amount to $\mbox{$\%$}$ 372 million and $\mbox{$\%$}$ 372 million as at December 31, 2018 and 2017, respectively.

38. Subsidiaries

Details of subsidiaries as at December 31, 2018, are as follows:

		Ownership		
Investor	Investee	(%)	Location	Industry
Kookmin Bank	Kookmin Bank Int'l Ltd.(London) ¹	100.00	United Kingdom	Banking and foreign exchange transaction
Kookmin Bank	Kookmin Bank Cambodia PLC.	100.00	Cambodia	Banking and foreign exchange transaction
Kookmin Bank	Kookmin Bank (China) Ltd.	100.00	China	Banking and foreign exchange transaction
Kookmin Bank	KB Microfinance Myanmar Co., Ltd	100.00	Myanmar	Micro finance services
Kookmin Bank	Personal pension trust and 10 others ²	-	Korea	Trust Asset-backed
Kookmin Bank	KL the 1st L.L.C. and 33 others ³	-	Korea	Securitization and others
Kookmin Bank	KB Wise Star Private Real Estate Feeder Fund 1 ⁴	86.00	Korea	Investment Trust
KB Wise Star Private Real Estate Feeder Fund 1	KB Star Office Private Real Estate Master Fund 2 ³	44.44	Korea	Investment Trust
Kookmin Bank	KB Multi-Asset Private Securities Fund S-14	99.96	Korea	Investment Trust
Kookmin Bank	KB Multi-Asset Private Securities Fund P-1 ⁴	99.96	Korea	Investment Trust
Fund P-1(Bond Mixed)	KB Multi-Asset Private Securities Fund P-1(Bond Mixed)	100.00	Korea	Investment Trust
Kookmin Bank	Samsung KODEX 10Y F-LKTB Inverse ETF(Bond-Derivatives) ⁴	88.74	Korea	Investment Trust
Kookmin Bank	KB Haeorum Private Securities 83 ⁴	99.95	Korea	Investment Trust
Kookmin Bank	KB KBSTAR KTB 3Y Futures Inverse ETF ⁴	61.56	Korea	Investment Trust
Kookmin Bank	Kiwoom Frontier Private placement fund 10[Bond] 4	99.85	Korea	Investment Trust
Kookmin Bank	Tong Yang Safe Plus Qualified Private Trust S-8(Bond) ⁴	99.93	Korea	Investment Trust
Kookmin Bank	Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1 ⁴	99.92	Korea	Investment Trust
Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1	Mirae Asset Triumph Global Privately placed Feeder Investment Trust 1	100.00	Korea	Investment Trust
Kookmin Bank	NH-Amundi Global Private Securities Investment Trust 1(BOND) ⁴	83.31	Korea	Investment Trust
Kookmin Bank	Meritz Private Real Estate fund No.9-2 ⁴	99.98	Korea	Investment Trust
Kookmin Bank	AIP US Red Private Real Estate Trust NO.10 ⁴	99.97	Korea	Investment Trust

¹ The Group converted Kookmin Bank Int'l Ltd.(London) into a London branch as at May 16, 2018, which is considered to be a merger transaction between subsidiaries under common control. The Group accounted for the transaction by applying carrying amount method and measured the transferred assets and liabilities at carrying amounts included in the

consolidated financial statements. The amounts of the transferred assets and liabilities resulting from the business combination were \forall 480,161 million and \forall 480,023 million, respectively as at the acquisition date.

The condensed financial information of major subsidiaries as at December 31, 2018 and 2017, and for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won) 2018 Operating Profit (loss) for Liabilities **Assets Equity** revenue the period Kookmin Bank Int'l Ltd.(London) 35.923 940 34,983 7.330 1.331 Kookmin Bank Hongkong Ltd.1 5,716 5,434 Kookmin Bank Cambodia PLC. 197,135 104,328 92,807 10,307 1,621 Kookmin Bank (China) Ltd. 2,605,033 2,192,469 412,564 138,453 14,819 **KB** Microfinance Myanmar Co., Ltd 20,941 879 20,062 2,783 538 Personal pension trust and 10 others 4,284,440 4,173,488 110,952 144,767 3,966

¹ Liquidation was completed during the year ended December 31, 2018.

(In millions of Korean won)			2017		
<u>-</u>	Assets	Liabilities	Equity	Operating revenue	Profit (loss) for the period
Kookmin Bank Int'l Ltd.(London) Kookmin Bank Hongkong Ltd.	506,474 22,866	423,252	83,222 22,866	15,931	3,022 (1,953)
Kookmin Bank Cambodia PLC.	133,133	76,680	56,453	8,267	984
Kookmin Bank (China) Ltd.	2,007,154	1,606,434	400,720	70,142	1,118
KB Microfinance Myanmar Co., Ltd Personal pension trust and 10	10,372	400	9,972	623	(664)
others	4,162,200	4,055,204	106,996	111,187	4,825

² The Group controls the trust because it has power that determines the management performance over the trust, and is exposed to variable returns to absorb losses through the guarantees of payment of principal or, payment of principal and fixed rate of return.

³ The Group controls these investees because it is exposed to variable returns from its involvement with the investees, and has ability to affect those returns through its power, even though it holds less than a majority of the voting rights of the investees.

⁴ The Group controls these investees because it is exposed to variable returns from its involvement with the investees, and has ability to affect those returns through its power.

Nature of the risks associated with interests in consolidated structured entities

Terms of contractual arrangements that provide financial support to a consolidated structured entity are as follows:

- The Group provides the capital commitments of \forall 172,000 million to KB Wise Star Private Real Estate Feeder Fund 1st, of which \forall 56,717 million has not been utilized and of \forall 55,894 million to Meritz Private Real Estate fund No.9-2, of which \forall 36,243 million has not been utilized. Based on the investment agreement, the Group is subject to increase its investment upon the request of the asset management company or agreement among existing investors.
- The Group has provided purchase commitment and grant of credit to the structured entities that are considered as subsidiaries. The Group should purchase unsold commercial paper securities if there is a shortage of the investors for the commercial paper securities issued by the structured entity. If events causing the cessation of the issuance of commercial paper securities occur or if the structured entities become insolvent, the Group should provide loans to the structured entities under certain conditions.

(In millions of Korean won)	2018
KL the 1st L.L.C.	50,132
KH the 2nd L.L.C.	40,988
KL the International 1st L.L.C.	30,280
Silver Investment 2nd Inc.	50,000
KL the 3rd L.L.C.	30,155
KH the 3rd L.L.C.	70,100
KBM the 1st L.L.C.	50,289
KY the 1st L.L.C.	24,035
KBC the 1st L.L.C.	35,104
KH the 4th L.L.C.	25,130
KDL the 1st L.L.C.	32,828
KB INO 1st L.L.C.	10,200
KBH the 1st L.L.C.	14,070
KBH the 2nd L.L.C.	20,187
LIIV FOR RENTAL 1st L.L.C.	32,200
HLD the 3rd L.L.C.	108,500
KB HUB the 1st L.L.C.	30,123
Leecheon Albatros L.L.C.	20,200
KBH the 3rd L.L.C.	40,167
KBC the 2nd L.L.C.	50,141
KLD the 1st L.L.C	9,100
LOG the 3rd L.L.C.	24,300
KB Green 1st L.L.C.	52,672
KBL Incheon 1st L.L.C.	100,968
KB DTower 1st L.L.C.	50,017
KB Display 1st L.L.C.	100,382
KBL CC 1st L.L.C.	90,207
KB Alminium 1st L.L.C.	50,208
KB First Park L.L.C.	62,919
KB INO 2nd L.L.C.	50,049

- The Group provides the guarantees of payment of principal or principal and fixed rate of return, in case the operating results of the trusts are less than the guaranteed principal or principal and a fixed rate of return.

Changes in subsidiaries

Kiwoom Frontier Private placement fund 10(Bond) and fourteen other subsidiaries were newly included in the consolidation scope, and Kookmin Bank Hong Kong Ltd. and six other subsidiaries were excluded from the scope of consolidation due to liquidation and resale during the year ended December 31, 2018.

Net cash flow from change in subsidiaries

The net cash inflow from subsidiaries newly consolidated and de-consolidated is amounting to $\forall 26,125$ million and $\forall 40,405$ million, respectively for the year ended December 31, 2018.

39. Unconsolidated Structured Entity

The nature, purpose and activities of the unconsolidated structured entities and how the structured entities are financed, are as follows:

Nature	Purpose	Activities	Methods of Financing
Asset-backed securitization	Early cash generation through transfer of securitization assets	Fulfillment of Asset-backed securitization plan Purchase and collection	Issuance of ABS and ABCP based on securitization assets
	Fees earned as services to SPC, such as providing lines of credit and ABCP purchase commitments	securitization assets Issuance and repayment of ABS and ABCP	
Project financing	Granting PF loans related to SOC and real property Granting loans to ships/aircrafts SPC	Construction of SOC and real property Building ships/ Construction and purchase of aircrafts	Loan commitments through Credit Line, providing lines of credit and investment agreements
Investment funds	Investment in beneficiary certificates Investment in PEF and partnerships	Management of fund assets Payment of fund fees and allocation of fund profits	Sales of beneficiary certificate instruments Investment of general partners and limited partners

As at December 31, 2018 and 2017, the size of the unconsolidated structured entities and the risks associated with its interests in unconsolidated structured entities are as follows:

(In millions of Korean won)	2018				
	Asset-backed securitization	Project financing	Investment funds	Others	Total
Total assets of the unconsolidated structured entities Carrying amount on financial statements	86,639,696	20,660,605	28,470,016	3,878,221	139,648,538
Assets Financial assets at fair value through profit or loss Derivative financial assets	213,279 4,034	2,270	2,241,304 22,250	17,715	2,474,568 26,284
Loans at amortized cost	416,246	1,764,707	-	336,294	2,517,247
Financial investments Investments in	5,458,105	-	-	-	5,458,105
associates	-	-	277,645	-	277,645
Other assets					
	6,091,664	1,766,977	2,541,199	354,009	10,753,849
Liabilities Deposits Derivative financial	526,274	728,324	62,319	7,757	1,324,674
liabilities	331	-	-	-	331
Other liabilities	981	1,112	58	7,757	2,151
Maximum exposure to loss Asset ¹	527,586 6,091,664	729,436	62,377 2,541,199	354,009	1,327,156
Purchase and capital commitments	-	20,000	1,664,461	-	1,684,461
Unused providing lines of credit Acceptances and guarantees and Loan	1,956,427	-	-	-	1,956,427
commitments	889,315	1,193,261	-	-	2,082,576
	8,937,406	2,980,238	4,205,660	354,009	16,477,313
Methods of determining the maximum exposure to loss	Providing lines of credit / Purchase commitments/ Acceptances and guarantees and Loan commitments	Loan commitments / Capital commitments / Purchase commitments and Acceptances and guarantees	Capital commitments	Loan commitments	

(In millions of Korean won)

			2017		
	Asset-backed securitization	Project Financing	Investment funds	Others	Total
Total assets of the unconsolidated structured entities Carrying amount on financial statements	99,835,410	21,636,792	25,929,064	4,890,100	152,291,366
Assets Financial assets at fair value through profit or loss Derivative financial assets	168,647 268	-	-	-	168,647 268
Loans	239,894	2,021,225	-	327,875	2,588,994
Financial investments Investments in	6,400,833	7,867	2,309,361	17,055	8,735,116
associates	-	-	235,234	-	235,234
Other assets		710			710
i	6,809,642	2,029,802	2,544,595	344,930	11,728,969
Liabilities Deposits Derivative financial liabilities	484,890 229	755,242	50,832	3,985	1,294,949
Other liabilities	-	29	45	- -	74
	485,119	755,271	50,877	3,985	1,295,252
Maximum exposure to loss Asset ¹					
Purchase and	6,809,642	2,029,802	2,544,595	344,930	11,728,969
capital commitments Unused providing lines	20,000	-	1,178,462	-	1,198,462
of credit Acceptances and guarantees and	2,082,736	-	-	-	2,082,736
Loan commitments	382,300	1,385,722			1,768,022
·	9,294,678	3,415,524	3,723,057	344,930	16,778,189
Methods of determining the maximum exposure to loss	Providing lines of credit / Purchase commitments / Acceptances and guarantees and Loan commitments	Loan commitments / capital commitments / purchase commitments and Acceptances and guarantees	Capital commitments	Loan commitments	

¹ Maximum exposure to loss includes the asset amounts, after deducting loss (provision for assets, impairment losses and others), recognized in the consolidated financial statements of the Group.

40. Finance and Operating Leases

40.1 Finance Lease

The future minimum lease payments as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Net carrying amount of finance lease assets	26,083	17,768
Minimum lease payments		
Within 1 year	5,824	1,660
1-5 years	2,406	-
	8,230	1,660
Present value of minimum lease payments		
Within 1 year	5,716	1,642
1-5 years	2,349	-
	8,065	1,642

40.2 Operating Lease

40.2.1 The Group as an Operating Lessee

The future minimum lease payments arising from the non-cancellable lease contracts as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Minimum lease payments		
Within 1 year	135,474	123,869
1-5 years	192,148	138,666
Over 5 years	16,675	34,129
_	344,297	296,664
Minimum sublease payments	(2,323)	(2,461)

The lease payments reflected in profit or loss for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Lease payments reflected in profit or loss		
Minimum lease payments	161,936	159,413
Sublease payments	(1,769)	(1,177)
_	160,167	158,236

40.2.2 The Group as an Operating Lessor

The future minimum lease receipts arising from the non-cancellable lease contracts as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018	2017
Minimum lease receipts		
Within 1 year	17,376	17,430
1-5 years	23,984	34,079
	41,360	51,509

41. Related Party Transactions

Profit or loss arising from transactions with related parties for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	_	2018	2017
Parent		4.044	0.004
KB Financial Group Inc.	Fee and commission income	4,644	2,961
	Other operating income	-	110
	Other non-operating income	808	778
	Interest expense	5,178	3,151
	General and administrative		
	expenses	778	671
Parent's subsidiaries			
KB Asset Management Co., Ltd.	Fee and commission income	1,085	1,125
	Other non-operating income	4	3
	Interest expense	95	272
	Fee and commission expense	3,157	1,488
	General and administrative		
	expenses	458	-
KB Real Estate Trust Co., Ltd.	Fee and commission income	134	114
	Other non-operating income	42	44
	Interest expense	197	160
	Fee and commission expense	2,282	1,577
KB Investment Co., Ltd.	Fee and commission income	23	36
	Interest expense	376	270
KB Credit Information Co., Ltd.	Fee and commission income	58	67
	Other non-operating income	205	231
	Interest expense	85	90
	Fee and commission expense	16,780	13,995
	General and administrative	•	,
	expenses	-	365
KB Data System Co., Ltd.	Fee and commission income	202	131
	Other non-operating income	98	95
	Interest expense	250	173
	General and administrative	- -	
	expenses	50,803	45,517

KB Life Insurance Co., Ltd.	Fee and commission income	12,471	14,418
	Gains on financial instruments		
	at fair value through profit or	44.004	
	loss Gains on financial instruments	14,064	-
	at fair value through profit or loss (under Korean IFRS		
	1039)	_	1,302
	Other non-operating income	4,284	4,223
	Interest expense	983	968
	Fee and commission expense	12	5
	Losses on financial instruments	12	3
	at fair value through profit or		
	loss	3,421	_
	Losses on financial instruments	0, 121	
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	-	10,779
	General and administrative		
	expenses	1,582	1,793
KB Kookmin Card Co., Ltd.	Interest income	3,855	3,549
	Fee and commission income	211,328	236,355
	Gains on financial instruments		
	at fair value through profit or		
	loss	2,730	-
	Gains on financial instruments		
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	-	263
	Reversal of credit losses	7	-
	Other non-operating income	983	1,003
	Interest expense	870	1,289
	Fee and commission expense	1,587	777
	Losses on financial instruments		
	at fair value through profit or	400	
	loss Losses on financial instruments	400	-
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	_	6,825
	Provision for credit losses	4	292
	General and administrative	•	202
	expenses	216	279
KB Savings Bank Co., Ltd.	Fee and commission income	379	273
,	Other non-operating income	44	47
	Interest expense	2	7
	Fee and commission expense	24	-
KB Capital Co., Ltd.	Interest income	1,989	89
•	Fee and commission income	2,311	1,264
		,	-,

	Other non-operating income	208	156
	Interest expense	1,138	247
	Fee and commission expense	61	-
	Other operating expense	5	-
	Provision for credit losses	163	105
	General and administrative		
	expenses	16	-
KB Insurance Co., Ltd.	Interest income	45	53
	Fee and commission income	22,948	22,856
	Gains on financial instruments	•	,
	at fair value through profit or		
	loss	24,999	-
	Gains on financial instruments		
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	-	3,345
	Other non-operating income	363	280
	Interest expense	2,112	2,268
	Fee and commission expense	967	-
	Losses on financial instruments		
	at fair value through profit or		
	loss	4,328	-
	Losses on financial instruments		
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	-	53,165
	Other operating expense	16	-
	General and administrative		
	expenses	15,667	14,663
KB Securities Co., Ltd.	Interest income	459	56
	Fee and commission income	15,770	13,511
	Gains on financial instruments		
	at fair value through profit or		
	loss	8,583	-
	Gains on financial instruments		
	at fair value through profit or		
	loss (under Korean IFRS		
	1039)	-	3,295
	Reversal of credit losses	-	123
	Other non-operating income	10,371	7,339
	Interest expense	3,771	2,914
	Fee and commission expense	1,079	397
	Losses on financial instruments		
	at fair value through profit or		
	loss	8,448	-
	Losses on financial instruments		
	at fair value through profit or		
	loss (under Korean IFRS		7.00=
	1039)	-	7,237

	Provision for credit losses General and administrative	21	-
	expenses	8,361	803
Hanbando BTL Private Special	Fee and commission income		
Asset Fund		160	170
KB Senior Loan Private Fund No.1	Fee and commission income	20	31
KB Evergreen Private Securities	Fee and commission income		
Fund 98(Bond)		5	-
KB AMP Infra Private Special Asset	Fee and commission income		
Fund 1 (FoFs)		5	10
KB Onkookmin 2020 TDF Fund	Fee and commission income		
(FoFs) ¹		1	1
KB Onkookmin 2025 TDF Fund	Fee and commission income		
(FoFs) ¹		1	1
KB Onkookmin 2030 TDF Fund	Fee and commission income		
(FoFs) ¹		1	1
KB Onkookmin 2035 TDF Fund	Fee and commission income		
(FoFs)		2	1
KB Onkookmin 2040 TDF Fund	Fee and commission income	4	4
(FoFs) ¹	For and commission income	1	1
KB Onkookmin 2045 TDF Fund (FoFs)	Fee and commission income	1	1
(FOFS) KB Onkookmin 2050 TDF Fund	Fee and commission income	ı	ı
(FoFs) ¹	Tee and commission income	1	1
KB Muni bond Private Securities	Fee and commission income	1	
Fund 1 (USD)(bond)		10	2
KB Global Private Real Estate Debt	Fee and commission income		_
Fund 1		5	-
KB Na Compass Energy Private	Fee and commission income		
Special Asset Fund		5	-
KB Star Office Private Real Estate	Interest income	433	-
Investment Trust No.3	Interest expense	48	-
KB Star Office Private Real Estate	Interest income	396	-
Investment Trust No.4	Fee and commission income	10	-
	Interest expense	13	-
KB Korea Short Term Premium	Fee and commission income		
Private Securities 5(USD)(Bond)		2	-
KB Global Core Bond Securities	Fee and commission income		
Master Fund(Bond)		2	-
sociates			
Korea Credit Bureau Co., Ltd.	Fee and commission income	4	4
	Interest expense	127	132
	Fee and commission expense	1,486	1,439
Incheon Bridge Co., Ltd.	Interest income	9,426	25,511
	Fee and commission income	9	-
	Reversal of credit losses	-	43
	Interest expense	296	292
	Fee and commission expense	2	-
	Provision for credit losses	1	-

Jaeyang Industry Co., Ltd.	Interest income	-	98
,. 3	Reversal of credit losses	-	6
Dongjo Co., Ltd.	Reversal of credit losses	31	2
Dae-A Leisure Co., Ltd.	Interest expense	9	1
KB12-1 Venture Investment Partnership	Interest expense	24	18
Future Planning KB Start-up	Interest expense	24	10
Creation Fund	interest expense	18	_
KB High-tech Company	Interest expense		
Investment Fund		27	65
Aju Good Technology Venture	Interest expense		
Fund		30	14
KB-KDBC New Technology	Interest expense	20	4
Business Investment Fund	Interest evacues	39	4
KB Digital Innovation & Growth New Technology Business	Interest expense		
Investment Fund		7	-
KB-Brain KOSDAQ Scale-up Fund	Interest expense	21	-
Paroman Corporation	Reversal of credit losses	-	345
KB Star Office Private Real Estate Investment Trust No.1	Interest expense	93	63
sociates of parent's subsidiaries			00
SY Auto Capital Co., Ltd.	Interest income	189	102
•	Fee and commission income	1	_
	Reversal of credit losses	-	32
	Interest expense	-	22
	Provision for credit losses	14	-
KB No.8 Special Purpose	Interest expense		
Acquisition Company 1		17	36
KB No.9 Special Purpose	Interest expense	40	0.0
Acquisition Company KB No.10 Special Purpose	Interest expense	43	33
Acquisition Company	Interest expense	30	24
KB No.11 Special Purpose	Interest expense	00	2-7
Acquisition Company		12	_
RAND Bio Science Co., Ltd.	Interest expense	3	16
Wise Asset Management	Interest expense		
Co., Ltd.		9	5
Food Factory Co., Ltd.	Interest income	9	1
	Fee and commission expense	1	-
	Provision for credit losses	1	-
APRO CO.,LTD.	Interest expense	1	-
Rainist Co., Ltd.	Interest expense	2	-
Spark Biopharma Inc.	Interest expense	25	-
	Interest expense		
KB Pre IPO Secondary Venture	•	07	
KB Pre IPO Secondary Venture Fund 1st POSCO-KB Shipbuilding Fund	Interest expense	27 81	60 3

Acquisition Co., Ltd. ¹			
Inno Lending Co., Ltd. 1	Fee and commission income	1	3
	Interest expense	-	1
Other			
Retirement pension	Fee and commission income	876	795
	Interest expense	3	3

¹ Excluded from the Group's related party as of December 31, 2018.

Details of receivables and payables, and related allowances for loan losses arising from the related party transactions as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018	2017
Parent	-		
KB Financial Group Inc.	Other assets	4,545	2,837
	Deposits	69,621	46,062
	Other liabilities	643,010	283,610
Parent's subsidiaries			
KB Asset Management Co., Ltd.	Other assets	209	231
	Deposits	3,284	8,958
	Other liabilities	316	327
KB Real Estate Trust Co., Ltd.	Deposits	27,321	16,187
	Other liabilities	350	347
KB Investment Co., Ltd.	Deposits	20,784	19,816
	Other liabilities	17	62
KB Credit Information Co., Ltd.	Deposits	4,240	4,444
	Other liabilities	5,659	5,714
KB Data System Co., Ltd.	Other assets	322	319
	Deposits	18,059	15,036
	Other liabilities	4,397	4,788
KB Life Insurance Co., Ltd.	Derivative financial assets	270	-
	Other assets	1,827	562
	Derivative financial liabilities	1,197	6,580
	Deposits	1,576	372
	Debts	25,000	25,000
	Other liabilities	3,169	3,171
KB Kookmin Card Co., Ltd.	Loans at amortized cost (Gross		
	amount)	3,354	6,806
	Allowances	2	-
	Other assets	24,582	25,454
	Derivative financial liabilities	612	3,298
	Deposits	84,089	85,091
	Provisions	298	777
	Other liabilities	59,748	48,073
KB Savings Bank Co., Ltd.	Other assets	2	2
	Other liabilities	391	391
KB Capital Co., Ltd.	Loans at amortized cost (Gross		
	amount)	54,787	19,285

	Allowances	227	105
	Other assets	574	89
	Deposits	64,283	73,906
	Other liabilities	57	45
KB Insurance Co., Ltd.	Derivative financial assets	7,034	-
	Other assets	12,143	7,183
	Derivative financial liabilities	5,265	22,818
	Deposits	5,188	7,034
	Debts	20,000	20,000
	Debentures	30,002	49,981
	Other liabilities	2,017	2,720
KB Securities Co., Ltd.	Cash and due from financial		
	institutions	5,286	622
	Derivative financial assets	3,935	1,095
	Loans at amortized cost (Gross		
	amount)	25,617	4,346
	Allowances	21	-
	Other assets	8,644	2,267
	Derivative financial liabilities	1,412	1,481
	Deposits	334,470	436,508
	Provisions	37	97
	Other liabilities	20,372	15,387
Hanbando BTL Private Special Asset Fund	Other assets	39	42
KB Senior Loan Private Fund No.1	Other assets	3	6
KB AMP Infra Private Special Asset Fund 1 (FoFs)		1	-
KB Onkookmin 2025 TDF Fund(FoFs) ¹	Other assets	-	1
KB Onkookmin 2030 TDF Fund(FoFs) ¹	Other assets	-	1
KB Muni bond Private Securities Fund 1(USD)(bond)	Other assets	2	2
KB Global Private Real Estate Debt Fund 1	Other assets	2	-
KB Na Compass Energy Private Special Asset Fund KB Star Office Private Real	Other assets Loans at amortized cost (Gross	1	-
Estate Investment Trust No.3	amount)	24,000	
Zotato invocanioni rradi ricio	Other assets	12	-
	Deposits	5,361	-
	Other liabilities	48	-
KB Star Office Private Real	Loans at amortized cost (Gross	40	-
Estate Investment Trust No.4	amount)	20,000	_
	Other assets	13	_
	Deposits	1,629	_
	Other liabilities	13	_
KB Korea Short Term Premium	Other assets	2	_
	Othor 6000to	2	-

KB Global Core Bond Securities Master Fund(Bond)	Other assets	2	-
Associates	.		
Korea Credit Bureau Co., Ltd.	Deposits	15,674	25,513
Labora Billia Oc. 144	Other liabilities	33	111
Incheon Bridge Co., Ltd.	Financial assets at fair value	22.002	
	through profit or loss Loans at amortized cost (Gross	32,882	-
	amount)	158,200	200,400
	Allowances	14	287
	Other assets	736	710
	Deposits	43,666	48,795
	Provisions	7	-
	Other liabilities	24	29
Terra Co., Ltd.	Deposits	-	10
Jungdong Steel Co., Ltd.	Deposits	_	3
Doosung Metal Co., Ltd.	Deposits	3	-
Jungdo Co., Ltd.	Deposits	4	4
Dongjo Co., Ltd.	Loans at amortized cost (Gross	7	7
Dengje del, Ltd.	amount)	_	116
	Allowances	_	1
Dae-A Leisure Co., Ltd.	Deposits	1,229	466
	Other liabilities	7	14
Daesang Techlon Co., Ltd. ¹	Deposits	_	2
Carlife Co., Ltd.	Deposits	2	-
Computerlife Co., Ltd.	Deposits	1	-
Skydigital INC.	Deposits	16	-
KB12-1 Venture Investment	Deposits	245	4,963
Partnership	Other liabilities	1	. 2
KB High-tech Company	Deposits	275	7,212
Investment Fund	Other liabilities	-	5
Aju Good Technology Venture	Deposits	6,439	2,771
Fund	Other liabilities	2	_,
KB-KDBC New Technology	Deposits	7,088	7,500
Business Investment Fund	Other liabilities	3	4
KB Digital Innovation & Growth New Technology Business			
Investment Fund	Deposits	618	-
KB-Brain KOSDAQ Scale-up	Deposits	18,813	-
Fund	Other liabilities	7	-
KB Star Office Private Real	Deposits	7,946	6,962
Estate Investment Trust No.1	Other liabilities	58	45
ssociates of parent's subsidiari	es		
SY Auto Capital Co., Ltd.	Loans at amortized cost (Gross		
	amount)	8,300	-
	Allowances	18	-
	Other assets	9	

	Deposits	5	6
	Provisions	11	29
	Other liabilities	2	-
KB No.8 Special Purpose	Deposits	_	2,339
Acquisition Company 1	Other liabilities	_	19
KB No.9 Special Purpose	Deposits	2,275	2,309
Acquisition Company	Other liabilities	42	38
KB No.10 Special Purpose	Deposits	1,666	1,698
Acquisition Company	Other liabilities	11	10
KB No.11 Special Purpose	Deposits	658	530
Acquisition Company	Other liabilities	2	-
RAND Bio Science Co., Ltd.	Deposits	232	1,032
	Other liabilities	-	4
Wise Asset Management Co.,	Deposits	696	340
Ltd.	Other liabilities	2	1
Built On Co., Ltd.	Deposits	7	26
Food Factory Co., Ltd.	Loans at amortized cost (Gross	•	20
,,	amount)	200	200
	Allowances	1	-
	Other assets	1	1
	Deposits	68	1
Acts Co., Ltd.	Deposits	29	4
Paycoms Co., Ltd.	Deposits	1	-
Big Dipper Co., Ltd.	Deposits	182	473
APRO CO.,LTD.	Deposits	2,201	-
Rainist Co., Ltd.	Deposits	1	-
Spark Biopharma Inc.	Deposits	2,630	-
	Other liabilities	19	-
KB IGen Private Equity Fund	Deposits		
No.1		148	-
KB Pre IPO Secondary Venture	Deposits	1,115	2,690
Fund 1st	Other liabilities	1	6
Inno Lending Co., Ltd. ¹	Deposits	-	41
Key management	Loans at amortized cost (Gross		
	amount)	2,218	1,619
	Other assets	2	2
	Deposits	9,771	8,042
	Other liabilities	165	121
Other			
Retirement pension	Other assets	331	348
	Other liabilities	16,388	4,286

¹ Excluded from the Group's related party as of December 31, 2018.

Notional amount of derivative assets and liabilities arising from the related party transactions as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won) Parent's subsidiaries	_	2018	2017
KB Life Insurance Co., Ltd.	Notional amount of Derivative		
	financial instruments	252,213	155,567
KB Kookmin Card Co., Ltd.	Notional amount of Derivative		
	financial instruments	62,611	79,106
KB Insurance Co., Ltd.	Notional amount of Derivative		
	financial instruments	1,127,722	491,133
KB Securities Co., Ltd.	Notional amount of Derivative		
	financial instruments	393,515	151,204

In accordance with Korean IFRS 1024, the Group includes the Parent, the Parent's subsidiaries, associates, associates of the Parent's subsidiaries, key management (including family members), and post-employment benefit plans of the Group and entities regarded as its related parties in the scope of its related parties. Additionally, the Group discloses balances (receivables and payables) and other amounts arising from the related party transactions in the notes to the consolidated financial statements. Refer to Note 13 for details on investments in associates.

Key management includes the directors of the Bank and the executive directors (vice presidents and above) of the Bank and companies where the directors and /or their close family members have control or joint control.

Significant loan transactions with related parties for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)			2018 ¹		
,	Beginning	Loans	Repayments	Others	Ending
Parent's subsidiaries					
KB Securities Co., Ltd.	4,346	1,369,958	1,348,687	-	25,617
KB Kookmin Card Co., Ltd.	6,806	164,635	168,087	-	3,354
KB Capital Co., Ltd.	19,285	33,711	-	1,791	54,787
KB Star Office Private Real					
Estate Master Fund 3	-	24,000	-	-	24,000
KB Star Office Private Real					
Estate Master Fund 4	-	20,000	-	-	20,000
Associate					
Incheon Bridge Co., Ltd.	203,126	-	14,700	2,656	191,082
Dongjo Co., Ltd	116	-	116	-	-
Associate of parent's subsidiaries					
SY Auto Capital Co., Ltd.	-	50,053	41,753	-	8,300
Food Factory Co., Ltd.	200	-	-	-	200
Key management ^{2,3}	1,619	108	836	1,327	2,218

(In millions of Korean won)			2017 ¹		
	Beginning	Loans	Repayments	Others	Ending
Parent's subsidiaries					
KB Securities Co., Ltd.	-	1,534,202	1,529,856	-	4,346
KB Kookmin Card Co., Ltd.	-	157,871	151,065	-	6,806
KB Capital Co., Ltd.	-	19,285	-	-	19,285
Associate					
Incheon Bridge Co., Ltd.	209,094	202,500	211,194	-	200,400
Dongjo Co., Ltd ²	-	-	130	246	116
Jaeyang Industry Co., Ltd.	303	-	290	(13)	-
Associate of parent's subsidiaries					
SY Auto Capital Co., Ltd.	10,000	24,031	34,031	-	-
Food Factory Co., Ltd.	-	200	-	-	200

¹ Transactions between related parties, such as settlements arising from operating activities and deposits that can deposit and withdraw frequently, are presented in net amounts.

Significant borrowing transactions with related parties for the years ended December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	2018					
		Beginning	Increase	Decrease	Others ¹	Ending
Parent						
KB Financial Group Inc	Deposits	46,062	1,555,000	1,495,000	(36,441)	69,621
Parent's subsidiaries						
KB Asset Management	Deposits					
Co., Ltd.	Берозітэ	8,958	-	-	(5,674)	3,284
KB Real Estate Trust Co.,	Deposits					
Ltd.	Ворозна	16,187	-	-	11,134	27,321
KB Investment Co., Ltd.	Deposits	19,816	56,200	68,200	12,968	20,784
KB Credit Information Co.,	Deposits					
Ltd.	•	4,444	1,569	1,409	(364)	4,240
KB Data System Co., Ltd.	Deposits	15,036	11,500	10,700	2,223	18,059
KB Life Insurance Co.,	Deposits	372	-	-	1,204	1,576
Ltd.	Debts	25,000	-	-	-	25,000
KB Kookmin Card Co.,	Deposits					
Ltd.	•	85,091	22,000	22,000	(1,002)	84,089
KB Capital Co., Ltd.	Deposits	73,906	-	-	(9,623)	64,283
	Deposits	7,034	-	1,650	(196)	5,188
KB Insurance Co., Ltd.	Debts	20,000	-	-	-	20,000
	Debentures	49,981	-	-	(19,979)	30,002
KB Securities Co., Ltd.	Deposits	436,508	111,996	82,512	(131,522)	334,470
KB Star Office Private						
Real Estate Master Fund	Deposits					
3		-	5,361	-	-	5,361
KB Star Office Private						
Real Estate Master Fund	Deposits		4 000			4 000
4		-	1,629	-	-	1,629

² Includes details of loan transactions that occurred before they became related parties..

³ Represents the transactions that have started occurring since the current year.

Associates						
Korea Credit Bureau Co.,	Deposits					
Ltd.	Deposits	25,513	8,000	16,000	(1,839)	15,674
Incheon Bridge Co., Ltd.	Deposits	48,795	1,260	1,270	(5,119)	43,666
Terra Co., Ltd.	Deposits	10	-	-	(10)	-
Jungdong Steel Co., Ltd.	Deposits	3	-	-	(3)	-
Doosung Metal Co., Ltd.	Deposits	-	-	-	3	3
Jungdo Co., Ltd.	Deposits	4	-	-	-	4
Dae-A Leisure Co., Ltd.	Deposits	466	479	466	750	1,229
Daesang Techlon Co., Ltd. ²	Deposits	2	-	-	(2)	-
Carlife Co., Ltd.	Deposits	-	-	-	2	2
Computerlife Co., Ltd.	Deposits	-	-	-	1	1
Skydigital INC.	Deposits	-	-	-	16	16
KB12-1 Venture Investment Partnership	Deposits	4,963	-	_	(4,718)	245
Future Planning KB Start- up Creation Fund	Deposits	_	9,000	9,000	_	-
KB High-tech Company			·	•		
Investment Fund	Deposits	7,212	-	-	(6,937)	275
Aju Good Technology	Deposits					
Venture Fund	Doposito	2,771	-	-	3,668	6,439
KB-KDBC New						
Technology Business	Deposits					
Investment Fund		7,500	-	-	(412)	7,088
KB Digital Innovation &						
Growth New Technology	Deposits					
Business Investment	200000					
Fund		-	-	-	618	618
KB-Brain KOSDAQ Scale-	Deposits					
up Fund	Dopoolio	-	-	-	18,813	18,813
KB Star Office Private						
Real Estate Master Fund						
1		6,962	351	-	633	7,946
Associates of parent's						
subsidiaries	Deposits	6			(1)	5
SY Auto Capital Co., Ltd.	Deposits	6	-	-	(1)	5
KB No.8 Special Purpose	Deposits	2 220		2 200	(20)	
Acquisition Company 12		2,339	-	2,300	(39)	-
KB No.9 Special Purpose Acquisition Company	Deposits	2 200	2.266	2 224	(66)	2 275
		2,309	2,266	2,234	(66)	2,275
KB No.10 Special	Danasita					
Purpose Acquisition	Deposits	1 600	1 610	1.610	(22)	1 666
Company		1,698	1,618	1,618	(32)	1,666
KB No.11 Special	Donosito					
Purpose Acquisition	Deposits	F20	F20	F20	100	CE O
Company		530	530	530	128	658
RAND Bio Science Co., Ltd.	Deposits	1,032		500	(300)	232
Wise Asset Management	Deposits	340	2,366	2,008	(300)	696
Wise Asset Management	Dehosira	340	2,300	2,000	(2)	090

Co., Ltd.						
Built On Co., Ltd.	Deposits	26	-	-	(19)	7
Food Factory Co., Ltd.	Deposits	1	-	-	67	68
Acts Co., Ltd.	Deposits	4	-	-	25	29
Paycoms Co., Ltd.	Deposits	-	-	-	1	1
Big Dipper Co., Ltd.	Deposits	473	-	-	(291)	182
APRO CO.,LTD.	Deposits	-	-	-	2,201	2,201
Rainist Co., Ltd.	Deposits	-	-	-	1	1
Spark Biopharma Inc.	Deposits	-	4,300	3,300	1,630	2,630
KB IGen Private Equity Fund No. 1	Deposits	-	-	-	148	148
KB Pre IPO Secondary Venture Fund 1st	Deposits	2,690	2,000	4,000	425	1,115
POSCO-KB Shipbuilding Fund	Deposits	-	32,800	32,800	_	-
Inno Lending Co., Ltd. 2	Deposits	41	-	-	(41)	-
Key management ³	Deposits	8,042	6,605	5,140	264	9,771

(In millions of Korean won)		2017				
· ·		Beginning	Increase	Decrease	Others ¹	Ending
Parent KB Financial Group Inc Parent's subsidiaries	Deposits	57,967	-	-	(11,905)	46,062
KB Asset Management Co., Ltd. KB Real Estate Trust Co.,	Deposits	73,279	-	65,000	679	8,958
Ltd.	Deposits	21,211	-	10,000	4,976	16,187
KB Investment Co., Ltd.	Deposits	23,954	49,000	48,537	(4,601)	19,816
KB Credit Information Co., Ltd.	Deposits	3,465	1,819	2,399	1,559	4,444
KB Data System Co., Ltd.	Deposits	10,926	10,700	7,000	410	15,036
KB Life Insurance Co.,	Deposits	700	-	-	(328)	372
Ltd.	Debts	25,000	-	-	-	25,000
KB Kookmin Card Co., Ltd.	Deposits	160,002	22,000	22,000	(74,911)	85,091
KB Capital Co., Ltd.	Deposits	9,075	-	-	64,831	73,906
	Deposits	9,883	-	-	(2,849)	7,034
KB Insurance Co., Ltd.	Debts	20,000	-	-	-	20,000
	Debentures	-	-	-	49,981	49,981
KB Securities Co., Ltd.	Deposits	116,893	242,085	135,000	212,530	436,508
Acceptate	Debentures	300	-	-	(300)	-
Associates						
Korea Credit Bureau Co., Ltd.	Deposits	26,827	11,000	6,000	(6,314)	25,513
Incheon Bridge Co., Ltd.	Deposits	38,556	1,270	21,270	30,239	48,795
Terra Co., Ltd.	Deposits	-	-	-	10	10
Jungdong Steel Co., Ltd.	Deposits	3	-	-	-	3
Jungdo Co., Ltd.	Deposits	-	-	-	4	4
Dae-A Leisure Co., Ltd.	Deposits	-	-	-	466	466

						
Daesang Techlon Co., Ltd. ²	Deposits	-	-	-	2	2
KB12-1 Venture Investment Partnership	Deposits	4,562	4,000	4,000	401	4,963
KB High-tech Company Investment Fund	Deposits	4,643	3,000	3,000	2,569	7,212
Aju Good Technology Venture Fund KB-KDBC New	Deposits	1,201	-	-	1,570	2,771
Technology Business	Deposits					
Investment Fund		-	-	-	7,500	7,500
EJADE Co., Ltd. ²	Deposits	2	_	-	(2)	_
Associate of Subsidiary	·				. ,	
KB Star Office Private						
Real Estate Investment	Deposits					
Trust No.1	·	6,682	303	-	(23)	6,962
Associates of parent's		5,552			` ,	
subsidiaries						
KB No.8 Special Purpose	Deposits					
Acquisition Company 12	Верозна	2,342	2,300	2,300	(3)	2,339
KB No.9 Special Purpose	Deposits					
Acquisition Company	Doposito	2,399	-	100	10	2,309
KB No.10 Special Purpose	Deposits					
Acquisition Company	Doposito	1,754	1,618	1,600	(74)	1,698
KB No.11 Special Purpose	Deposits					
Acquisition Company		-	530	-	-	530
SY Auto Capital Co., Ltd.	Deposits	3,997	2,000	2,000	(3,991)	6
RAND Bio Science Co.,	Deposits					
Ltd.		2,356	1,000	2,500	176	1,032
Wise Asset Management	Deposits					
Co., Ltd.		-	1,346	1,475	469	340
Built On Co., Ltd.	Deposits	-	-	-	26	26
Food Factory Co., Ltd.	Deposits	-	-	-	1	1
Acts Co., Ltd.	Deposits	-	-	-	4	4
Big Dipper Co., Ltd.	Deposits	-	-	-	473	473
KB Pre IPO Secondary Venture Fund 1st	Deposits	-	13,000	11,000	690	2,690
POSCO-KB Shipbuilding Fund	Deposits	_	3,000	3,000	_	_
Inno Lending Co., Ltd. ²	Deposits	1,902	-	-	(1,861)	41
KB IC 3rd Private Equity	•	1,002			(1,001)	
Fund ²	Deposits	700	-	700	-	-

¹ Transactions between related parties, such as settlements arising from operating activities and deposits, are excluded.

² Not considered to be the Bank's related party as at December 31, 2018.

³ Represents the transactions that have started occurring since the current year.

Significant contribution and collection arising from transactions with related parties for the year ended December 31, 2018, are as follows:

(In millions of Korean won) 2018 Contribution Collection and others Parent's subsidiaries **KB IP Investment Fund** 120 Hanbando BTL Private Special Asset Fund 20,257 Hope Sharing BTL Private Special Asset Fund 1,675 KB Mezzanine Private Security Investment Trust No.2 29,280 KB Senior Loan Private Fund No.1 31,305 KB Haeoreum private securities investment trust 70(Bond)¹ 51,100 KB KBSTAR Short Term KTB Active ETF1 30,377 KB Star Office Private Real Estate Master Fund 4 50,000 1,196 KB Star Office Private Real Estate Master Fund 4 43,500 916 KB Korea Short Term Premium Private Securities 5(USD)(Bond) 113,220 KB Global Core Bond Securities Master Fund(Bond) 50,000 KB Haeoreum private securities investment trust 96 50,000 KB Korea Short Term Premium Private Securities 4(USD)(Bond) 44,872 **Associates** Korea Credit Bureau Co., Ltd. 113 Balhae Infrastructure Fund 4,645 8,623 Daesang Techlon Co., Ltd.¹ 42 PT Bank Bukopin TBK 116,422 KoFC KBIC Frontier Champ 2010-5 (PEF) 4,800 KB GwS Private Securities Investment Trust 6,386 KB12-1 Venture Investment Partnership 16,040 Future Planning KB Start-up Creation Fund 2,876 KB High-tech Company Investment Fund 4,700 Aju Good Technology Venture Fund 9,808 KB-KDBC New Technology Business Investment Fund 5,000 KBTS Technology Venture Private Equity Fund 7,620 KB Digital Innovation & Growth New Technology Business Investment Fund 1,125 KB IP Investment Fund II 3,000 KB Digital Innovation Investment Fund Limited partnership 7,700 KB-Brain KOSDAQ Scale-up Fund 4,000 KB Star Office Private Real Estate Investment Trust No.1 1,162

¹ Not considered to be the Bank's related party as at December 31, 2018.

Acceptances and guarantees and unused commitments provided to related parties as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)	_	2018	2017
Parent's subsidiaries			
KB Investment Co., Ltd.	Loss sharing	4 000	4.000
I/D Kaakmin Cand Ca. I td	agreements Loan commitment in	1,000	1,000
KB Kookmin Card Co., Ltd.	Korean won	820,000	813,194
	Loan commitment in	020,000	013,194
	foreign currency	5,591	_
	Other commitments in	0,001	
	Korean won	1,300,000	1,000,000
KB Securities Co., Ltd.	Loan commitment in	, ,	, ,
	Korean won	137,509	135,653
KB Mezzanine Private Security Investment Trust	Purchase of securities		
No.2	ruichase of securities	11,141	11,141
KB Senior Loan Private Fund No.1	Purchase of securities	3,770	3,770
Associates			
Balhae Infrastructure Fund	Purchase of securities	10,453	12,564
Incheon Bridge Co., Ltd.	Loan commitment in	00.000	
I/. FO I/DIO F (1 Ol 0040 F (DEF)	Korean won	20,000	20,000
KoFC KBIC Frontier Champ 2010-5 (PEF)	Purchase of securities	1,290	1,290
KB GwS Private Securities Investment Trust	Purchase of securities	876	876
KoFC POSCO HANWHA KB Shared Growth No.2. Private Equity Fund	Purchase of securities	10,040	10,040
Aju Good Technology Venture Fund	Purchase of securities	1,960	11,768
KB-KDBC New Technology Business	Purchase of securities	1,900	11,700
Investment Fund	ruicilase of securilles	2,500	7,500
KBTS Technology Venture Private Equity	Purchase of securities	2,500	7,500
Fund	T drondoo or occurring	7,380	_
KB Digital Innovation & Growth New	Purchase of securities	1,000	
Technology Business Investment Fund		3,375	-
KB IP Investment Fund	Purchase of securities	12,000	-
KB Digital Innovation & Growth New	Purchase of securities	12,000	_
Technology Business Investment	T drondoo or occurring		
Fund		27,300	
KB-Brain KOSDAQ Scale-up Fund	Purchase of securities		-
Associates of parent's subsidiaries		16,000	
SY Auto Capital Co., Ltd.	Loan commitment in		
or Auto Capital Co., Ltd.	Korean won	6,700	10,000
Key management	Loan commitment in	0,700	10,000
,	Korean won	894	458

Acceptances and guarantees and unused commitments received from related parties as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		2018	2017
Parent's subsidiaries			
KB Investment Co., Ltd.	Loss sharing agreements	14,474	12,117
KB Real Estate Trust Co., Ltd.	Purchase of securities	1,319	4,319
KB Life Insurance Co., Ltd.	Purchase of securities	6,595	21,595
KB Securities Co., Ltd.	Purchase of securities	1,319	4,319
KB Kookmin Card Co., Ltd.	Loan commitment in Korean won	87,922	85,114

Compensation to key management for the years ended December 31, 2018 and 2017, consists of:

(In millions of Korean won)	2018					
	Short-term employee benefits	Post- employment benefits	Share-based payments	Total		
Registered directors (executive)	1,278	51	1,022	2,351		
Registered directors (non-executive)	337	-	-	337		
Non-registered directors	4,807	183	3,217	8,207		
_	6,422	234	4,239	10,895		

(In millions of Korean won)	2017					
_	Short-term employee benefits	Post- employment benefits	Share-based payments	Total		
Registered directors (executive)	1,270	60	1,831	3,161		
Registered directors (non-executive)	315	-	-	315		
Non-registered directors	4,990	178	7,966	13,134		
	6,575	238	9,797	16,610		

Significant operating transactions occurring between the Group and related parties include the establishment of deposit accounts, issuance of general purpose loans, loans on business transactions and trade receivables, and overdraft credit accounts arising from net settlement agreement between the Bank and KB Kookmin Card Co., Ltd.

Collateral offered to related parties as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)		201	18	2017	
	Assets pledged	Carrying amount	Collateralized amount	Carrying amount	Collateralized amount
Parent's subsidiaries					
KB Securities Co., Ltd.	Securities	62,006	62,000	75,990	76,000
KB Life Insurance Co., Ltd.	Securities	26,055	25,000	26,128	25,000
	Building/ Land	209,459	32,500	229,023	32,500

KB Insurance Co., Ltd.	Securities	50,000	50,000	50,000	50,000
	Building/ Land	209.459	26.000	229.023	26.000

¹ Collaterals related to lease contracts arising from operating activities between related parties are excluded.

Collateral received from related parties as at December 31, 2018 and 2017, are as follows:

(In millions of Korean won)

(2018	2017
Parent's subsidiaries			
KB Securities Co., Ltd.	Time deposits/		
	Beneficiary right certificate	178,178	167,000
	Securities	20,000	20,000
KB Life Insurance Co., Ltd.	Securities	10,000	10,000
KB Kookmin Card Co., Ltd.	Time deposits	22,000	22,000
KB Insurance Co., Ltd.	Securities	66,500	58,000
KB Credit Information Co.,	Time deposits and others		
Ltd.		1,425	1,265
KB Star Office Private Real	Real estate		
Estate Master Fund 3		28,800	-
KB Star Office Private Real	Real estate		
Estate Master Fund 4		24,000	-
Key management	Time deposits and others	401	388
	Real estate	3,182	2,287

¹ Collaterals related to lease contracts arising from operating activities between related parties are excluded.

As at December 31, 2018, Incheon Bridge Co., Ltd., a related party, provides fund management account, civil engineering completed risk insurance, and management rights as senior collateral amounting to \forall 611,000 million to a financial syndicate that consists of the Group and five other institutions, and as subordinated collateral amounting to \forall 384,800 million to subordinated debt holders that consist of the Group and two other institutions. Also, it provides certificate of credit guarantee amounting to \forall 400,000 million as collateral to a financial syndicate consisting of the Group and five other institutions.

The amounts of receivables purchased from KB securities Co., Ltd. are $\mbox{$W$}$ 7,920,050 million and $\mbox{$W$}$ 4,168,048 million for the years ended December 31, 2018 and 2017 respectively, and the amounts of receivables sold to KB securities Co., Ltd. are $\mbox{$W$}$ 3,835,245 million and $\mbox{$W$}$ 2,204,346 million for the years ended December 31, 2018 and 2017 respectively.

The amounts of intangible assets purchased through KB Data System Co., Ltd. are ₩ 17,831 million and ₩ 12,532 million for the years ended December 31, 2018 and 2017, respectively.

The Bank and KB Kookmin Card Co., Ltd. are jointly and severally liable for the payables of the Bank before the spin-off date.

42. Adoption of Korean IFRS 1109 Financial Instruments

The Group adopted Korean IFRS 1109 *Financial Instruments*, which was issued on September 25, 2015, on January 1, 2018. The application of Korean IFRS 1109 has following impacts on the financial statements.

On the date of initial application, January 1, 2018, the measurement category of the financial assets in accordance with Korean IFRS 1039 and 1109, are as follows:

(In millions of Korean won)

Measuremer	nt categories	Carrying amounts				
December 31, 2017 (Korean IFRS 1039)	January 1, 2018 (Korean IFRS 1109)	Korean IFRS 1039 ¹	Reclassification	Remeasurement	Korean IFRS 1109 ¹	
Cash and due from financial institutions	Financial assets at amortized cost Financial assets at	15,646,318	(1,908,070)	(1,530)	13,736,718	
	fair value through profit or loss ²	_	1,908,070	-	1,908,070	
	,	15,646,318		(1,530)	15,644,788	
Financial assets at fai	r value through profit o	r loss (under Ko	orean IFRS 1039)			
Financial assets held for trading: debt securities Financial assets held	Financial assets at fair value through profit or loss	7,900,613	312,312	-	8,212,925	
for trading: equity securities Financial assets held		338,904	(216,955)	-	121,949	
for trading: others		73,856	-	-	73,856	
Financial assets designated at fair value through profit						
or loss		95,357	(95,357)	-	-	
		8,408,730	<u> </u>		8,408,730	
Derivative financial assets held for trading Derivative financial	Derivative financial assets held for trading Derivative financial	2,527,190	(17,197)	-	2,509,993	
assets held for hedging	assets held for hedging	80,469	_	_	80,469	
neaging	neaging	2,607,659	(17,197)		2,590,462	
Loans	Financial assets at amortized cost Financial assets at	251,710,605	(132,255)	(289,070)	251,289,280	
	fair value through profit or loss ³		130,032	2,690	132,722	
		251,710,605	(2,223)	(286,380)	251,422,002	
Financial investments Available-for-sale financial assets: debt securities	Financial assets at fair value through other comprehensive income	27,605,761	(2,835,591)	-	24,770,170	

	Financial assets at fair value through profit				
	or loss ⁴ Financial assets at	-	2,549,706	-	2,549,706
	amortized cost ⁵	-	2,835,591	4,118	2,839,709
Available-for-sale financial assets: equity securities	Financial assets at fair value through other comprehensive				
	income Financial assets at fair	4,472,263	(2,587,853)	276	1,884,686
	value through profit or loss ⁶	_	38,147	(89)	38,058
Available-for-sale financial assets: others	Financial assets at fair value through other comprehensive			, ,	
	income Financial assets at fair value through profit	500	(500)	-	-
	or loss 7	-	500	-	500
Held-to-maturity financial assets	Financial assets at amortized cost Financial assets at fair value through profit	8,737,150	(214,280)	(1,202)	8,521,668
	or loss ⁸	-	214,280	(2,004)	212,276
		40,815,674	-	1,099	40,816,773
Other financial assets	Financial assets at amortized cost	6,341,463	(1,624)	(3,368)	6,336,471
		325,530,449	(21,044)	(290,179)	325,219,226

¹ Net of allowance.

- Other securities amounting to ₩ 500 million classified as available-for-sale financial assets in accordance with Korean IFRS 1039 were reclassified as financial assets at fair value through profit or loss because those financial assets did not meet SPPI condition.
- ⁸ The structured debt securities amounting to ₩ 214,280 million classified as held-to-maturity financial assets in accordance with Korean IFRS 1039 were reclassified as financial assets at fair value through profit or loss because those financial assets did not meet SPPI condition.

² The deposits amounting to ₩ 1,908,070 million classified as loans and receivables in accordance with Korean IFRS 1039 were reclassified as financial assets at fair value through profit or loss because those financial assets did not meet the Solely Payments of Principal and Interest ("SPPI") condition.

³ The loans amounting to ₩ 132,255 million classified as loans and receivables in accordance with Korean IFRS 1039 were reclassified as financial assets at fair value through profit or loss because those financial assets did not meet the SPPI condition.

⁴ The equity securities amounting to ₩ 2,549,706 million classified as available-for-sale financial assets in accordance with Korean IFRS 1039 were reclassified as debt securities (financial assets at fair value through profit or loss) because those financial assets did not meet SPPI condition.

⁵ The debt securities amounting to ₩ 2,835,591 million classified as available-for-sale financial assets in accordance with Korean IFRS 1039 were reclassified as financial assets at amortized cost because those financial assets met the business model condition which the Group holds the financial asset for the collection of the contractual cash flows, and SPPI condition.

⁶ The equity securities amounting to ₩ 38,147 million classified as available-for-sale financial assets in accordance with Korean IFRS 1039 were reclassified as financial assets at fair value through profit or loss as the Group did not designate those equity securities as financial assets at fair value through other comprehensive income.

On the date of initial application, January 1, 2018, the measurement category of the financial liabilities in accordance with Korean IFRS 1039 and 1109, are as follows:

(In millions of Korean won)

Measurement categories Carrying amounts December 31, 2017 January 1, 2018 Korean Korean Reclassification Remeasurement (Korean IFRS 1039) (Korean IFRS 1109) **IFRS 1039 IFRS 1109** Financial liabilities held Financial liabilities at fair for trading value through profit or loss 74,191 74,191 Derivative financial Derivative financial liabilities held for liabilities held for trading 2,558,788 2,558,788 trading Derivative financial Derivative financial liabilities held for liabilities held for hedging hedging 50,032 50,032 Deposits Financial liabilities at amortized cost 252,478,931 252,478,931 Debts Financial liabilities at amortized cost 15,810,753 15,810,753 Debentures Financial liabilities at amortized cost 19,183,798 19,183,798 Other financial Financial liabilities at 12,733,354 (21,044)12,712,310 liabilities amortized cost 302,868,803 302,889,847 (21,044)

On the date of initial application, January 1, 2018, the classification of the financial assets by category in accordance with Korean IFRS 1109, are as follows:

(In millions of Korean won)

January 1, 2018

	Financial assets at fair value through profit or loss	Debt securities at fair value through other comprehensive income	Equity securities at fair value through other comprehensive income	Financial assets at amortized cost ¹	Derivative financial instruments held for hedging	Total
Cash and due						
from financial						
institutions	-	-	-	13,736,718	-	13,736,718
Financial assets at						
fair value through						
profit or loss	13,250,062	-	-	-	-	13,250,062
Derivative						
financial asset	0.500.000					0.500.000
held for trading Derivative	2,509,993	-	-	-	-	2,509,993
financial asset						
held for hedging	_	_	_	_	80,469	80,469
Loans at					00,400	00,400
amortized cost	-	-	-	251,289,280	-	251,289,280
Financial						
investments	-	24,770,170	1,884,686	11,361,377	-	38,016,233
Other financial						
assets		-		6,336,471	-	6,336,471
	15,760,055	24,770,170	1,884,686	282,723,846	80,469	325,219,226

¹ Net of allowance.

On the date of initial application, January 1, 2018, the reclassification from financial assets at fair value through profit or loss to financial assets at amortized cost or financial assets at fair value through other comprehensive income, does not exist.

On the date of initial application, January 1, 2018, the reclassification from certain financial assets, other than financial assets at amortized cost to financial assets at amortized cost, are as follows:

(In millions of Korean won)	Measurement categories before reclassification	Fair value	Recognizable valuation gain or loss if not reclassified
Currency stabilization bond	Available-for-sale	1,975,001	(248)
Asset backed securities	Available-for-sale	860,590	(4,046)
		2,835,591	(4,294)

On the date of initial application, January 1, 2018, the adjustments from the allowances/provision in accordance with Korean IFRS 1039 to the allowances/provision in accordance with Korean IFRS 1109, are as follows:

Measurement categories		Allowances/Provision			
December 31, 2017 (Korean IFRS 1039)	January 1, 2018 (Korean IFRS 1109)	Korean IFRS 1039	Reclassification	Remeasurement	Korean IFRS1109
Loans and receivab	les				
Due from financial institutions	Financial assets at amortized cost	-	-	1,530	1,530
Loans	Financial assets at amortized cost Financial assets at fair value through profit or	1,378,113	-	289,070	1,667,183
	loss	35,608	(35,608)	-	-
Other financial assets	Financial assets at amortized cost	49,722	-	3,368	53,090
Available-for-sale					
Debts securities	Financial assets at fair value through other				
	comprehensive income Financial assets at	-	-	2,145	2,145
Hold to moturity on	amortized cost	-	-	176	176
Held-to-maturity sec					
Debts securities	Financial assets at amortized cost	-	-	1,202	1,202
		1,463,443	(35,608)	297,491	1,725,326
Unused commitmen	nt and guarantee				
Non-financial guarant	tee and unused commitment	195,772	-	4,940	200,712
		195,772		4,940	200,712
Financial guarantee		1,862		356	2,218
		1,862		356	2,218

On the date of initial application, January 1, 2018, the impacts on accumulated other comprehensive income due to financial assets at fair value through other comprehensive income and others, are as follows:

(In millions of Korean won)	Impact of application
December 31, 2017 (before adoption of Korean IFRS 1109)	678,094
Change of subsequent Measurement category:	
available-for-sale financial assets to financial assets at amortized cost	4,294
Change of subsequent Measurement category:	
available-for-sale financial assets to financial assets at fair value	
through profit or loss	(64,987)
Recognition of expected credit losses on	
debt securities at fair value through other comprehensive income	2,145
Reversal of impairment on equity securities	
at fair value through other comprehensive income	(612,647)
Valuation of fair value of equity securities accounted for under cost	
method	276
Change of gains (losses) from using equity method of	
associates and joint ventures	(5,709)
Change of gain/loss from foreign currency translation of foreign	
operations	1,932
Tax effect	184,605
January 1, 2018 (after adoption of Korean IFRS 1109)	188,003

On the date of initial application, January 1, 2018, the impacts on retained earnings, are as follows:

(In millions of Korean won)	Impact of application
December 31, 2017 (before adoption of Korean IFRS 1109)	17,403,751
Change of subsequent Measurement category: available-for-sale	
financial assets to financial assets at fair value through profit or loss	64,987
Change of subsequent Measurement category: held-to-maturity	
financial assets to financial assets at fair value through profit or loss	(2,004)
Change of subsequent Measurement category: loans and receivables	
to financial assets at fair value through profit or loss	2,690
Recognition of expected credit losses on debt securities at fair value	
through other comprehensive income	(2,145)
Reversal of impairment on equity securities at fair value through other	
comprehensive income	612,647
Application of expected credit losses on financial assets at amortized	
cost	(295,346)
Application of expected credit losses on provisions	(5,296)
Valuation of fair value of equity securities accounted for under cost	
method	(89)
Change of gains (losses) from using equity method of associates and	
joint ventures	6,994
Change of gain/loss from foreign currency translation of foreign	
operations	(1,932)
Tax effect	(105,563)
January 1, 2018 (after adoption of Korean IFRS 1109)	17,678,694

43. Approval of Issuance of the Financial Statements

The issuance of the Group's consolidated financial statements as at and for the year ended December 31, 2018, was originally approved by the Board of Directors on February 7, 2019, and was re-approved with revision on February 28, 2019.

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