IMPORTANT NOTICE

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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 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 Managers (as defined below) or any affiliate of the Managers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the Managers or such affiliate on behalf of the issuer in such jurisdiction.

The following 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 BNP Paribas, Citigroup Global Markets Inc., The Hongkong and Shanghai Banking Corporation Limited, Merrill Lynch International, NH Investment & Securities Co., Ltd. and Société Générale (collectively, the "**Managers**") nor any person who controls any of them nor any director, officer, employee or agent of any of them nor affiliate of any such person accepts any liability or responsibility whatsoever 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 Managers.

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This document 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 (all such persons together being referred to as "**relevant persons**"). Any securities will only be available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities 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.

PRICING SUPPLEMENT

NONGHYUP BANK

(incorporated with limited liability under the laws of the Republic of Korea)

Issue of US$500,000,000 1.250% Notes due 2025
under the US$8,000,000,000
Global Medium Term Note Programme

THE NOTES TO WHICH THIS PRICING SUPPLEMENT RELATES (THE "**NOTES**") HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND, UNLESS SO REGISTERED, 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), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. ACCORDINGLY, THE NOTES WILL BE OFFERED AND SOLD ONLY (I) OUTSIDE THE UNITED STATES TO NON-U.S. PERSONS IN RELIANCE ON REGULATION S AND (II) WITHIN THE UNITED STATES IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT ("**RULE 144A**") TO QUALIFIED INSTITUTIONAL BUYERS (AS DEFINED UNDER RULE 144A).

IN CONNECTION WITH THIS OFFERING, TO THE EXTENT PERMITTED BY, AND IN ACCORDANCE WITH, APPLICABLE LAWS AND REGULATIONS, ANY OF BNP PARIBAS, CITIGROUP GLOBAL MARKETS INC., THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED, MERRILL LYNCH INTERNATIONAL, NH INVESTMENT & SECURITIES CO., LTD. AND SOCIÉTÉ GÉNÉRALE (APPOINTED AND ACTING IN ITS CAPACITY AS STABILISING MANAGER) (THE "**STABILISING MANAGERS**") (OR PERSONS ACTING ON BEHALF OF THE STABILISING MANAGERS) MAY OVER-ALLOT 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 STABILISING MANAGERS (OR PERSONS ACTING ON BEHALF OF THE STABILISING MANAGERS) WILL UNDERTAKE STABILISATION ACTION. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE 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 NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES.

Joint Bookrunners and Lead Managers

BNP PARIBAS
HSBC
Société Générale Corporate & Investment Banking

Citigroup
BofA Securities

Co-manager

NH Investment & Securities

Pricing Supplement dated 13 July 2020

NongHyup Bank

Issue of US$500,000,000 1.250% Notes due 2025
under the US$8,000,000,000 Global Medium Term Note Programme

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the Offering Circular dated 7 July 2020. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with such Offering Circular. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of the Offering Circular and this Pricing Supplement.

This document 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 from the requirement to publish a prospectus for offers of Notes. Accordingly any person making or intending to make an offer in that Relevant State of Notes which are the subject of an offering contemplated in this document may only do so in circumstances in which no obligation arises for the Issuer or any of the Managers 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 Managers have authorised, nor do they authorise, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or the Managers to publish or supplement a prospectus for such offer.

For the purposes of this provision, the expression an "offer to the public" in relation to any Securities in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any **Securities** to be offered so as to enable an investor to decide to purchase or subscribe for any Securities, and 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") – 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).

THE NOTES HAVE NOT BEEN REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA, AND, ACCORDINGLY, THE NOTES MAY NOT BE OFFERED, SOLD, DELIVERED OR TRANSFERRED, DIRECTLY OR INDIRECTLY, IN KOREA OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, ANY KOREAN RESIDENT (AS SUCH TERM IS DEFINED UNDER THE FOREIGN EXCHANGE TRANSACTION ACT OF KOREA), EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS.

1.	Issuer:	NongHyup Bank
2.	(i) Series Number:	24
	(ii) Tranche Number:	1
3.	Specified Currency or Currencies:	United States Dollars ("**US$**")
4.	Aggregate Nominal Amount:	
	(i) Series:	US$500,000,000

	(ii)	Tranche:	US$500,000,000
5.	(i)	Issue Price:	99.730% of the Aggregate Nominal Amount
	(ii)	Net proceeds (after deducting the underwriting commission but prior to deducting the offering expenses)	US$497,150,000
6.	(i)	Specified Denominations:	US$200,000 and integral multiples of US$1,000 in excess thereof
	(ii)	Calculation Amount:	US$1,000
7.	(i)	Issue Date:	20 July 2020
	(ii)	Interest Commencement Date:	Issue Date
8.	Maturity Date:		20 July 2025
9.	Interest Basis:		1.250% Fixed Rate (further particulars specified below)
10.	Redemption/Payment Basis:		Redemption at par
11.	Change of Interest Basis or Redemption/Payment Basis:		Not Applicable
12.	Put/Call Options:		None
13.	(i)	Status of the Notes:	Senior Unsecured
	(ii)	Date of Board approval for issuance of Notes obtained:	19 December 2019
	(iii)	Date of regulatory approval/ consent/report for issuance of Notes obtained:	The Issuer filed a report for the issuance of the Notes to the Ministry of Strategy and Economy of Korea, which report has been accepted on 2 July 2020.
14.	Listing:		Singapore Exchange Securities Trading Limited
15.	Method of distribution:		Syndicated

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	Fixed Rate Note Provisions	Applicable
	(i) Rate(s) of Interest:	1.250% per annum payable semi-annually in arrear
	(ii) Interest Payment Date(s):	20 January and 20 July in each year up to and including the Maturity Date (with the first interest payment date being 20 January 2021) in each case, subject to adjustment in accordance with the Following Business Day Convention
	(iii) Fixed Coupon Amount(s):	US$6.25 per Calculation Amount
	(iv) Broken Amount(s):	Not Applicable
	(v) Day Count Fraction:	30/360
	(vi) Determination Date(s):	Not Applicable
	(vii) Other terms relating to the method of calculating interest for Fixed Rate Notes:	None
17.	Floating Rate Note Provisions	Not Applicable
18.	Zero Coupon Note Provisions	Not Applicable
19.	Index Linked Interest Note/other variable-linked interest Note Provisions	Not Applicable
20.	Dual Currency Note Provisions	Not Applicable

PROVISIONS RELATING TO REDEMPTION

21.	Call Option	Not Applicable
22.	Put Option	Not Applicable
23.	Final Redemption Amount	US$1,000 per Calculation Amount
24.	Early Redemption Amount	US$1,000 per Calculation Amount

GENERAL PROVISIONS APPLICABLE TO THE NOTES

25.	Form of Notes:	Registered Notes: Unrestricted Global Certificate exchangeable for unrestricted Individual Note Certificates in the limited circumstances described in the Unrestricted Global Certificate, and Restricted Global Certificate exchangeable for restricted Individual Note Certificates in the limited circumstances described in the Restricted Global Certificate
26.	Additional Financial Centre(s) or other special provisions relating to payment dates:	Seoul, Korea, London, United Kingdom and New York, U.S.A.

27.	Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature):	No
28.	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
29.	Details relating to Instalment Notes:	
	(i) Instalment Amount(s):	Not Applicable
	(ii) Instalment Date(s):	Not Applicable
30.	Redenomination renominalisation and reconventioning provisions:	Not Applicable
31.	Consolidation provisions:	Not Applicable
32.	Other terms or special conditions:	Not Applicable

DISTRIBUTION

		Managers
33.	(i) If syndicated, names of Managers:	*Joint Lead Managers* BNP Paribas Citigroup Global Markets Inc. The Hongkong and Shanghai Banking Corporation Limited Merrill Lynch International Société Générale *Co-manager* NH Investment & Securities Co., Ltd.
	(ii) Date of Subscription Agreement:	
	(ii) Stabilising Manager:	Each of the Joint Lead Managers
34.	If non-syndicated, name of Relevant Dealer:	Not Applicable
35.	U.S. Selling Restrictions:	Rule 144A Eligible Reg. S Category 2 TEFRA rules not applicable
36.	Prohibition of Sales to EEA or UK Retail Investors:	Not Applicable
37.	Additional selling restrictions:	Not Applicable

OPERATIONAL INFORMATION

38.	Any clearing system(s) other than Euroclear and Clearstream and the relevant identification number(s):	DTC
39.	Delivery:	Delivery against payment
40.	In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:	Not Applicable
41.	Additional Paying Agent(s) (if any):	Not Applicable
	ISIN:	Rule 144A Notes: US65540JAE82 Regulation S Notes: US65540KAD72
	CUSIP:	Rule 144A Notes: 65540J AE8 Regulation S Notes: 65540K AD7
	Common codes:	Rule 144A Notes: 220183238 Regulation S Notes: 220183190

RECENT DEVELOPMENTS

The following sections provide information that supplements or replaces certain information about the Issuer under the headings corresponding to the headings below in the Offering Circular. Capitalised terms used in these sections or elsewhere in this Pricing Supplement have the meanings given to them in the Offering Circular. If the information in these sections differs from the information in the Offering Circular, you should rely on the information in these sections.

USE OF PROCEEDS

The net proceeds from the issuance of the Notes are expected to be US$497,150,000, after deducting a combined management and underwriting commission but not estimated expenses of the offering. The Issuer will allocate an amount equivalent to the net proceeds from the issuance of the Notes (the "**Social Bond Proceeds**") to finance and/or refinance new and/or existing loans extended to entities that fall within the Social Eligible Categories, including (i) sustainable agriculture, (ii) employment generation, (iii) small- and medium-sized enterprise ("**SME**") financing and microfinance, (iv) access to essential services, (v) affordable basic infrastructure and (vi) affordable housing (collectively, the "**Social Eligible Categories**") in accordance with the Issuer's Green, Social and Sustainability Bond Framework, which is in alignment with the Green Bond Principles 2018, the Social Bond Principles 2018 and the Sustainability Bond Guidelines 2018 published by the International Capital Markets Association. In particular, the Issuer intends to allocate the proceeds to support agriculture, rural areas and farmers as defined by the Framework Act on Agriculture, Rural Community and Food Industry, companies that qualify for job creation including smart farm operations as defined by the Ministry of Agriculture, Food and Rural Affairs, SMEs as defined in Article 2 of the Enforcement Decree of the Framework Act on Small and Medium Enterprises, low-income individuals and tenants of public housing as defined by the Korean Ministry of Health and Welfare and the Ministry of Education, affected by the COVID-19 pandemic, which qualify for the Social Eligible Categories in the Issuer's Green, Social and Sustainability Bond Framework.

Examples of Social Eligible Categories include the following:

- Sustainable agriculture: loans to support (i) agriculture, rural areas and farmers defined under the Framework Act on Agriculture, Rural Community and Food Industry; (ii) smart farm operations defined by the Ministry of Agriculture, Food and Rural Affairs. and (iii) agri-food companies or farmers with less than five years of operations;

- Employment generation: loans to job creation companies certified by or in receipt of guarantees from the government or government related-entities (including but not limited to the Ministry of Employment and Labour, the Ministry of Small and Medium-sized Enterprises and Startups and the Korea Technology Finance Corporation);

- SME financing and microfinance: loans to companies categorised as SMEs under the Enforcement Decree of the Framework Act on Small and Medium Enterprises;

- Access to essential services (including healthcare, education and farming training, financing and financial services): (i) loans to low income individuals (as determined by the Korean Ministry of Health and Welfare and the Ministry of Education), single parents with dependent children below 18 years of age or individuals with financially-dependent family members over 60 years of age; and (ii) medical, education, farming and training programs to alienated communities or underserved populations, including famers and/or communities within low income target groups in rural areas;

- Affordable basic infrastructure: projects that provide or promote to certain underserved target populations including, among others, low income individuals, people with disabilities and victims of natural disasters: (i) clean drinking water, (ii) sewerage, (iii) sanitation, (iv) public transportation or (v) energy; and

- Affordable housing: lending to tenants of public housing provided by (i) public housing providers under the Special Act of Public Housing or (ii) public housing providers approved by the Korea Housing Finance Corporation.

Project Evaluation and Selection Process

Under the Issuer's project evaluation and selection process, the Social Eligible Categories will be initially identified and proposed by the Issuer's business units if they have met all lending criteria established by the Issuer for lending in the ordinary course of its business. The Issuer's Sustainability Bond Working Group, which is composed of representatives from the Issuer's Treasury Department, Planning & Coordination Department, Management Support Department, Retail Marketing Department, Corporate Marketing Department, Investment Banking Department, International Banking Department, Agriculture & Food Finance Department, Smart Banking Department and Global Business Department, will review the proposed Social Eligible Categories to determine its compliance with the Issuer's Green, Social and Sustainability Bond Framework. The Sustainability Bond Working Group will review the allocation of proceeds on an annual basis to determine whether any changes or updates to the existing allocations would be necessary.

Management of Proceeds

The Social Bond Proceeds will be deposited in the Issuer's general funding accounts and earmarked for allocation to eligible assets. The allocation of the Social Bond Proceeds will be recorded in a register, which will contain the details of the social bonds and their use of proceeds. Any balance of the Social Bond Proceeds not yet allocated to eligible assets may be used for the payment of all or a portion of outstanding indebtedness, and/or temporarily invested in cash, cash equivalents, investment grade securities or other marketable securities and short-term instruments or other capital management activities.

Reporting

The Issuer will disclose within one year of issuing the social bonds the allocation of proceeds and the social impact, which will be publicly available on the Issuer's website. The allocation reporting will comprise the list and breakdown of Social Eligible Categories along with the balance of unallocated proceeds. The impact reporting will be disclosed where feasible and will comprise qualitative social impact analysis, as well as quantitative social performance indicators (if reasonably practicable), on loans extended to entities that fall within the Social Eligible Categories. Sustainalytics, an external consultant, issued an opinion dated 14 December 2018 regarding the suitability of the Notes as an investment in connection with certain criteria (the "**Second Party Opinion**"). The Second Party Opinion and the Issuer's Green, Social and Sustainability Bond Framework are publicly available on the following website: www.nhbank.com.

RISK FACTORS

Risks Relating to the Notes

The Notes may not be a suitable investment for all investors seeking exposure to social assets.

The Issuer will allocate an amount equivalent to the net proceeds from the issuance of the Notes to finance and/or refinance new and/or existing loans extended to entities that fall within the Social Eligible Categories (as defined in "–*Use of Proceeds*") in accordance with its Green, Social and Sustainability Bond Framework, which is in alignment with the Green Bond Principles 2018, the Social Bond Principles 2018 and the Sustainability Bond Guidelines 2018 published by the International

Capital Markets Association. See "Use of Proceeds." In particular, the Issuer intends to allocate the proceeds to support agriculture, rural areas and farmers, companies that qualify for job creation including smart farm operations, SMEs, low-income individuals and tenants of public housing, affected by the COVID-19 pandemic, which qualify for the Social Eligible Categories in the Issuer's Green, Social and Sustainability Bond Framework. The examples of Social Eligible Categories provided in "*–Use of Proceeds*" are for illustrative purposes only and no assurance can be provided that loans to entities with these specific characteristics will be made by the Issuer during the term of the Notes. The Issuer's Green, Social and Sustainability Bond Framework and the Second Party Opinion (as defined in "*–Use of Proceeds*") are not incorporated into, and do not form a part of, this Pricing Supplement or the Offering Circular.

There is currently no market consensus on what precise attributes are required for a particular loan or series of notes to be defined as "social," and therefore no assurance can be provided to investors that selected Social Eligible Categories will meet all investor expectations regarding social impact. Although the Social Eligible Categories will be selected in accordance with the categories recognized under the Issuer's Green, Social and Sustainability Bond Framework, and will be developed in accordance with relevant legislation and standards, there can be no guarantee that the loans will deliver the social benefits as anticipated, or that adverse social impact will not occur during the term of the Notes. In addition, where any negative impact is insufficiently mitigated, any loans extended may become controversial and may be criticized by activist groups or other stakeholders.

The Second Party Opinion may not reflect the potential impact of all risks related to the structure, market, additional risks discussed above and other factors that may affect the value of the Notes. The Second Party Opinion is not a recommendation to buy, sell or hold securities and is only current as of the date that the Second Party Opinion was initially issued. In addition, although the Issuer has agreed to certain reporting and use of proceeds obligations in connection with certain social criteria, its failure to comply with such obligations will not constitute a breach or an event of default under the Notes. A withdrawal of the Second Party Opinion or any failure by the Issuer to use an amount equivalent to the net proceeds from the issuance of the Notes on Social Eligible Categories or to meet or continue to meet the investment requirements of certain socially-focused investors with respect to the Notes may affect the value of the Notes and may have consequences for certain investors with portfolio mandates to invest in social assets.

No assurance can be provided with respect to the suitability of the Second Party Opinion or that the Notes will fulfill the criteria required to qualify as social bonds. Each potential purchaser of Notes should determine for itself the relevance of the information contained in this Pricing Supplement and the Offering Circular regarding the use of the net proceeds from the issuance of the Notes and its purchase of Notes should be based upon such investigation as it deems necessary.

RATING OF THE NOTES

The Notes are expected to be rated A1 by Moody's Investors Service, Inc. and A+ by Standard & Poor's Ratings Services, a division of the McGraw-Hill Companies, Inc. Such ratings do not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision or withdrawal at any time by such rating organisations. Each such rating should be evaluated independently of any other rating of the Notes.

STABILISING

In connection with this issue, each of the Joint Lead Managers (or persons acting on behalf of any Stabilising Manager) 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 Stabilising Manager (or persons acting on behalf of a Stabilising Manager) will undertake stabilisation action. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the 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 Notes and 60 days after the date of the allotment of the Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilising Manager (or persons acting on behalf of any Stabilising Manager) in accordance with all applicable laws and rules.

LISTING APPLICATION

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the US$8,000,000,000 Global Medium Term Note Programme of the Issuer. The Singapore Exchange Securities Trading Limited (the "**SGX-ST**") 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 SGX-ST 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.

CAPITALISATION

The following table sets forth the capitalisation of the Issuer as of 31 March 2020 (i) on an actual basis, as extracted from the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 included in the Offering Circular and (ii) on an as adjusted basis to give effect to the issue of the Notes. The as adjusted information below is illustrative only and does not take into account any changes in the capitalisation of the Issuer after 31 March 2020, other than to give effect to the issue of the Notes.

	As of 31 March 2020	
	Actual[1]	**As Adjusted**
	(in billions of Won)	
Indebtedness:		
Borrowings	₩ 12,805	₩ 12,805
Debentures	17,280	17,280
Notes offered hereby	–	608 [2]
Sub total	₩ 30,085	₩ 30,693
Equity:		
Capital stock	₩ 2,162	₩ 2,162
Other paid-in capital	9,848	9,848
Retained earnings	5,089	5,089
Other components of equity	(718)	(718)
Sub total	₩ 16,381	₩ 16,381
Total	₩ 46,466	₩ 47,074

Notes:

(1) There has been no material change in the capitalization of the Issuer since 31 March 2020.

(2) Reflects net proceeds of US$497,150,000 (after deducting a combined management and underwriting commission but not estimated expenses) from the issue of the Notes translated into Won at ₩1,222.6 to US$1.00, the Market Average Exchange Rate in effect as of 31 March 2020.

OFFERING CIRCULAR **CONFIDENTIAL**

NONGHYUP BANK

(incorporated with limited liability in the Republic of Korea)

US$8,000,000,000
Global Medium Term Note Programme

Under this US$8,000,000,000 Global Medium Term Note Programme (the "**Programme**"), NongHyup Bank (the "**Issuer**") may from time to time issue notes (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). Notes may be issued in bearer or registered form. The maximum aggregate nominal amount of all Notes from time to time outstanding under the Programme will not exceed US$8,000,000,000 (or its equivalent in other currencies calculated as described in the Dealer Agreement described herein), subject to increase 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 by the Issuer (each a "**Dealer**" and together the "**Dealers**"), which appointment may be for a specific issue or on an ongoing basis. 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.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "**SGX-ST**") in connection with the Programme and application will be made for the listing and quotation of 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 on the SGX-ST. Such permission will be granted when such Notes have been admitted for listing and quotation on the SGX-ST. The SGX-ST 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 SGX-ST are not to be taken as an indication of the merits of the Issuer, the Programme or such Notes.

See "*Risk Factors*" for a discussion of certain factors to be considered in connection with an investment in the Notes.

Each Series (as defined in *"Summary of the Programme")* of Notes in bearer form will be represented on issue by a temporary global note (each a "**Temporary Global Note**"), and will be sold in an "offshore transaction" within the meaning of Regulation S ("**Regulation S**") under the United States Securities Act of 1933, as amended (the "**Securities Act**"). Interests in Temporary Global Notes generally will be exchangeable for interests in permanent global notes (each a "**Permanent Global Note**" and, together with the Temporary Global Notes, the "**Global Notes**"), or if so stated in the relevant pricing supplement, definitive Notes ("**Definitive Notes**"), after the date falling 40 days after the later of the commencement of the offering and the relevant issue date of such Tranche (as defined in *"Summary of the Programme"),* upon certification as to non-U.S. beneficial ownership. Interests in Permanent Global Notes will be exchangeable for Definitive Notes in whole but not in part as described under *"Summary of Provisions Relating to the Notes while in Global Form."*

The Notes of each Series to be issued in registered form ("**Registered Notes**") and which are sold in an "offshore transaction" within the meaning of Regulation S ("**Unrestricted Notes**") will initially be represented by a permanent registered global certificate (each an "**Unrestricted Global Certificate**") without interest coupons, which may be deposited on the relevant issue date (a) in the case of a Series intended to be cleared through Euroclear Bank SA/NV ("**Euroclear**") and/or Clearstream Banking S.A. ("**Clearstream**"), with a common depositary on behalf of Euroclear and Clearstream or (b) in the case of a Series intended to be cleared through the Central Moneymarkets Unit Service (the "**CMU Service**"), operated by the Hong Kong Monetary Authority (the "**HKMA**"**),** with a sub-custodian for the CMU Service (c) in the case of a Series intended to be cleared through The Depositary Trust Company ("**DTC**"), registered in the name of Cede & Co. as nominee for DTC and (d) in the case of a Series intended to be cleared through a clearing system other than, or in addition to, Euroclear and/or Clearstream, DTC and/or the CMU Service or delivered outside a clearing system as agreed between the Issuer and the relevant Dealer. Registered Notes which are sold in the United States to "qualified institutional buyers" (each, a "**QIB**") within the meaning of Rule 144A ("**Rule 144A**") under the Securities Act ("**Restricted Note**s") will initially be represented by a permanent registered global certificate (each a "**Restricted Global Certificate**" and, together with the relevant Unrestricted Global Certificate, the "**Global Certificates**"), without interest coupons, which may be deposited on the relevant issue date with a custodian (the "**DTC Custodian**") for, and registered in the name of Cede & Co. as nominee for, DTC. The provisions governing the exchange of interests in Global Notes for other Global Notes and Definitive Notes are described in *"Summary of Provisions Relating to the Notes while in Global Form."*

The Notes have not been recommended, approved or disapproved by the United States Securities and Exchange Commission or any other federal or state securities commission or other regulatory authority in the United States. None of the foregoing authorities have passed upon the adequacy or accuracy of this Offering Circular. Any representation to the contrary is a criminal offence in the United States.

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 on the SGX-ST) a supplementary Offering Circular, if appropriate, will be submitted to the SGX-ST and made available which will describe the effect of the agreement reached in relation to such Notes.

Arranger

Citigroup

Dealers

BNP PARIBAS	**BofA Securities**	**Citigroup**
Crédit Agricole CIB	**HSBC**	**ING**
J.P. Morgan	**Mizuho Securities**	**NH Investment & Securities**
Société Générale Corporate & Investment Banking	**Standard Chartered Bank**	**UBS**

The date of this Offering Circular is 7 July 2020.

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 the 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.

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.

The Offering Circular is based on information provided by the Issuer and by other sources the Issuer believes are reasonable. Accordingly, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Dealers as to the accuracy or completeness of the information contained or incorporated in this Offering Circular or any other information provided by the Issuer in connection with the Programme. None of the Dealers accepts 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. Each Dealer and its affiliates accordingly disclaim all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular or any such information.

No person is or has been authorised 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 authorised 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 or other evaluation or (ii) should be considered as a recommendation by the Issuer or any of the Dealers that any recipient of this Offering Circular 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 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 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.

The price and amount of Notes to be issued under the Programme will be determined by the Issuer and each relevant Dealer at the time of issue based on prevailing market conditions.

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. tax regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended (the "**Code**") and the regulations promulgated thereunder.

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 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 available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by the Issuer 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 may 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 (including the United Kingdom (the "**UK**")), Japan, Hong Kong, Singapore and Korea; see "*Subscription and Sale and Transfer and Selling Restrictions.*"

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.

MIFID II PRODUCT GOVERNANCE – The final terms (or Pricing Supplement, as the case may be) in respect of any Series (as defined under "*Terms and Conditions of the Notes*") of Notes may include information entitled "MiFID II Product Governance," which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate, and if such information is included, 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**") will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

For the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), each of the Arranger and the Dealers will be deemed not to be a manufacturer unless determined otherwise, the determination of which will be made in relation to each issue of Notes with respect to the Arranger and each Dealer.

IMPORTANT – EEA OR UK RETAIL INVESTORS – If the final terms (or Pricing Supplement, as the case may be) in respect of any Series of Notes includes a legend entitled "Prohibition of Sales to EEA or UK Retail Investors," the Notes of any such Series 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 EEA or in the UK. For these purposes: (a) the expression "**retail investor**" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of 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**"); and (b) the expression "**offer**" includes 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. 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 will be 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.

A determination will be made in relation to each issue about whether the PRIIPs Regulation applies to the Notes constituting such issue.

This Offering Circular has been prepared on the basis that, except to the extent sub-paragraph (ii) below may apply, any offer of Notes in any Member State of the EEA or the UK (each, a "**Relevant State**") will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of Notes. Accordingly, any person making or intending to make an offer in that Relevant State of Notes which are the subject of an offering contemplated in this Offering Circular as completed by final terms in relation to the offer of those Notes may only do so (i) 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, or (ii) if a prospectus for such offer 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 and (in either case) published, all in accordance with the Prospectus Regulation, provided that any such prospectus has subsequently been completed by final terms which specify that offers may be made other than pursuant to Article 1(4) of the Prospectus Regulation in that Relevant State and such offer is made in the period beginning and ending on the dates specified for such purpose in such prospectus or final terms, as applicable, and the Issuer has consented in writing to its use for the purpose of such offer. Except to the extent sub-paragraph (ii) above may apply, neither the Issuer nor any Dealer has authorised, nor do they authorise, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or any Dealer to publish or supplement a prospectus for such offer.

This Offering Circular is only being distributed to and is only directed at (i) persons who are outside the UK 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 (all such persons together being referred to as "relevant persons"). The Notes will only be available to, and any invitation, offer or agreement to subscribe for, 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 Offering Circular or any of its contents.

No prospectus (including any amendment, supplement or replacement thereto) or any other offering material relating to the Notes has been prepared in connection with the offering of the Notes that has been approved by the *Autorité des marchés financiers* or by the competent authority of another State that is a contracting party to the Agreement on the European Economic Area and notified to the *Autorité des marchés financiers*; no Notes have been offered or sold nor will be offered or sold, directly or indirectly, to the public in France; the prospectus or any other offering material relating to the Notes has not been distributed or caused to be distributed and will not be distributed or caused to be distributed to the public in France; such offers, sales and distributions have been and shall only be made in France to qualified investors (*investisseurs qualifiés*) as defined in Article 2, e) of Regulation (EU) 2017/1129, and/or to a restricted circle of investors acting for their own account (*cercle restreint d'investisseurs agissant pour compte propre*) in accordance with Articles L. 411-1 and L. 411-2 of the French Monetary and Financial Code and applicable regulations thereunder. The direct or indirect distribution to the public in France of any so acquired Notes may be made only as provided by Articles L. 411-1 *et seq.* and L. 621-8 to L. 621-8-3 of the French Monetary and Financial Code and applicable regulations thereunder.

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 Series of 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).

None of the Dealers nor 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.

U.S. INFORMATION

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. See "*Subscription and Sale and Transfer and Selling Restrictions.*"

This Offering Circular may be submitted on a confidential basis in the United States to a limited number of QIBs 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 authorised. 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.

Registered Notes may be offered or sold within the United States only to QIBs 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.

Each purchaser or holder of Notes represented by a Restricted Global Certificate or any Notes issued in registered form in exchange or substitution therefor will be deemed, by its acceptance or purchase of any such 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–Transfer Restrictions.*" Unless otherwise stated, terms used in this paragraph have the meanings given to them in "*Form of the Notes.*"

KOREAN SELLING RESTRICTIONS

A registration statement for the offering and sale of the Notes has not been filed with the Financial Services Commission of Korea (the "**FSC**"). Accordingly, the Notes may not be offered or sold, directly or indirectly, in Korea or to any resident of Korea (as defined under the Foreign Exchange Transaction Law of Korea and the regulations thereunder) except as otherwise permitted by applicable Korean law and regulations (including the sale of the Notes to qualified institutional investors (as defined under the Financial Investment Services and Capital Markets Act of Korea and its enforcement decree) in the primary market if (a) the amount of the Notes acquired by qualified institutional investors in the primary market is limited to less than 20% of the aggregate issue amount of the Notes and (b) the Notes have been (i) listed in one of the major markets designated by the Financial Supervisory Service of Korea (the "**FSS**") or (ii) registered with or reported to a financial supervisory authority located in one of such major markets or (iii) offered through such procedures as may be considered a public offering). In addition, to the extent required by the applicable laws and regulations of Korea, until the expiration of one year after the issuance of any Notes, such Notes may not be transferred to any resident of Korea except as otherwise permitted by applicable Korean law and regulations (including the sale of the Notes to qualified institutional investors in the secondary market if the Notes have been (a) listed in one of the major markets designated by the FSS or (b) registered with or reported to a financial supervisory authority located in one of such major markets or (c) offered through such procedures as may be considered a public offering).

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 of covenant dated 5 September 2014 (the "**Deed of Covenant**") 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 such holder, 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 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.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

The Issuer is a corporation organised under the laws of Korea. All of the officers and directors named herein reside in Korea and all or a substantial portion of the assets of the Issuer and of such officers and directors are located in Korea. 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 Bae, Kim & Lee LLC, its Korean legal 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.

The "Agency Agreement," the "Deed of Covenant," the "Notes," the "Receipts" and the "Coupons" (each as defined under "*Terms and Conditions of the Notes*" below) and any non-contractual obligations arising out of or in connection therewith are governed by, and shall be construed in accordance with, English law except that in the case of Subordinated Notes, Condition 4(b) is governed by, and shall be construed in accordance with, Korean law. However, if a claim relating to any non-contractual obligations arising out of or in connection with any of the Agency Agreement, the Deed of Covenant, the Notes, the Receipts or the Coupons is brought to a court in Korea, Korean courts may not recognise English law as the governing law of such claim.

FORWARD-LOOKING STATEMENTS

Certain statements in this Offering Circular constitute "forward-looking statements," including statements regarding the Issuer's expectations and projections for future operating performance and business prospects. The words "believe," "expect," "anticipate," "estimate," "project," "will," "aim," "will likely result," "will continue," "intend," "plan," "contemplate," "seek to," "future," "objective," "goal," "should," "will pursue" and similar expressions or variations of these expressions identify forward-looking statements. In addition, all statements other than statements of historical facts included in this Offering Circular, including, without limitation, those regarding the Issuer's financial position and results, business strategy, plans and objectives of management for future operations, including development plans and objectives relating to the Issuer's products and services, are forward-looking statements. Such forward-looking statements and any other projections contained in this Offering Circular (whether made by the Issuer or any third party) involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from the future results, performance or achievements expressed or implied by forward-looking statements. Such forward-looking statements are based on current beliefs, assumptions, expectations, estimates and projections regarding the Issuer's present and future business strategies and the environment in which the Issuer will operate in the future. Among the important factors that could cause some or all of those assumptions not to occur or cause the Issuer's actual results, performance or achievements to differ materially from those in the forward-looking statements include, among other things:

- the Issuer's ability to implement successfully its strategy;
- the Issuer's growth and expansion;
- future levels of non-performing loans;
- the adequacy of provisions for credit and investment losses;
- technological changes;
- interest rates;
- availability of funding and liquidity;
- the Issuer's exposure to market risks; and
- adverse market and regulatory conditions.

By their nature, certain disclosures relating to these and other risks are only estimates and could be materially different from what actually occurs in the future. As a result, actual future gains, losses or impact on the Issuer's income or results of operations could materially differ from those that have been estimated.

In addition, other factors that could cause actual results to differ materially from those estimated by the forward-looking statements contained in this Offering Circular could include, but are not limited to:

- general economic and political conditions in Korea or other countries which have an impact on the Issuer's business activities or investments;
- the monetary and interest rate policies of Korea;
- inflation or deflation;
- foreign exchange rates;
- prices and yields of equity and debt securities;
- the performance of the financial markets in Korea and globally;
- changes in domestic and foreign laws, regulations and taxes;
- changes in competition and the pricing environment in Korea; and
- regional or general changes in asset valuations.

For further discussion of the factors that could cause actual results to differ, see "*Risk Factors*." The Issuer cautions you not to place undue reliance on forward-looking statements, which speak only as of the date of this Offering Circular. Except as required by law, the Issuer is not under any obligation, and expressly disclaims any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise.

All subsequent forward-looking statements attributable to the Issuer or any person acting on its behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

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

Unless otherwise indicated, the financial information contained in this Offering Circular as of and for the year ended 31 December 2019 is derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular, the financial information contained in this Offering Circular as of and for the year ended 31 December 2018 is derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular, and the financial information contained in this Offering Circular as of 31 March 2020 and for the three months ended 31 March 2019 and 2020 is derived from the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019 included elsewhere in this Offering Circular, all of which have been prepared in accordance with K-IFRS.

The Issuer's application of certain accounting standards in recent years may affect the direct comparability of the historical financial information included in this Offering Circular as of and for different dates and periods. In accordance with the application of K-IFRS 1115 *Revenue from Contracts with Customers* ("**K-IFRS 1115**") beginning on 1 January 2018, the Issuer deducts commission expenses relating to credit cards from interest income or commission income so that such income is presented net of the associated commission expenses because such expenses are regarded as consideration paid to customers. While such deductions of commission expenses relating to credit cards from interest income or commission income are reflected in the financial statements for the year ended 31 December 2018 included for comparative purposes in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular, the Issuer's audited consolidated financial statements for the year ended 31 December 2018 included in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular were not restated to reflect such deductions. As stated above, unless otherwise indicated, the financial information contained in this Offering Circular for the year ended 31 December 2018 has been derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular and accordingly, in general, does not reflect such deductions of commission expenses relating to credit cards from interest income or commission income. As a result, the Issuer's financial information for the three months ended 31 March 2019 and 2020 and the year ended 31 December 2019 presented in this Offering Circular may not be directly comparable to the Issuer's financial information for the year ended 31 December 2018 presented in this Offering Circular. For details relating to such deductions and the application of K-IFRS 1115, see Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

Certain statistical information of the Issuer has been derived from information set forth in the Issuer's monthly reports submitted to the Financial Services Commission (the "**FSC**"), which is prepared on a separate basis in accordance with the guidelines promulgated by the FSC based on Article 43-2 of the Banking Act of Korea (the "**Banking Act**"), and related accounting records. Such information may differ in certain aspects (as described where applicable) from the information in the Issuer's financial statements prepared in accordance with K-IFRS.

Under the Banking Act, assets accepted in trust by a bank in Korea must be segregated from the other assets in the accounts of such bank. Accordingly, banks, including the Issuer, engaged in the banking and trust businesses must maintain separate accounts and separate sets of records. All financial information contained in this Offering Circular relating to the Issuer is presented with respect to the Issuer's bank accounts only, unless stated otherwise.

In this Offering Circular:

- references to the "**NACF**" refer to the National Agricultural Cooperative Federation;
- references to the "**NACF Group**" refer to the NACF and its consolidated subsidiaries;
- references to "**Korea**" refer to the Republic of Korea;
- references to the "**U.S.**" or the "**United States**" refer to the United States of America;
- references to "**China**" or "**PRC**" refer to the People's Republic of China;
- references to "**U.S. dollars**," "**US$**" and "**$**" refer to the currency of the United States of America;
- references to "**Won**" and "**₩**" refer to the currency of Korea;
- references to "**Renminbi**" and "**RMB**" refer to the lawful currency of the PRC;
- references to "**S$**" refer to the currency of Singapore;
- references to "**Sterling**" and "**£**" refer to the currency of the United Kingdom;
- references 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 establishing the European Community, as amended; and
- references to the "**Government**" refer to the government of Korea.

Unless otherwise specified, all conversions of Won into U.S. dollars in this Offering Circular were made at the base rate published by Seoul Money Brokerage Services, Ltd. for U.S. dollars against Won (the "**Market Average Exchange Rate**"). For convenience only, except as set out below and where otherwise indicated, certain Won amounts have been translated into U.S. dollars at the Market Average Exchange Rate of US$1.00 = Won 1,222.6 as of 31 March 2020. No representation is made that the Won or the U.S. dollar amounts referred to in this Offering Circular 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. See "*Exchange Rates.*"

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

CONTENTS

In connection with the issue and distribution of any Tranche of Notes, the Dealer(s) (if any) named as the Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) in the applicable Pricing Supplement may, subject to all applicable laws and regulations, over-allot the Notes or effect transactions with a view to supporting the market price of the Notes of a Series of which such Tranche forms a part at a level higher than that which might otherwise prevail for a limited period after the issue date. However, there is no assurance that the Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) will undertake any stabilising action. Any stabilisation 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 stabilisation action or over-allotment must be conducted by the relevant Stabilising Manager(s) (or persons acting on behalf of any Stabilising 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 consolidated (if any) annual financial statements and, if published later, the most recently published unaudited quarterly and semi-annual interim consolidated financial statements (if any) of the Issuer;

(b) all supplements or amendments to this Offering Circular circulated by the Issuer from time to time; and

(c) with respect to each Tranche, the relevant Pricing Supplement,

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 (with effect from the date such statement or document, as the case may be, is issued) 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.

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 office set out at the end of this Offering Circular. In addition, such documents will be available, without charge, from the principal office of Deutsche Bank AG, Hong Kong Branch (the "**Principal Paying Agent**") for any Notes listed on the SGX-ST.

The Issuer will, in connection with the listing and quotation of the Notes on the SGX-ST, so long as the rules of the SGX-ST 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 on the SGX-ST.

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

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, attached to, 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 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 US$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*") 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*") 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*") and other Notes issued at a discount or a 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 Condit*ions *of the Notes*" below shall have the same meanings in this summary.

Issuer:	NongHyup Bank
Description:	Global Medium Term Note Programme
Programme Size:	Up to US$8,000,000,000 (or its equivalent in other currencies calculated as described in the Dealer Agreement) outstanding at any time. The Issuer may increase the amount of the Programme in accordance with the terms of the Dealer Agreement.
Risk Factors:	Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the abilities of the Issuer to fulfil its respective obligations in respect of the Notes are discussed under the section "*Risk Factors.*"
Arranger:	Citigroup Global Markets Inc.
Dealers:	BNP Paribas Citigroup Global Markets Inc. Crédit Agricole Corporate and Investment Bank The Hongkong and Shanghai Banking Corporation Limited ING Bank N.V., Singapore Branch J.P. Morgan Securities plc Merrill Lynch International Mizuho Securities Asia Limited NH Investment & Securities Co., Ltd. Société Générale Standard Chartered Bank UBS AG Hong Kong Branch and any other Dealers appointed from time to time by the Issuer either generally in respect of the Programme or in relation to a particular Tranche of Notes.
Principal Paying Agent and Paying Agent:	Deutsche Bank AG, Hong Kong Branch (in respect of Unrestricted Notes)
U.S. Registrar, U.S. Paying Agent and U.S. Transfer Agent:	Deutsche Bank Trust Company Americas
Exchange Agent:	Deutsche Bank AG, Hong Kong Branch (in respect of Restricted Notes)
Registrar and Transfer Agent:	Deutsche Bank Luxembourg S.A. (in respect of Unrestricted Notes other than CMU Notes)Deutsche Bank AG, Hong Kong Branch (in respect of CMU Notes (as defined in the Agency Agreement))

CMU Lodging and Paying Agent:	Deutsche Bank AG, Hong Kong Branch
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*") including the following restrictions applicable at the date of this Offering Circular. **Notes with a maturity of less than one year:** Notes having a maturity of less than one year from the date of issue 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 qualified institutional investors and have a denomination of at least £100,000 or its equivalent. See "*Subscription and Sale and Transfer and Selling Restrictions*."
Distribution:	Notes may be distributed by way of private or public placement and in each case on a syndicated or non-syndicated basis.
Method of Issue:	The Notes will be issued on a syndicated or non-syndicated basis. The Notes will be issued in series (each a "**Series**") having one or more issue dates and on terms otherwise identical (or identical other than in respect of the first payment of interest), the Notes of each Series being intended to be interchangeable with all other Notes of that Series. Each Series may be issued in tranches (each a "**Tranche**") on the same or different issue dates. The specific terms of each Tranche (which will be completed, where necessary, with the relevant terms and conditions and, save in respect of the issue date, issue price, first payment of interest and nominal amount of the Tranche, will be identical to the terms of other Tranches of the same Series) will be completed in the pricing supplement (the "**Pricing Supplement**").
Currencies:	Subject to any applicable legal or regulatory restrictions, any currency agreed upon between the Issuer and the relevant Dealer.
Maturities:	Such maturities as may be agreed upon between the Issuer and the relevant Dealer, 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, Subordinated Notes shall have a minimum maturity of five years.
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.
Clearing Systems:	Clearstream, Euroclear, the CMU Service and/or the DTC and, in relation to any Tranche, such other clearing system as may be agreed upon among the Issuer, the Principal Paying Agent and the relevant Dealer.

Form of Notes:	Notes may be issued in bearer or registered form as described in "*Form of the Notes.*" Registered Notes will not be exchangeable for Bearer Notes (as defined in "*Form of the Notes*") and vice versa.
Fixed Rate Notes:	Fixed interest will be payable on such date or dates as may be agreed upon between the Issuer and the relevant Dealer and on redemption and will be calculated on the basis of such Day Count Fraction as may be agreed upon between the Issuer and the relevant Dealer.
Floating Rate Notes:	Floating Rate Notes will bear interest at a rate determined:
	(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 of 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 upon screen page of a commercial quotation service; or
	(iii) on such other basis as may be agreed upon between the Issuer and the relevant Dealer.
	The margin (if any) relating to such floating rate will be agreed upon between the Issuer and the relevant Dealer for each Series of Floating Rate Notes.
Index Linked Notes:	Payments of principal in respect of Index Linked Redemption Notes or 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 upon.
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. Interest on Floating Rate Notes and Index Linked Interest Notes in respect of each Interest Period, as agreed upon 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 upon 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.
Zero Coupon Notes:	Zero Coupon Notes will be offered and sold at a discount to their nominal amount and will not bear interest.

Redemption:	The applicable Pricing Supplement will indicate either that the relevant Notes cannot be redeemed prior to their stated maturity (other than in specified instalments, if applicable, or for taxation reasons (in the case of Subordinated Notes, only with the prior approval of the FSS or of such other relevant regulatory authorities in Korea, if necessary) or, in the case of Senior Notes, following an Event of Default or, in the case of Subordinated Notes, following a Subordination Event) 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 FSS or of such other relevant regulatory authorities in Korea, if necessary) 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 upon between the Issuer and the relevant Dealer. The applicable Pricing Supplement may provide that Notes may be redeemable in two or more instalments of such amounts and on such dates as are indicated in the applicable Pricing Supplement.
Denomination of Notes:	Notes will be issued in such denominations as may be agreed upon between the Issuer and the relevant Dealer 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.
Withholding Tax:	All payments in respect of the Notes will be made without deduction for or on account of withholding taxes imposed by any relevant Tax Jurisdiction, subject as provided in Condition 13 (*Taxation*). In the event that any such deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 13 (*Taxation*), be required to pay additional amounts to cover the amounts so deducted.
Negative Pledge:	The terms of the Senior Notes will contain a negative pledge provision as further described in Condition 5 (*Negative Pledge*).
Cross Default/Cross Acceleration:	The terms of the Senior Notes will contain a cross default/cross acceleration provision as further described in Condition 14 (*Events of Default*).
Status of the Senior Notes:	The Senior Notes and any relative Receipts and Coupons will constitute direct, unconditional, unsubordinated and, subject to the provisions of Condition 5 (*Negative Pledge*), unsecured obligations of the Issuer and will rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations (other than subordinated obligations, if any) of the Issuer, from time to time outstanding.
Status of the Subordinated Notes:	The Subordinated Notes and any relative Receipts and Coupons will constitute direct, general, subordinated and unsecured obligations of the Issuer which will rank *pari passu* among themselves and in priority to claims of holders of all class of equity (including holders of preference shares (if any) of the Issuer).

Write-off of the Subordinated Notes upon a Trigger Event:	The Subordinated Notes will be subject to Write-off upon the occurrence of a Trigger Event, as provided in Condition 4(c) (*Loss Absorption Upon a Trigger Event in respect of Subordinated Notes*). See "*Risk Factors–Risks Relating to the Notes–The Notes that are Subordinated Notes may be fully written off upon the occurrence of a trigger event, in which case holders of the Subordinated Notes will lose all of their investment.*"
Listing:	Approval in-principle has been received from the SGX-ST in connection with the Programme and application will be made for the listing and quotation of 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 on the SGX-ST. Such permission will be granted when such Notes have been admitted for listing and quotation on the SGX-ST. For so long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, such Notes, if traded on the SGX-ST, will be traded in a minimum board lot size of S$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 upon 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 are to be listed or admitted to trading and, if so, on which stock exchange(s).
Governing Law:	The Notes and any non-contractual obligations arising out of or in connection with the Notes will be governed by, and construed in accordance with, English law, except in the case of Subordinated Notes, Condition 4(b) (*Status of the Subordinated Notes and relevant provisions*) which will be governed by, and construed in accordance with, Korean law.
Enforcement of Notes in Global Form:	In the case of Global Notes and Global Certificates, individual investors' rights against the Issuer will be governed by the Deed of Covenant dated 5 September 2014, a copy of which will be available for inspection at the specified office of the Principal Paying Agent.
Selling Restrictions:	There are restrictions on the offer, sale and transfer of the Notes in the United States, the European Economic Area (including the UK), Japan, Hong Kong, Singapore and Korea 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.*"
United States Selling Restrictions:	Regulation S, Category 1 or 2 and Rule 144A as specified in the applicable Pricing Supplement. TEFRA C or D/TEFRA not applicable as specified in the applicable Pricing Supplement.

RISK FACTORS

Prospective purchasers of Notes should carefully review the information contained elsewhere in this Offering Circular, including the following matters. In addition, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of the following risks and uncertainties develops into actual events, the Issuer's business, financial condition or results of operations could be materially and adversely affected.

General Risks Relating to the Issuer's Business

The recent global outbreak of COVID-19 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, has spread globally and was declared a "pandemic" by the World Health Organization on March 11, 2020. The global outbreak of COVID-19 has led to global economic and financial disruptions and has adversely affected the Issuer's business operations in recent months. Risks associated with a prolonged outbreak of COVID-19 may 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, resulting in increased write-offs, higher provisioning and reduced interest and fee income;
- decreases in interest rates worldwide (see "*–An increase in interest rates would 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*");
- depreciation of the Won against major foreign currencies, which may increase the Issuer's costs in servicing foreign currency-denominated debt and result in foreign exchange losses (see "*–Unfavourable changes in the global financial markets could adversely affect the Issuer's results of operations and financial condition*");
- impairments in the fair value of the Issuer's investments in companies that may be adversely affected by the pandemic;
- disruption in the normal operations of the Issuer's business resulting from the contraction of the disease by the Issuer's employees or customers, which may necessitate employees to be quarantined and/or offices or branches to be temporarily shut down; and
- 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.

It is not possible to predict the duration or the full magnitude of the overall harm that may result from the COVID-19 outbreak. 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 may be adversely affected.

Unfavourable 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 in 2020 and beyond remain uncertain. In recent years, 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;
- 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;
- 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 ("**Brexit**"); and
- political and social instability in various countries in the Middle East, including Syria, Iraq and Egypt.

In light of the high level of interdependence of the global economy, unfavourable 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.

Difficult global and Korean financial and economic conditions could result in significant deterioration in the quality of the Issuer's assets and accumulation of higher provisioning, allowances for expected credit losses and write-offs as more of the Issuer's corporate and retail customers declare bankruptcy or insolvency or otherwise face increasing difficulties in meeting their debt obligations. Depending on the nature of the difficulties in the financial markets and general economy, the Issuer may be forced to scale back certain core lending activities and other operations and/or borrow money at a higher funding cost or face a tightening net interest spread, any of which may have a negative impact on the Issuer's earnings and profitability. Furthermore, while the Issuer currently maintains its capital adequacy ratio at a level higher than the required regulatory minimum, there is no guarantee that a higher capital requirement will not be imposed by the Government in the event of a deepening crisis. In addition, given the highly integrated nature of financial systems and economic relationships worldwide, there may be other, unanticipated systemic or other risks that may not be presently predictable. Any of these risks, if materialised, may have a material adverse effect on the Issuer's business, financial condition and results of operations.

As of 31 March 2020, on a separate basis, the Issuer's substandard or below credits (including loans, credit card receivables and confirmed acceptances and guarantees, among others) including those credits that have been in arrear for three months or more and as classified according to the FSS guidelines, amounted to Won 1,313 billion, and the ratio of the Issuer's substandard or below credits to total credits was 0.6%. As of 31 March 2020, on a separate basis, the Issuer's delinquent credits (including loans and credit card receivables) as reported to the FSS, which represent the principal amount of credits past due for one month or more, amounted to Won 883 billion, and its delinquency ratio was 0.4%. There is no assurance that the asset quality of the Issuer's loans will not deteriorate in the future, especially if the current economic and financial conditions in global and Korean markets were to worsen, which would have a material adverse effect on the Issuer's business, financial condition and results of operations.

In addition, the Issuer is 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. 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 and has recently been subject to significant volatility as a result of the recent COVID-19 pandemic. A depreciation of the Won will increase the Issuer's cost of servicing its 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 pressure on securities prices, including the stock prices of Korean and foreign companies in which the Issuer holds an interest. Notwithstanding the Korean government's efforts to stabilise such volatility through the execution of a bilateral currency swap agreement with the U.S. Federal Reserve for the provision of US$60 billion in exchange for Won-denominated treasury bonds in March 2020 and the establishment of bond and stock market stabilisation funds with the participation of Korean banks, 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 the Issuer's investments in joint ventures and associates.

An increase in interest rates would 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 the past. The Bank of Korea reduced its policy rate to 1.50% in June 2015 and again to 1.25% in June 2016 amid deflationary concerns and interest rate cuts by central banks around the world. While the Bank of Korea 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, it again reduced its policy rate to 1.50% in June 2019 and 1.25% in October 2019 to address the sluggishness of the global and domestic economies. Moreover, the Bank of Korea further reduced its policy rate to unprecedented levels of 0.75% in March 2020 and 0.50% in May 2020 amid rising concerns of a potential global recession as a result 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 minimise 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 rates would increase the interest costs of the Issuer's retail and corporate borrowers and will 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 its operations.

A substantial portion of the Issuer's funding requirements are met through short-term funding sources, which consist primarily of customer deposits. As of 31 March 2020, on a separate basis, deposits (including certificates of deposit) amounted to Won 244,100 billion, of which 95.1% had maturities of one year or less or were payable on demand. As of the same date, on a separate basis, deposits placed by local governments amounted to Won 66,624 billion, which 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 or maintained with the Issuer (in the case of deposits payable on demand). No assurance can be given, however, that customers will continue to roll over or maintain their deposits with the Issuer in the future. Furthermore, Korean farmers, which account for a significant part of the Issuer's customer deposit base, may encounter financial difficulties since they compete with more price competitive agricultural and livestock products from the U.S., Europe or China as a result of the Korea-EU Free Trade Agreement, the Korea-United States Free Trade Agreement, and the Korea-China Free Trade Agreement, which became effective in July 2011, March 2012 and December 2015, respectively. Adverse financial conditions encountered by such farmers may also affect the amount of deposits they place in the Issuer or the amount of other investment products they purchase and may accordingly impact the Issuer's business, financial condition and results of operations.

As of 31 March 2020, the Issuer had a liquidity coverage ratio, defined as the stock of highly-liquid assets divided by total net cash outflows over a 30-calendar day period, of 121.0%. The FSS requires certain specialised Korean banks, including the Issuer, to maintain a minimum liquidity coverage ratio of 100.0% from 1 January 2019. In the event that a substantial number of the Issuer's short-term deposit customers fail to roll over their deposits upon maturity or withdraw their deposits from the Issuer, the Issuer's liquidity position could be adversely affected, and the Issuer may also be required to seek funding from more expensive sources to finance its operations. In addition, the FSS may require the Issuer to take measures to improve its liquidity position to levels maintained by specialised or commercial banks or impose certain restrictions on its operations, which may constrain its lending and funding activities.

Downgrades 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 consolidated statement of financial position, the availability of a significant base of core and retail deposits, and its ability to access a broad range of funding sources. Any downgrades 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.

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

Under the capital adequacy requirements of the FSC, as of 31 December 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 31 March 2020, the Issuer's common equity Tier I capital adequacy ratio, the Tier I capital adequacy ratio and the combined Tier I and Tier II capital adequacy ratios were 12.17%, 12.29% and 14.80%, 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 the Issuer's results of operations or financial condition deteriorates for any reason, 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 ("**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 1 December 2013, which minimum ratios were increased to 4.0% and 5.5%, respectively, from 1 January 2014 and increased further to 4.5% and 6.0%, respectively, from 1 January 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 a domestic systemically important bank for 2019 and 2020, which subjects it to an additional capital requirement of 1.0% in such years. The implementation of Basel III in Korea may have a significant effect on the capital requirements of Korean financial institutions, including the Issuer. See "*Supervision and Regulation–Capital Adequacy and Allowances.*"

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 favourable terms, or at all. The Issuer's ability to obtain additional capital at any time may be constrained to the extent that banks, bank holding companies 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 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.

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

As of 31 March 2020, the Issuer held debt securities with a total book value of Won 48,438 billion in its trading and investment securities portfolio. The market value of these securities could decline significantly due to various factors, including future increases in interest rates, which may be significant in light of the current low interest environment, or 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 consolidated statements of financial position is determined by references to suggested prices posted by Korean rating agencies, which measure prices based on observable market data, or the Korea Financial Investment Association. These valuations, however, may differ significantly from the actual value that the Issuer could realise in the event the Issuer elects to sell these securities. As a result, the Issuer may not be able to realise the full "marked-to-market" value at the time of any such sale of these securities and thus may incur additional losses.

Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate 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 the London Interbank Offered Rate ("**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.

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. The Issuer issues, trade, hold or otherwise use various products and securities that reference LIBOR, including, among others, loans, securities, deposits, borrowings, derivatives and debentures. 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. 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 expenses, 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 minimise 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, including the potential for disputes with counterparties regarding the interpretation and enforceability of fallback contract language in LIBOR-based financial instruments and contracts.

The Issuer's operations may be subject to increasing and continually evolving cybersecurity 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 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 affecting the Issuer's information technology systems, computer viruses or other malicious codes, loss or destruction of data (including confidential client information), unauthorised access, account takeover attempts and cyberattacks. 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 continual investments to build systems and defenses to address cybersecurity and other technological risks, including the appointment of a Chief Information Security Officer, there is no guarantee that such measures or any other measures can provide adequate security and stability. In addition, because methods used to cause cyberattacks change frequently or, in some cases, are not recognised 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. If the Issuer were to be subject to a system failure or other cyber incident, it could result in the disclosure of confidential client information, damage to the Issuer's 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.

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

The Issuer seeks to monitor and manage its risk exposure through a comprehensive risk management platform, encompassing a centralised risk management organisation and credit evaluation systems, reporting and monitoring systems, early warning systems 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. For example, from time to time, a limited number of the Issuer's personnel have engaged in embezzlement or other forms of misbehaviour that resulted in financial harm to the Issuer. In response to these incidents, the Issuer has strengthened its internal control procedures by, among others, implementing a real-time monitoring system, but there is no assurance that such measures will be sufficient to prevent similar employee misconduct in the future. Management of credit, market and operational risk requires, among others, policies and procedures to record properly and verify a large number of transactions and events, and the Issuer cannot assure you that these policies and procedures will prove to be fully effective at all times against all the risks that the Issuer faces. 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.

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

The Issuer is subject to the risk of legal claims and regulatory actions, which may expose the Issuer to monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against its management and employees and regulatory restrictions on its operations, as well as reputational harm. See "*Business– Legal Proceedings.*"

The Issuer is unable to predict the outcome of many 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 decisions, findings or resolutions in such matters could encourage other parties, including governmental authorities in other jurisdictions, to bring similar 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.

Risks Relating to Government Regulation and Policy

The Issuer is an indirect subsidiary of the NACF, which has a close relationship with the Government, and the decisions and policies implemented by NongHyup Financial Group Inc., the Issuer's holding company, or the NACF may not be in the Issuer's best interest as a stand-alone company.

The Issuer is the largest subsidiary of NongHyup Financial Group Inc. ("**NH Financial Group**"), a financial holding company which is currently wholly-owned by the NACF. The NACF has a close relationship with the Government as it assists the Government in forming and implementing agricultural and livestock policies. See "*Business–Relationship with the Government and Government Support.*" The Issuer paid dividends to NH Financial Group of Won 190 billion and Won 600 billion in respect of fiscal years 2018 and 2019, respectively. Under the National Agricultural Cooperatives Federation Act (the "**NACF Act**"), the NACF is entitled to receive from the Issuer agricultural support project expenses (formerly known as brand fees), which for 2020 is set at 2.5% of the average total gross revenue (consisting of interest income, commission income, gain on financial assets and other revenues, on a gross basis) of the last three fiscal years of the Issuer. For 2018 and 2019, the amount of agricultural support project expenses paid by the Issuer was Won 291 billion and Won 300 billion respectively.

While the Issuer believes that NH Financial Group and its subsidiaries (including the Issuer) play a vital role in the NACF Group's profit generation, the group-wide management decisions and policies that the NACF or NH Financial Group implements in the future may not necessarily be in the Issuer's best interest as a stand-alone company. For example, subject to certain limitations under the Financial Holding Company Act, the NACF or NH Financial Group may:

- require the Issuer to engage in various transactions, including investments, joint ventures or dispositions, either with other subsidiaries or with third parties, or to expand or restrict the Issuer's operations, for the benefit of the group;

- require the Issuer to provide direct or indirect support, financial, operational, technical or otherwise to itself or to other subsidiaries;
- make changes to the Issuer's management personnel or employees, including for the purpose of seconding individuals with particular skills or expertise to itself or to other subsidiaries or as a result of policy disagreements; and
- implement group-wide initiatives, policies or strategies that require significant expenditures from the Issuer or significant time and attention of the Issuer's management.

Accordingly, there is no guarantee that the benefits to the Issuer of being a part of the NACF or NH Financial Group will outweigh the costs in any instance.

The Issuer depends upon the contributions and support from the Government, and the Issuer cannot assure investors that the Government will not cease such contributions and support, which may adversely affect the Issuer's financial condition.

The Issuer generally offers policy loans to farmers at concessionary interest rates set below market rates. A policy loan that the Issuer offers to farmers may be funded by either the Government or the Issuer. If a policy loan is funded by the Issuer, the Government pays to the Issuer the difference between the market rates and the concessionary interest rates offered by the Issuer. The difference between the market and concessionary interest rates ranged from 0.4% to 3.5% during 2019 and from 0.2% to 3.3% in the first three months of 2020. Concessionary interest rates are agreed upon between the Issuer and the Government every year. As of 31 December 2018, 31 December 2019 and 31 March 2020, policy loans provided by the Issuer in the aggregate amounted to Won 19,419 billion, Won 19,606 billion and Won 19,677 billion, respectively, representing 9.7%, 9.3% and 9.1% of the Issuer's total Won-denominated loans as of such dates, respectively. Of such amounts, as of 31 December 2018, 31 December 2019 and 31 March 2020, policy loans funded by the Government amounted to Won 2,991 billion, Won 2,734 billion and Won 2,661 billion, respectively, while policy loans funded by the Issuer amounted to Won 16,428 billion, Won 16,872 billion and Won 17,016 billion, respectively.

In addition, the Issuer from time to time receives capital contributions from its sole shareholder, NH Financial Group, which has been instrumental to improving the Issuer's capital adequacy. For example, the Issuer received capital injections from NH Financial Group of Won 450 billion, Won 500 billion, Won 400 billion and Won 200 billion in March 2013, September 2013, March 2015 and June 2018, respectively.

There is no assurance that the Government, whether directly or through the NACF or NH Financial Group, will continue to provide sufficient funding to enable the Issuer to carry out the Government's agricultural and livestock policy, including policy loans. Any reduction in Government support may adversely affect the Issuer's business, financial condition and results of operations.

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

As a financial services 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, utilise 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. Treble 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 cybersecurity breach affecting the financial institution even if the breach is not directly attributable to the financial institution.

The Act on the Financial Consumer Protection Framework was passed by the Korean National Assembly on 5 March 2020. Under the Act, the Issuer as a financial instrument distributor 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. The Act is scheduled to be promulgated after deliberation by the cabinet and will become effective on 25 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 its 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 policy guidelines and recommendations, the Government has from time to time promoted and, as a matter of policy, may continue to attempt to promote lending by the Korean financial industry to particular types of borrowers. In the past, the Government has announced policy guidelines requesting financial institutions to participate in remedial programmes for troubled corporate borrowers, as well as policies aimed at promoting certain sectors of the economy, including measures such as making low interest funding available to financial institutions that lend to these sectors. In addition, the Issuer provides policy loans to farmers in furtherance of the Government's national agricultural policy. The Issuer expects that all loans or credits made pursuant to these government policies will be reviewed in accordance with the Issuer's credit approval procedures. However, these or any future government policies may influence the Issuer to lend to certain sectors or in a manner in which it otherwise would not in the absence of such policies.

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 small and medium-sized enterprises ("**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 SME borrowers. See "*–Risks Relating to the Issuer's Loan Portfolio–The Issuer has significant exposure to small and medium-sized enterprises, and financial difficulties experienced by such companies may result in a deterioration of the Issuer's asset quality and have an adverse effect on it.*" In addition, in September 2019, 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 requested Korean banks to participate in a mortgage loan refinancing programme for low-income individuals with low repayment ability aimed at reducing the payment burden on outstanding mortgage loans.

The Government has also implemented other policy measures in an effort to help stabilise the financial markets. In late 2009 in the wake of the global financial crisis, six major commercial banks in Korea, including the Issuer, established the United Asset Management Company Ltd. ("**UAMCO**") to purchase, sell and securitise non-performing loans and to engage in corporate restructuring activities, among other things. Currently, the Issuer and six other banks each hold a 14.0% equity stake in UAMCO, while one other bank holds a 2.0% equity interest. The Issuer has committed to contribute approximately Won 142 billion of capital to UAMCO, of which approximately Won 87 billion has been contributed to date. There can be no assurance that UAMCO will not require any additional financings from the Issuer. The overall impact of these and other legislative and regulatory efforts on the Korean financial markets are uncertain, and they may not have the intended stabilising effect thereon.

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 it 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:

- admonitions or warnings with respect to the Issuer or its officers;
- capital increases or reductions;
- assignments of contractual rights and obligations relating to financial transactions;
- a suspension of performance by the Issuer's officers of their duties and the appointment of receivers;
- disposals of property holdings or closures of branch offices or downsizing;
- stock cancellations or consolidations;
- mergers with other financial institutions;
- acquisition of the Issuer by a third party; and
- suspensions of a part or all of the Issuer's business operations.

If any of these measures are imposed on the Issuer by the FSC, they could hurt the Issuer's business, results of operations and financial condition.

Risks Relating to the Issuer's Loan Portfolio

The Issuer may not be able to sustain or improve the asset quality of its retail loan portfolio, which may have an adverse impact on the Issuer.

In recent years, consumer debt, including lending to households and small unincorporated businesses, has increased rapidly in Korea. The Issuer's portfolio of retail loans comprises two principal product types, secured retail loans (which are primarily composed of mortgage and home equity loans secured by real estate) and general purpose loans (which are unsecured loans and tend to carry a higher credit risk). As of 31 March 2020, the Issuer's retail loan portfolio (before allowance for expected credit losses and deferred loan origination costs and fees) amounted to Won 120,266 billion, or 52.0% of its total loans outstanding, on a separate basis.

The Issuer's large exposure to consumer debt, together with adverse changes in economic conditions in Korea and globally, may lead to increasing delinquencies and a deterioration in asset quality. See "*–General Risks Relating to the Issuer's Business–Unfavourable changes in the global financial markets could adversely affect the Issuer's results of operations and financial condition*." As of 31 December 2018 and 2019 and 31 March 2020, on a separate basis, the Issuer's non-performing retail loans were Won 168 billion, Won 244 billion and Won 253 billion, respectively, representing a non-performing loan ratio (net of write-offs and loan sales) of 0.2%, 0.2% and 0.2%, respecively.

A deterioration of the asset quality of the Issuer's retail loan portfolio would require the Issuer to record increased provisions and write-offs and adversely affect the Issuer's financial condition and results of operations. In addition, 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 those consumers could result in further deterioration in the credit quality of the Issuer's retail loan portfolio. For example, the severe impact of the COVID-19 pandemic on Korea's economy may disrupt the business, activities and operations of the Issuer's consumers, which in turn could result in a significant decrease in the number of financial transactions or the inability of the Issuer's consumers to meet existing payment or other obligations to the Issuer. In addition, a rise in unemployment or an increase in interest rates in Korea could adversely affect the ability of consumers to make payments and increase the likelihood of potential defaults. See "*–General Risks Relating to the Issuer's Business–An increase in interest rates would 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.*"

In addition, the Issuer is exposed to changes in regulations and policies on consumer lending by the Government, which may adopt measures to restrict consumer lending or encourage financial institutions to provide financial support to certain types of retail borrowers. In 2014 and 2015, the Government implemented several measures to encourage consumer spending and revive the housing market in Korea, including loosening regulations on mortgage lending. However, the Government introduced various measures from the second half of 2016 to 2019 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 FSC requested Korean banks, including the Issuer, to establish a "pre-workout programme," including a credit counseling and recovery service, for retail borrowers with outstanding short-term debt. Under the pre-workout programme, which has been in operation since April 2009, maturity extensions and/or interest reductions are provided to retail borrowers with total loans of less than Won 1.5 billion (consisting of no more than Won 500 million of unsecured loans and Won 1 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 Won 40 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. The Issuer's participation in such Government-led initiatives to provide financial support to retail borrowers may lead the Issuer to offer credit terms for such borrowers that it would not otherwise offer in the absence of such initiatives, which may have an adverse effect on the Issuer's results of operations and financial condition. See "*–Risks Relating to Government Regulation and Policy–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.*"

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

A majority of the Issuer's mortgage and home equity loans is secured by borrowers' homes, other real estate, other securities and guarantees (which are principally provided by the Government and other financial institutions), and a substantial portion of the Issuer's corporate loans are also secured, including by real estate. As of 31 March 2020, the Issuer's secured loans (before allowance for expected credit losses and deferred loan origination costs and fees) amounted to Won 159,358 billion, or 68.9%

of its total loans, on a separate basis. There is no assurance that the value of collateral will not materially decline in the future. Although it is the Issuer's general policy for mortgage and home equity loans to lend 40.0% to 70.0% of the appraised value of the collateral (except in areas of high speculation designated by the Government where the Issuer generally limits its lending to 40.0% or less of the appraised value of collateral) and to periodically re-appraise the Issuer's collateral, a downturn in the real estate markets in Korea may result in a decline in the value of the collateral securing such loans. If collateral values decline in the future, they may not be sufficient to cover uncollectible amounts in respect of secured loans extended by the Issuer. Any declines in the value of the real estate or other collateral securing the Issuer's retail loans, or the Issuer's 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 it to record additional allowances for expected credit losses.

In Korea, foreclosure on collateral generally requires a written petition to a Korean court. An application, when made, may be subject to delays and administrative requirements that may decrease the value of such collateral. The Issuer cannot guarantee that it will be able to realise 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 potential losses.

The Issuer has significant exposure to small and medium-sized enterprises, and financial difficulties experienced by such companies may result in a deterioration of the Issuer's asset quality and have an adverse effect on the Issuer's financial condition.

The Issuer's total loans to SMEs, on a separate basis, amounted to Won 87,173 billion, representing 38.2% of its total loans, as of 31 March 2020. The Issuer's loans to SMEs that were classified as substandard or below, on a separate basis, amounted to Won 720 billion, representing 0.8% of its total loans to those enterprises, as of 31 March 2020. The Issuer's asset quality may deteriorate in the future as a result of, among other things, adverse changes in economic conditions in Korea and globally. See "*–General Risks Relating to the Issuer's Business–Unfavourable changes in the global financial markets could adversely affect the Issuer's results of operations and financial condition*." Accordingly, the Issuer may be required to take measures to decrease its exposure to these customers.

The overall prospects for the Korean economy in 2020 and beyond remain uncertain, especially in light of the COVID-19 pandemic affecting many countries worldwide, including Korea, 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. For example, the FSC requested 14 Korean banks, including the Issuer, to extend special low-rate loans to small merchants affected by the COVID-19 pandemic beginning in April 2020. In addition, Korean financial regulatory authorities, including the FSC and the FSS, adopted guidelines for Korean banks to extend loan terms and defer interest payments with respect to SMEs and small merchants affected by the COVID-19 pandemic starting from April 2020. 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 results of operations and financial condition.

Many SMEs represent sole proprietorships or very small businesses dependent on a relatively limited number of suppliers or customers and tend to be affected by fluctuations in the Korean and global economy to a greater extent than large corporate borrowers. In addition, SMEs often maintain less sophisticated financial records than large corporate borrowers. Therefore, it is generally more difficult for the Issuer to judge the level of risk inherent in lending to these enterprises, as compared to large corporations. However, in light of the COVID-19 pandemic, the Bank of Korea announced the early implementation of Basel III standards relating to lowering the risk weight of loans extended to SMEs with no credit rating from 100% to 85% starting from April 2020 in an effort to boost such lending.

In addition, many SMEs have close business relationships with large corporations in Korea, primarily as suppliers. Any difficulties encountered by those large corporations 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.

Financial difficulties experienced by SMEs as a result of, among others, adverse changes in domestic and global economic conditions, could have an adverse impact on the ability of SMEs to make payments on their loans. For example, the ongoing COVID-19 pandemic has had a significant adverse impact on the Korean and global economy, including disruptions in the supply chains, declines in the sales and deterioration in the financial conditions of SMEs. See "*–General Risks Relating to the Issuer's Business–The recent global outbreak of COVID-19 may adversely affect the Issuer's business, financial condition or results of operations.*" In addition, aggressive marketing and intense competition among Korean banks to expand lending 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 write-offs, 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 the largest Korean commercial conglomerates, known as "chaebols," and, as a result, financial difficulties of chaebols may have an adverse impact on the Issuer.

As of 31 March 2020, the total amount of the Issuer's exposure to the 30 largest Korean conglomerates, or *chaebols*, was Won 15,080 billion, which represented 7.2% of the Issuer's total exposure, on a separate basis. The Issuer's largest single credit (based on outstanding balances) to a *chaebol* as of such date was Won 1,922 billion, which represented 0.9% of total credits, on a separate basis. 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 incur additional provisions, which would hurt the Issuer's results of operations and financial condition.

The allowances that the Issuer has established against these exposures may not be sufficient to cover all future losses arising from these exposures. In addition, in the case of companies that are in, or in the future enter into, workout, restructuring, reorganisation or liquidation proceedings, the Issuer's recoveries from those companies may be limited. The Issuer may, therefore, experience future losses with respect to these exposures.

The Issuer has exposure to Korean construction, real estate development, shipbuilding and shipping] companies, and financial difficulties of these companies may adversely impact the Issuer.

As of 31 March 2020, on a separate basis, the total amount of the Issuer's loans to companies in Korea in the construction and real estate development industries amounted to Won 7,717 billion, or 3.3% of the Issuer's loans. As of 31 March 2020, on a separate basis, the total amount of the Issuer's loans (including confirmed acceptances and guarantees) to companies in Korea in the shipbuilding and shipping industries amounted to Won 2,688 billion, or 1.2% of the Issuer's loans. The Issuer also has other exposures to companies in these four industries, including in the form of other guarantees extended for the benefit of such companies and debt and equity securities of such companies held by the Issuer. In the case of construction and real estate development companies, the Issuer has potential exposure in the form of guarantees provided to the Issuer by general contractors with respect to financing extended by the Issuer for residential and commercial real estate development projects, as well as commitments by the Issuer to purchase asset-backed securities secured by the assets of companies in the construction and real estate development industries and other commitments the Issuer enters into relating to project financing for such real estate projects, which may effectively function as guarantees. 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 and real estate development industries in Korea have 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 adverse conditions in the global economy and the resulting slowdown in global trade. 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 these troubled industries, which were disproportionately impacted by adverse domestic and global economic developments, the Government implemented a programme 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 programme, 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 certain companies in Korea, 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 stabilising the Korean construction, shipbuilding and shipping industries.

The allowance for expected credit losses that the Issuer has established against its credit exposures to the borrowers in these troubled industries may not be sufficient to cover all future losses arising from these and other exposures. If the credit quality of the Issuer's borrowers in the troubled industries further declines, the Issuer may incur substantial additional provisions for expected credit losses, which could adversely impact the Issuer's results of operations and financial condition. Furthermore, although a portion of the Issuer's loans to companies in these troubled industries are secured by collateral, such collateral may not be sufficient to cover uncollectible amounts in respect of such loans.

The Issuer has exposure to companies that are currently or may in the future be put in restructuring and may suffer losses as a result of additional allowances for expected credit losses required or the adoption of restructuring plans with which it does not agree.

As of 31 March 2020, Won 239 billion, or 0.1%, of the Issuer's total loans were to corporate customers in workout, restructuring or rehabilitation, and the Issuer's allowance for expected credit losses on such loan exposures amounted to Won 106 billion, or 44.4% of such loans. These allowances may not be sufficient to cover all future losses arising from the Issuer's credit exposure to these companies. Furthermore, the Issuer has other potential exposure to such companies in the form of debt and equity securities of such companies held by it (including equity securities the Issuer acquired as a result of debt-to-equity conversions). The Issuer's exposures to such companies may also increase in the future, including as a result of adverse conditions in the Korean economy. In addition, in the case of borrowers that are or become subject to workout, 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 its credits to other creditors on unfavorable terms, which may adversely affect the Issuer's results of operations and financial condition.

Risks Relating to Competition

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

Competition in the Korean financial market has been and is likely to remain intense. Some of the financial institutions that the Issuer competes with have greater financial resources or more specialised capabilities than the Issuer. In the area of the Issuer's core banking operations, 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. In the area of credit cards, Korean banks and credit card companies have in the past engaged in aggressive marketing activities and made significant investments, contributing to some extent to lower profitability and asset quality problems previously experienced with respect to credit card receivables. The increasing competition and market saturation resulting from this common focus has made and continues to make it more difficult for the Issuer to secure retail, SME and large corporate customers with the credit quality and on credit terms necessary to maintain or increase the Issuer's income and profitability.

In addition, the following general regulatory reforms in the Korean financial industry have increased competition among banks and other 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.

- In March 2016, the FSC introduced an individual savings account scheme in Korea, which enables individuals to efficiently manage a wide range of retail investment vehicles, including cash deposits, investment funds and securities investment products, from a single integrated account with one financial institution and offers tax benefits on investment returns. Since the scheme backed by the Government allows only one individual savings account per person, financial institutions have been competing to retain existing customers and attract new customers since the launch of the individual savings account scheme. Over 30 financial institutions, including banks, securities companies and insurance companies, have registered with the FSC to sell their individual savings account products.

- In April 2019, the FSC approved and is currently conducting test procedures for a financial regulatory sandbox, a framework set up to allow financial service providers to test new business models in a less regulated environment, as part of its efforts to work closely with the fintech sector and provide support to facilitate its development.

- In December 2019, the FSC launched an "open banking" system, which allows customers to view banking account information, regardless of institution, through a single mobile application. Such integrated system is expected to allow fintech firms to share payment networks with banks, thereby lowering transaction fees and encouraging the development of new payment services.

The Issuer expects such measures to intensify competition among financial institutions in Korea.

Furthermore, the introduction of Internet-only banks in Korea is expected to increase competition in the Korean banking industry. Internet-only banks generally operate without branches and conduct most of their operations through electronic means, which enable them to minimise 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, a mobile-only bank, 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, 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, the subsequent merger of Hana Bank into Korea Exchange Bank in 2015, KB Financial Group's acquisition of Hyundai Securities Co., Ltd. in 2016 and the subsequent merger of Hyundai Securities with and into KB Investment & Securities Co., Ltd. in 2016. In 2016, Mirae Asset Securities Co., Ltd. acquired a 43% interest in KDB Daewoo Securities Co., Ltd., which subsequently merged with and into Mirae Asset Securities to create Mirae Asset Daewoo Securities Co., Ltd., the largest securities company in Korea in terms of capital. In 2014, pursuant to the implementation of the Government's privatisation plan with respect to Woori Finance Holdings Co., Ltd. and its former subsidiaries, Woori Financial, Woori Asset Management and Woori F&I were acquired by KB Financial Group, Kiwoom Securities and Daishin Securities, respectively, and Woori Investment & Securities, Woori Aviva Life Insurance and Woori FG Savings Bank were acquired by NH Financial Group. In addition, in October 2014, the KDIC's ownership interest in Kwangju Bank and Kyongnam Bank were acquired by JB Financial Group and BS Financial Group, respectively. Furthermore, Orange Life Insurance, Ltd. (formerly known as ING Life Insurance Korea, Ltd.) became a wholly-owned subsidiary of Shinhan Financial Group following the acquisition of equity interests by Shinhan Financial Group in February 2019 and January 2020.

The Issuer expects that consolidation in the Korean financial industry will continue. Other financial institutions may seek to acquire or merge with other entities, and 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 does, 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.

Competition for customer deposits may increase, resulting in a loss of the Issuer's deposit customers or an increase in its funding costs.

In recent years, the Issuer has faced increasing pricing pressure on deposit products from its competitors. If the Issuer does not continue to offer competitive interest rates to its deposit customers, the Issuer may lose their business. In addition, even if the Issuer is able to match its competitors' pricing, doing so may result in an increase in its funding costs, which may have an adverse impact on the Issuer's results of operations.

Risks Relating to Korea

Unfavourable financial and economic conditions in Korea may have a material adverse impact on the Issuer's business, financial condition and results of operations.

The Issuer is incorporated in Korea, where most of its assets are located and most of its income is generated. As a result, the Issuer is subject to political, economic, legal and regulatory risks specific to Korea, and its performance and successful fulfillment 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 of growth and uncertainty, and in early 2020, the overall Korean economy and the economies of Korea's major trading partners have shown signs of deterioration due to the debilitating effects of the COVID-19 pandemic. See "*–General Risks Relating to the Issuer's Business–The recent* *global outbreak of COVID-19 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, 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 "*–General Risks Relating to the Issuer's Business–Unfavourable 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 fluctuated significantly and, as a result of deteriorating global and Korean economic conditions, there has been significant volatility in the stock prices of Korean companies recently. Further declines in the Korea Composite Stock Price Index ("**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 the Korean economy include:

- declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;
- the occurrence of severe health epidemics, such as the ongoing COVID-19 pandemic;
- 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 (such as 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 China, the United States, Europe and Japan, 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, the Euro or the Japanese Yen exchange rates or revaluation of the Chinese Renminbi and the overall impact of Brexit on the value of the Korean Won), interest rates, inflation rates or stock markets;
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets;
- 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 *chaebols* and their senior management for possible misconduct;
- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and SME borrowers in Korea;
- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;

- social and labour unrest;
- substantial changes in the market prices of Korean real estate;
- a decrease in tax revenue or a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programmes that would lead to an increased government budget deficit;
- financial problems or lack of progress in the restructuring of *chaebols*, other large troubled companies (including those in the construction, real estate development, shipbuilding and shipping sectors), their suppliers and the financial sector;
- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues concerning 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;
- geo-political uncertainty and 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 U.S. and Iran) and Northern Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;
- political or social tensions involving Russia and any resulting adverse effects on the global 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.

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 programmes 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, 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 Gaeseong 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 August 2015, two Korean soldiers were injured in a landmine explosion near the Korean demilitarised zone. Claiming the landmines were set by North Koreans, the Korean army reinitiated its propaganda programme toward North Korea utilising loudspeakers near the demilitarised zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both Koreas.

- 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 between the two Koreas were held in April 2018, May 2018 and September 2018 and between the United States and North Korea 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 further increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea 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 value of the Notes.

The Issuer is generally subject to Korean accounting, regulatory, corporate governance and disclosure standards, which differ in significant respects from those applicable to banks in other countries.

Korean banks, including the Issuer, are subject to Korean accounting standards and disclosure requirements, which differ in significant respects from those applicable to banks in certain other countries, including the United States. The Issuer's financial statements are prepared in accordance with K-IFRS, which may differ in certain respects from IFRS applied in other countries. In addition, the Issuer is subject to corporate governance standards applicable to Korean banks which differ in many respects from standards applicable in other countries, including the United States. There may also be less publicly available information about Korean banks, such as the Issuer, than is regularly made available by public or non-public companies in other countries. Such differences in accounting and corporate governance standards as well as less available public information could result in less than satisfactory corporate governance practices or disclosure to investors in certain countries.

Labour unrest may adversely affect the Issuer's operations.

Economic difficulties in Korea or increases in corporate reorganisations and bankruptcies, including as a result of the recent COVID-19 pandemic, 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 programmes. According to statistics from the Korea National Statistical Office, the unemployment rate increased from 3.7% in 2016 and 2017 to 3.8% in 2018 and 2019. Further increases in unemployment and any resulting labour unrest in the future could adversely affect the Issuer's operations, as well as the operations of many of its 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. Any of these developments may have an adverse effect on the Issuer's financial condition and results of operations.

You may not be able to enforce a judgment of a foreign court against the Issuer.

The Issuer is a corporation with limited liability organised under the laws of Korea. Substantially all of the Issuer's directors and officers and other persons named in this Offering Circular reside in Korea, and all or a significant portion of the assets of the Issuer's directors and officers and other persons named in this Offering Circular and substantially all of its assets are located in Korea. As a result, it may not be possible for investors to effect service of process outside Korea, or to enforce judgments obtained in foreign courts against them or the Issuer. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of foreign courts, of civil liabilities predicated on the securities laws of jurisdictions outside Korea.

Risks Relating to the Notes

The Notes are not guaranteed by the Republic of Korea.

The Notes are not the obligations of, or guaranteed by, the Republic of Korea. Although under the NACF Act, the Government is allowed to guarantee bonds offered by the Issuer, it is not providing a guarantee in respect of the Notes. In addition, the Government is under no obligation to maintain the solvency of the Issuer. Therefore, investors should not rely on the Government to fulfill the Issuer's obligations under the Notes in the event the Issuer is unable to do so.

The Notes are unsecured obligations, the repayment of which may be jeopardised in certain circumstances.

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

- the Issuer enters into bankruptcy, liquidation, reorganisation or other winding-up procedures;
- there is a default in payment under the Issuer's future 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, if available, pursuant to another exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and, in each case, in accordance with applicable state securities laws. In addition, interests in Bearer Notes are offered under the restrictions of TEFRA C or D, as specified in the applicable Pricing Supplement, and accordingly, investors will be required to provide non-U.S. beneficial ownership certifications in certain circumstances. Furthermore, a registration statement for the offering and sale of the Notes has not been filed with the FSC, and under currently applicable laws and regulations of Korea, until the expiration of one year after the issuance of any Notes, such Notes may not be transferred to any resident of Korea except as otherwise permitted by applicable Korean law and regulations. For a further discussion of the transfer restrictions applicable to the Notes, see "*Subscription and Sale.*"

The Notes may have limited liquidity.

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 business, results of operations and financial condition;
- 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 Notes that are Subordinated Notes are subordinated and have only limited rights of acceleration.

The relevant Pricing Supplement may specify that the Notes will be Subordinated Notes which will be subordinated obligations of the Issuer. Payments on the Subordinated Notes will be subordinate in right of payment upon the occurrence of a Subordination Event (as defined in Condition 4(b) 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 the Subordinated Notes. As a consequence of these subordination provisions, if any of such events should occur, the holders of the Subordinated Notes may recover proportionately less than the holders of the Issuer's deposit liabilities or the holders of 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 the Subordinated Notes.

In addition, subject to complying with applicable regulatory requirements in respect of the Issuer's leverage and capital ratios, 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, the 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 the Subordinated Notes on a liquidation or winding-up of the Issuer and may increase the likelihood of a non-payment or reduction of interest on the Subordinated Notes. The issue of any such other securities or the incurrence of any such other indebtedness might also have an adverse impact on the market price of the Subordinated Notes and the ability of holders to sell the Subordinated Notes.

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

The Subordinated Notes will be subject to loss absorption provisions pursuant to which the Issuer will irrevocably effect a full write-off of the outstanding principal amount and accrued but unpaid interest on the 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 of Korea. Such write-off will be in effect on the third business day in Korea from the occurrence of such trigger event.

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 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 the Subordinated Notes are written off, such written-off amount will be irrevocably lost and will not be restored under any circumstances, including where the trigger event ceases to continue, and holders of the Subordinated Notes will cease to have any claims for any principal amount and accrued but unpaid interest on the Subordinated Notes. See Condition 4(c) of Terms and Conditions of the 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 the 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 the Subordinated Notes will take place. Accordingly, the trading behavior with respect to the 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 the Subordinated Notes. A potential investor should not invest in the Subordinated Notes unless it has knowledge and expertise to evaluate how the 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 the 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 that becomes an "insolvent or similar financial company" (including an "insolvency-threatened financial company"), where 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. 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.

In addition, under Article 8 of the Act on Structural Improvement of the Financial Industry, if the financial institution which is in financial trouble but not yet designated as the insolvent financial institution voluntarily merges with another financial institution for the improvement of its financial structure, the Government may provide financial assistance to the merged financial institution through: (i) the KDIC, (ii) the purchase by the Government's Public Capital Management Fund of certain securities held or issued by the merged financial institution (such as bonds issued by the Government or local governments or bonds guaranteed by the Government or subordinated notes issued by the merged financial institution), and (iii) a capital injection by the Government of state-owned assets into the merged financial institution.

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 the Subordinated Notes, the Issuer will be classified as an insolvency-threatened financial institution 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 the Subordinated Notes.

Pursuant to Condition 4(c) of the Terms and Conditions of the Notes, the Issuer will issue a Trigger Event Notice not more than two Korean Business Days after the occurrence of a Trigger Event, confirming that a Trigger Event has occurred. Although the Issuer will notify the Principal Paying Agent and the holders of the Subordinated Notes not more than two Korean Business Days after the occurrence of a Trigger Event, there may be a delay between a Trigger Event and the time that the clearing systems and the holders of the Subordinated Notes are notified of the occurrence of the relevant Trigger Event. Such delay may exceed several days during which trading and settlement in the Subordinated Notes may continue. Any such delay will not change or delay the effect of a Trigger Event or the Issuer's obligations under the Subordinated Notes or the rights of the Subordinated Noteholders.

The clearing systems are expected to suspend all clearance and settlement of transfers of the Subordinated Notes by the Subordinated Noteholders following receipt of a Trigger Event Notice, and any transfer of Subordinated Notes which are scheduled to settle after commencement of such suspension is expected to be rejected by clearing systems and will not be settled within the clearing systems.

It is possible that transfers that are initiated prior to any suspension following receipt by the clearing systems of a Trigger Event Notice and scheduled to settle on a date before the clearing systems commence such suspension will be settled through the clearing system even though such transfers were initiated after the Trigger Event. In such circumstances, transferees of the Subordinated Notes may be required to pay consideration through the clearing systems even though, upon the occurrence of a Trigger Event, no amounts under the Subordinated Notes will thereafter become due, and such transferees will have no rights whatsoever under the Conditions or the Subordinated Notes to take any action or enforce any rights whatsoever against the Issuer. The settlement of the Subordinated Notes following a Trigger Event will be subject to procedures of the clearing system for the time being in effect.

Each holder of Subordinated Notes are deemed to have authorised, directed and requested the taking of any and all necessary action to give effect to any loss absorption feature and any write-off following the occurrence of the Trigger Event.

Any future discontinuation of LIBOR and the application of a successor or alternative benchmark reference rate may adversely affect the value of and return on the Notes that are Floating Rate Notes.

In the case of the Notes that are Floating Rate Notes, the LIBOR may be the benchmark reference rate used to calculate the rate of interest applicable to such Notes ("**LIBOR-based Floating Rate Notes**") for each interest period. In July 2017, the FCA announced that it does not intend to continue to encourage, or use its power to compel, panel bank to provide rate submissions for the determination of LIBOR beyond the end of 2021, and there is no guarantee that LIBOR will be determined and announced after 2021 on the current basis, or at all. See "*–General Risks Relating to the Issuer's Business–Uncertainties regarding the possible discontinuation of the London Interbank Offered Rate or any other interest rate benchmark could have adverse consequences for market participants, including the Issuer.*"

Upon the occurrence of a Benchmark Transition Event (as defined in Condition 7(f) of the Terms and Conditions of the Notes) with respect to LIBOR, including a public statement or publication of information by or on behalf of the U.K. Financial Conduct Authority or the ICE Benchmark Administration announcing that the latter has ceased or will cease to provide LIBOR permanently or indefinitely, the Benchmark Replacement (as defined in Condition 7(f) of the Terms and Conditions of the Notes) as determined by the Issuer or its designee will replace LIBOR for all purposes relating to outstanding LIBOR-based Floating Rate Notes. Among other alternatives, the Secured Overnight Financing Rate ("**SOFR**"), which has been identified by the Alternative Reference Rates Committee convened by the Board of Governors of the U.S. Federal Reserve System and the Federal Reserve Bank of New York as the preferred alternative benchmark reference rate for LIBOR, together with any necessary spread adjustment, may be determined as the Benchmark Replacement to be used to calculate the rate of interest applicable to outstanding LIBOR-based Floating Rate Notes. Any such Benchmark Replacement determined by the Issuer or its designee will, in the absence of manifest error, be conclusive and binding on the applicable Noteholders. See "*Terms and Conditions of the Notes–Floating Rate Note and Index-Linked Interest Note Provisions–Effect of Benchmark Transition Event.*" Accordingly, if a Benchmark Transition Event occurs with respect to LIBOR prior to the maturity of any LIBOR-based Floating Rate Notes, the method of calculation and rate of interest payable on such Notes will change. There is no guarantee that any Benchmark Replacement will be similar to, or behave in the same manner as, LIBOR, or that the rate of interest calculated based on any such Benchmark Replacement will not be lower than the rate of interest that would have applied to any LIBOR-based Floating Rate Notes for any interest period if LIBOR had continued to be used as the benchmark reference rate.

Uncertainty regarding the continued availability of LIBOR, as well as the rate of interest that would be applicable to LIBOR-based Floating Rate Notes if LIBOR is discontinued or ceases to be published, may negatively affect the trading market for and trading price of such Notes. Currently, it is not possible to predict future developments with respect to LIBOR or their timing or impact. Any such developments, including as a result of international, national or other initiatives for reform or the adoption of successor or alternative benchmark reference rates in the international debt capital markets, could have a material adverse effect on the value of and return on LIBOR-based Floating Rate Notes.

Risks relating to Notes denominated in Renminbi

Renminbi is not freely convertible and this may adversely affect the liquidity of the Notes and the Issuer's ability to source Renminbi outside the PRC to service the Notes.

The Renminbi is not freely convertible at present. The PRC government continues to regulate conversion between Renminbi and foreign currencies despite the significant reduction over the years by the PRC government of its control over routine foreign exchange transactions under current accounts. The People's Bank of China (the "**PBOC**") has established a Renminbi clearing and settlement system for participating banks in Hong Kong pursuant to a settlement agreement (the "**Settlement Agreement**") relating to the clearing of Renminbi business between the PBOC and Bank of China (Hong Kong) Limited. However, the current size of Renminbi and Renminbi-denominated financial assets outside the PRC is limited, and their growth is subject to many constraints which are directly affected by PRC laws and regulations on foreign exchange, which may adversely affect the liquidity of the Notes. There is no assurance that new PRC laws and regulations will not be promulgated or the Settlement Agreement will not be terminated or amended in the future in a way that will have the effect of restricting the availability of Renminbi offshore. To the extent the Issuer is required to source Renminbi in the offshore market to service the Notes, there is no assurance that the Issuer will be able to source such Renminbi on satisfactory terms, or at all.

The Renminbi is subject to exchange rate risk.

The value of the Renminbi against the U.S. dollar and other foreign currencies fluctuates and is affected by changes in the PRC and international political and economic conditions and by many other factors. The Issuer will make all Renminbi payments under the Notes in Renminbi unless otherwise specified. As a result, the value of such payments in Renminbi (in U.S. dollars or other applicable foreign currency terms) may vary with the prevailing exchange rates in the marketplace. If the value of the Renminbi depreciates against the U.S. dollar or other foreign currencies, the value of a Noteholder's investment in U.S. dollar or other applicable foreign currency terms will decline.

Payments in respect of the Notes will only be made in accordance with prevailing rules and regulations in the manner specified in the Notes.

All payments of Renminbi under the Notes will be made solely by (i) transfer to a Renminbi bank account maintained in Hong Kong in accordance with prevailing CMU rules and procedures when the Renminbi Notes are represented by Global Notes or Global Certificates, or (ii) transfer to a Renminbi bank account maintained in Hong Kong in accordance with prevailing rules and regulations when the Renminbi Notes are in definitive form. The Issuer cannot be required to make payment by any other means (including in any other currency or in bank notes, by cheque or draft or by transfer to a bank account in the PRC).

FORM OF THE NOTES

Bearer Notes

Each Tranche of Notes in bearer form ("**Bearer Notes**") will initially be in the form of either a Temporary Global Note in bearer form, without interest coupons, or a Permanent Global Note in bearer form, without interest coupons, in each case as specified in the relevant Pricing Supplement. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "**Global Note**") will be deposited on or around the issue date of the relevant Tranche of the Notes with a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system, and/or a sub-custodian for the CMU Service.

In the case of each Tranche of Bearer Notes, the relevant Pricing Supplement will also specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (the "**TEFRA C Rules**") or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (the "**TEFRA D Rules**") is applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days or are treated as being in registered form for U.S. federal income tax purposes, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

Temporary Global Note exchangeable for Permanent Global Note

If the relevant Pricing Supplement specifies the form of Notes as being a "Temporary Global Note exchangeable for a Permanent Global Note," then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification of non-U.S. beneficial ownership. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused. In addition, interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of a first exchange) the delivery of a Permanent Global Note to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against:

(i) presentation and (in the case of a final exchange) presentation and surrender of the Temporary Global Note to or to the order of the Principal Paying Agent; and

(ii) receipt by the Principal Paying Agent of a certificate or certificates of non-U.S. beneficial ownership.

The principal amount of Notes represented by the Permanent Global Note shall be equal to the aggregate of the principal amounts specified in the certificates of non-U.S. beneficial ownership **provided, however, that** in no circumstances shall the principal amount of Notes represented by the Permanent Global Note exceed the initial principal amount of Notes represented by the Temporary Global Note.

If:

(a) the Permanent Global Note has not been delivered or the principal amount thereof increased by 5.00 p.m. (Hong Kong time) on the seventh day after the bearer of the Temporary Global Note has requested exchange of an interest in the Temporary Global Note for an interest in a Permanent Global Note; or

(b) the Temporary Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Temporary Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer of the Temporary Global Note in accordance with the terms of the Temporary Global Note on the due date for payment,

then the Temporary Global Note (including the obligation to deliver a Permanent Global Note) will become void at 5.00 p.m. (Hong Kong time) on such seventh day (in the case of (a) above) or at 5.00 p.m. (Hong Kong time) on such due date (in the case of (b) above) and the bearer of the Temporary Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Temporary Global Note or others may have under the Deed of Covenant).

The Permanent Global Note will become exchangeable, in whole but not in part only and at the request of the bearer of the Permanent Global Note, for Bearer Notes in definitive form:

(i) on the expiry of such period of notice as may be specified in the Pricing Supplement; or

(ii) at any time, if so specified in the Pricing Supplement; or

(iii) if the Pricing Supplement specifies "in the limited circumstances described in the Permanent Global Note," then if either of the following events occurs:

(A) Euroclear or Clearstream or the CMU Service or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; or

(B) any of the circumstances described in Condition 14 (*Events of Default*) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Pricing Supplement), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

If:

(x) Definitive Notes have not been duly delivered by 5.00 p.m. (Hong Kong time) on the thirtieth day after the bearer has requested exchange of the Permanent Global Note for Definitive Notes; or

(y) the Permanent Global Note was originally issued in exchange for part only of a Temporary Global Note representing the Notes and such Temporary Global Note becomes void in accordance with its terms; or

(z) Permanent Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Permanent Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Permanent Global Note on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (Hong Kong time) on such thirtieth day (in the case of (x) above) or at 5.00 p.m. (Hong Kong time) on the date on which such Temporary Global Note becomes void (in the case of (y) above) or at 5.00 p.m. (Hong Kong time) on such due date ((z) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under the Deed of Covenant).

Temporary Global Note exchangeable for Definitive Notes

If the relevant Pricing Supplement specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA C Rules are applicable or that neither the TEFRA C Rules or the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole but not in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes.

If the relevant Pricing Supplement specifies the form of Notes as being "Temporary Global Note exchangeable for Definitive Notes" and also specifies that the TEFRA D Rules are applicable, then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for Definitive Notes not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification of non-U.S. beneficial ownership. Interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

Whenever the Temporary Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the relevant Pricing Supplement), in an aggregate principal amount equal to the principal amount of the Temporary Global Note to the bearer of the Temporary Global Note against the surrender of the Temporary Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

If:

(a) Definitive Notes have not been duly delivered by 5.00 p.m. (Hong Kong time) on the thirtieth day after the bearer has requested exchange of the Temporary Global Note for Definitive Notes; or

(b) the Temporary Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Temporary Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Temporary Global Note on the due date for payment,

then the Temporary Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (Hong Kong time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (Hong Kong time) on such due date (in the case of (b) above) and the bearer of the Temporary Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Temporary Global Note or others may have under the Deed of Covenant).

The exchange upon notice/at any time options should not be expressed to be applicable if the Specified Denomination of the Notes includes language substantially to the following effect: "€100,000 and integral multiples of €1,000 in excess thereof up to and including €199,000." Furthermore, such Specified Denomination construction is not permitted in relation to any issuance of Notes which is to be represented on issue by a Temporary Global Notes exchangeable for Definitive Notes.

Permanent Global Note exchangeable for Definitive Notes

If the relevant Pricing Supplement specifies the form of Notes as being "Permanent Global Note exchangeable for Definitive Notes," then the Notes will initially be in the form of a Permanent Global Note which will be exchangeable in whole, but not in part, for Definitive Notes:

(a) on the expiry of such period of notice as may be specified in the relevant Pricing Supplement; or

(b) at any time, if so specified in the relevant Pricing Supplement; or

(c) if the relevant Pricing Supplement specifies "in the limited circumstances described in the Permanent Global Note," then if either of the following events occurs:

   (A) Euroclear or Clearstream or the CMU Service or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; or

   (B) any of the circumstances described in Condition 14 (*Events of Default*) occurs.

Whenever the Permanent Global Note is to be exchanged for Definitive Notes, the Issuer shall procure the prompt delivery (free of charge to the bearer) of such Definitive Notes, duly authenticated and with Coupons and Talons attached (if so specified in the Pricing Supplement), in an aggregate principal amount equal to the principal amount of Notes represented by the Permanent Global Note to the bearer of the Permanent Global Note against the surrender of the Permanent Global Note to or to the order of the Principal Paying Agent within 30 days of the bearer requesting such exchange.

If:

(a) Definitive Notes have not been duly delivered by 5.00 p.m. (Hong Kong time) on the thirtieth day after the bearer has requested exchange of the Permanent Global Note for Definitive Notes; or

(b) the Permanent Global Note (or any part thereof) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Permanent Global Note has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Permanent Global Note on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (Hong Kong time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (Hong Kong time) on such due date ((b) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under the Deed of Covenant).

In the event that a Global Note is exchanged for Definitive Notes, such Definitive Notes shall be issued in Specified Denomination(s) only. A Noteholder who holds a principal amount of less than the minimum Specified Denomination will not receive a Definitive Note in respect of such holding and would need to purchase a principal amount of Notes such that it holds an amount equal to one or more Specified Denominations.

Legend concerning United States persons

In the case of any Tranche of Bearer Notes having an original maturity of more than 365 days, the Notes in global form, the Notes in definitive form and any Coupons and Talons appertaining thereto will bear a legend to the following effect:

"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 U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED."

The sections referred to in the legend provide that, with certain exceptions, United States persons who hold such obligations will not be permitted to deduct any loss, and will not be eligible for capital gain treatment with respect to any gain, realized on a sale, exchange or redemption of a Bearer Note, Coupon or Talon.

For purposes of this section, "United States person" means:

- a citizen or resident of the United States;
- a corporation, partnership or other entity created or organized in or under the laws of the United States or any political subdivision thereof; or
- an estate or trust the income of which is subject to United States federal income taxation regardless of its source.

For purposes of this section, "United States" means the United States of America, including each state and the District of Columbia, its territories, possessions and other areas subject to its jurisdiction.

Registered Notes

Each Tranche of Notes in registered form ("**Registered Notes**") will be represented by either:

(i) individual Note Certificates in registered form ("**Individual Note Certificates**"); or

(ii) one or more Unrestricted Global Certificates ("**Unrestricted Global Certificate(s)**") in the case of Registered Notes sold outside the United States to non-U.S. persons in reliance on Regulation S ("**Unrestricted Registered Notes**") and/or one or more Restricted Global Certificates ("**Restricted Global Certificate(s)**") in the case of Registered Notes sold to QIBs in reliance on Rule 144A ("**Restricted Notes**"),

in each case as specified in the relevant Pricing Supplement, and references in this Offering Circular to "**Global Certificates**" shall be construed as a reference to Unrestricted Global Certificates and/or Restricted Global Certificates.

Each Note represented by a Restricted Global Certificate will be registered in the name of Cede & Co. (or such other entity as is specified in the applicable Pricing Supplement) as nominee for DTC and the relevant Restricted Global Certificate will be deposited on or about the issue date with the DTC Custodian. Beneficial interests in Notes represented by a Restricted Global Certificate may only be held through DTC at any time. Each Note represented by an Unrestricted Global Certificate will be registered in the name of a common depositary (or its nominee) for Euroclear and/or Clearstream and/or the CMU Service and/or any other relevant clearing system or in the name of Cede & Co. as nominee for DTC, and the relevant Unrestricted Global Certificate will be deposited on or about the issue date with the common depositary or the DTC custodian.

If the relevant Pricing Supplement specifies the form of Notes as being "Individual Note Certificates," then the Notes will at all times be represented by Individual Note Certificates issued to each Noteholder in respect of their respective holdings.

Global Certificate exchangeable for Individual Note Certificates

If the relevant Pricing Supplement specifies the form of Notes as being "Global Certificate exchangeable for Individual Note Certificates," then the Notes will initially be represented by one or more Global Certificates each of which will be exchangeable in whole, but not in part, for Individual Note Certificates:

(i) on the expiry of such period of notice as may be specified in the relevant Pricing Supplement; or

(ii) at any time, if so specified in the relevant Pricing Supplement; or

(iii) if the relevant Pricing Supplement specifies "in the limited circumstances described in the Global Certificate," then:

    (a) in the case of any Global Certificate held by or on behalf of DTC, if DTC notifies the Issuer that it is no longer willing or able to discharge properly its responsibilities as depositary with respect to the Global Certificate or DTC ceases to be a "clearing agency" registered under the Exchange Act or if at any time DTC is no longer eligible to act as such, and the relevant Issuer is unable to locate a qualified successor within 90 days of receiving notice or becoming aware of such ineligibility on the part of DTC;

    (b) in the case of any Global Certificate held by or on behalf of, Euroclear and/or Clearstream and/or CMU Service and/or any other clearing system (other than DTC), if Euroclear, Clearstream or the CMU Service or any other relevant clearing system is closed for business for a continuous period of 14 days (other than by reason of legal holidays) or announces an intention permanently to cease business; and

    (c) in any case, if any of the circumstances described in Condition 14 (*Events of Default*) occurs.

Whenever a Global Certificate is to be exchanged for Individual Note Certificates, each person having an interest in a Global Certificate must provide the Registrar (through the relevant clearing system) with such information as the Issuer and the Registrar may require to complete and deliver Individual Note Certificates (including the name and address of each person in which the Notes represented by the Individual Note Certificates are to be registered and the principal amount of each such person's holding). In addition, whenever a Restricted Global Certificate is to be exchanged for Individual Note Certificates, each person having an interest in the Restricted Global Certificate must provide the Registrar (through the relevant clearing system) with a certificate given by or on behalf of the holder of each beneficial interest in the Restricted Global Certificate stating either (i) that such holder is not transferring its interest at the time of such exchange or (ii) that the transfer or exchange of such interest has been made in compliance with the transfer restrictions applicable to the Notes and that the person transferring such interest reasonably believes that the person acquiring such interest is a QIB and is obtaining such beneficial interest in a transaction meeting the requirements of Rule 144A. Individual Note Certificates issued in exchange for interests in the Restricted Global Certificate will bear the legends and be subject to the transfer restrictions set out under "*Subscription and Sale and Transfer and Selling Restrictions–Transfer Restrictions.*"

Whenever a Global Certificate is to be exchanged for Individual Note Certificates, the Issuer shall procure that Individual Note Certificates will be issued in an aggregate principal amount equal to the principal amount of the Global Certificate within five business days of the delivery, by or on behalf of the registered holder of the Global Certificate to the Registrar of such information as is required to complete and deliver such Individual Note Certificates against the surrender of the Global Certificate at the specified office of the Registrar.

Such exchange will be effected in accordance with the provisions of the Trust Deed and the Agency Agreement and the regulations concerning the transfer and registration of Notes scheduled to the Agency Agreement and, in particular, shall be effected without charge to any holder, but against such indemnity as the Registrar may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such exchange.

If:

(a) Individual Note Certificates have not been delivered by 5.00 p.m. (Hong Kong time) on the thirtieth day after they are due to be issued and delivered in accordance with the terms of the Global Registered Note; or

(b) any of the Notes represented by a Global Certificate (or any part of it) has become due and payable in accordance with the Terms and Conditions of the Notes or the date for final redemption of the Notes has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the holder of the Global Certificate in accordance with the terms of the Global Certificate on the due date for payment,

then the Global Certificate (including the obligation to deliver Individual Note Certificates) will become void at 5.00 p.m. (Hong Kong time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (Hong Kong time) on such due date (in the case of (b) above) and the holder of the Global Certificate will have no further rights thereunder (but without prejudice to the rights which the holder of the Global Certificate or others may have under the Deed of Covenant.

Under the Deed of Covenant, persons shown in the records of DTC, Euroclear and/or Clearstream and/or the CMU Service and/or any other relevant clearing system as being entitled to an interest in a Global Certificate will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Global Certificate became void, they had been the holders of Individual Note Certificates in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of DTC, Euroclear and/or Clearstream and/or the CMU Service and/or any other relevant clearing system.

Terms and Conditions applicable to the Notes

The terms and conditions applicable to any Definitive Note or Individual Note Certificate will be endorsed on that Definitive Note or Individual Note Certificate and will consist of the terms and conditions set out under "*Terms and Conditions of the Notes*" below and the provisions of the relevant Pricing Supplement which supplement, amend and/or replace those terms and conditions.

The terms and conditions applicable to any Global Certificate will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*" below.

Rights under Deed of Covenant

Under the Deed of Covenant, persons shown in the records of Euroclear or Clearstream or the CMU Service and/or any other relevant clearing system as being entitled to an interest in a Temporary Global Note or a Permanent Global Note which becomes void will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Temporary Global Note or Permanent Global Note became void, they had been the holders of Definitive Notes in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or Clearstream and/or the CMU Service and/or any other relevant clearing system.

SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

Clearing system accountholders

In relation to any Tranche of Notes represented by a Global Note in bearer form, references in the Terms and Conditions of the Notes to "**Noteholder**" are references to the bearer of the relevant Global Note which, for so long as the Global Note is held by a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system, and/or a sub-custodian for the CMU Service, will be that depositary, common depositary or sub-custodian, as the case may be.

In relation to any Tranche of Notes represented by one or more Global Certificates, references in the Terms and Conditions of the Notes to "**Noteholder**" are references to the person in whose name the relevant Global Certificate is for the time being registered in the Register which (a) in the case of a Restricted Global Certificate or Unrestricted Global Certificate held by or on behalf of DTC, will be Cede & Co. (or such other entity as is specified in the applicable Pricing Supplement) as nominee for DTC; and (b) in the case of any Unrestricted Global Certificate which is held by or on behalf of a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system, and/or a sub-custodian for the CMU Service, will be such sub-custodian, such depositary or common depositary, or a nominee for such depositary or common depositary, as the case may be.

Each of the persons shown in the records of DTC, Euroclear, Clearstream and/or any other relevant clearing system as being entitled to an interest in a Global Note or a Global Certificate (each an "**Accountholder**") must look solely to DTC, Euroclear, Clearstream and/or such other relevant clearing system (as the case may be) for such Accountholder's share of each payment made by the Issuer to the holder of such Global Note or Global Certificate and in relation to all other rights arising under such Global Note or Global Certificate. The extent to which, and the manner in which, Accountholders may exercise any rights arising under a Global Note or Global Certificate will be determined by the respective rules and procedures of DTC, Euroclear and Clearstream and any other relevant clearing system from time to time. For so long as the relevant Notes are represented by a Global Note or Global Certificate, Accountholders shall have no claim directly against the Issuer in respect of payments due under the Notes and such obligations of the Issuer will be discharged by payment to the holder of such Global Note or Global Certificate.

If a Global Note or a Global Registered Note is lodged with a sub-custodian for or registered with the CMU Service, the person(s) for whose account(s) interests in such Global Note or Global Registered Note are credited as being held in the CMU Service in accordance with the CMU Rules as notified by the CMU Service to the CMU Lodging and Paying Agent in a relevant CMU Instrument Position Report or any other relevant notification by the CMU Service (which notification, in either case, shall be conclusive evidence of the records of the CMU Service save in the case of manifest error) shall be the only person(s) entitled or in the case of Registered Notes, directed or deemed by the CMU Service as entitled to receive payments in respect of Notes represented by such Global Note or Global Registered Note and the Issuer will be discharged by payment to, or to the order of, such person(s) for whose account(s) interests in such Global Note or Global Certificate are credited as being held in the CMU Service in respect of each amount so paid. Each of the persons shown in the records of the CMU Service, as the beneficial holder of a particular nominal amount of Notes represented by such Global Note or Global Registered Note must look solely to the CMU Lodging and Paying Agent for his share of each payment so made by the Issuer in respect of such Global Note or Global Registered Note.

Conditions applicable to Global Notes

Each Global Note and Global Certificate will contain provisions which modify the Terms and Conditions of the Notes as they apply to the Global Note or Global Certificate. The following is a summary of certain of those provisions:

Payments: All payments in respect of the Global Note or Global Certificate which, according to the Terms and Conditions of the Notes, require presentation and/or surrender of a Note, Note Certificate or Coupon will be made against presentation and (in the case of payment of principal in full with all interest accrued thereon) surrender of the Global Note or Global Certificate to or to the order of any Paying Agent and will be effective to satisfy and discharge the corresponding liabilities of the Issuer in respect of the Notes. On each occasion on which a payment of principal or interest is made in respect of the Global Note, the Issuer shall procure that the payment is noted in a schedule thereto.

Payment Business Day: in the case of a Global Note or a Global Certificate, shall be: if the currency of payment is Euro, any day which is a TARGET Settlement Day and a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or, if the currency of payment is not Euro, any day which is a day on which dealings in foreign currencies may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre.

Payment Record Date: Each payment in respect of a Global Registered Note (other than a Global Registered Note cleared through DTC) will be made to the person shown as the Holder in the Register at the close of business (in the relevant clearing system) on the Clearing System Business Day before the due date for such payment (the "**Record Date**") where "**Clearing System Business Day**" means any week day (Monday to Friday inclusive) within any given calendar year, except 25 December and 1 January.

Exercise of put option: In order to exercise the option contained in Condition 10(e) (*Redemption of the Senior Notes only at the option of the Noteholders*) the bearer of a Permanent Global Note or the holder of a Global Certificate must, within the period specified in the Conditions for the deposit of the relevant Note and put notice, give written notice of such exercise to the Principal Paying Agent specifying the principal amount of Notes in respect of which such option is being exercised. Any such notice will be irrevocable and may not be withdrawn.

Notices: Notwithstanding Condition 20 (*Notices*), while all the Notes are represented by a Permanent Global Note (or by a Permanent Global Note and/or a Temporary Global Note) or a Global Certificate and the Permanent Global Note is (or the Permanent Global Note and/or the Temporary Global Note are), or the Global Certificate is, (i) registered in the name of DTC's nominee or deposited with a depositary or a common depositary for Euroclear and/or Clearstream and/or any other relevant clearing system (other than the CMU Service, in respect of which see (ii) below), notices to Noteholders may be given by delivery of the relevant notice to DTC and/or Euroclear and/or Clearstream and/or any other relevant clearing system and, in any case, such notices shall be deemed to have been given to the Noteholders in accordance with Condition 20 (*Notices*) on the date of delivery to DTC and/or Euroclear and/or Clearstream and/or any other relevant clearing system or (ii) deposited with the CMU Service, notices to the holders of Notes of the relevant Series may be given by delivery of the relevant notice to the persons shown in a CMU Instrument Position Report issued by the CMU Service on the second business day preceding the date of despatch of such notice as holding interests in the relevant Global Note or Global Registered Note.

See "*Clearance and Settlement*" for information covering the rules, regulations and procedures of the Clearing System (as defined therein).

FORM OF PRICING SUPPLEMENT

[*The Pricing Supplement in respect of each Tranche of Notes will substantially be in the following form, duly supplemented (if necessary), amended (if necessary) and completed to reflect the particular terms of the relevant Notes and their issue*.]

Pricing Supplement dated [date]

NongHyup Bank

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes] under the US$8,000,000,000 Global Medium Term Note Programme

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the Conditions (the "**Conditions**") set forth in the Offering Circular dated [[•] July 2020] [and the supplementary Offering Circular dated [•]]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with such Offering Circular [as so supplemented]. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of the Offering Circular [, the supplementary Offering Circular dated [•]] and this Pricing Supplement.

[*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 Conditions (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 [current date] [and the supplemental Offering Circular dated [•]], save in respect of the Conditions which are extracted from the Offering Circular dated [original date] and are attached hereto. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of the Offering Circular[, the supplementary Offering Circular dated [•]] and this Pricing Supplement.]

[MIFID II PRODUCT GOVERNANCE – Solely for the purposes of the 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**"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the manufacturer'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 target market assessment) and determining the appropriate distribution channels.]

[*The following legend is to be inserted unless the pricing supplement in respect of any Notes specifies the "Prohibition of Sales to EEA or UK Retail Investors" as "Not Applicable."*]

[PROHIBITION OF SALES TO EEA OR 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 the United Kingdom ("**UK**"). For these purposes: (a) the expression "**retail investor**" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of [Directive 2014/65/EU (as amended, "**MiFID II**")/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**"); and (b) the expression "**offer**" includes 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. Consequently, no key information document required by Regulation (EU) No 1286/2014 (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.]

[*The following legend is to be inserted if the pricing supplement in respect of any Notes specifies the "Prohibition of Sales to EEA or UK Retail Investors" as "Not Applicable."*]

[This document 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 from the requirement to publish a prospectus for offers of Notes. Accordingly any person making or intending to make an offer in that Relevant State of Notes which are the subject of an offering contemplated in this document may only do so in circumstances in which no obligation arises for the Issuer or any of the Managers 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 Managers have authorised, nor do they authorise, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or the Managers to publish or supplement a prospectus for such offer.

For the purposes of this provision, the term "offer" in relation to any Securities in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any Securities to be offered so as to enable an investor to decide to purchase or subscribe for any Securities, and 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") – 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).]

THE NOTES HAVE NOT BEEN REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA, AND, ACCORDINGLY, THE NOTES MAY NOT BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN KOREA OR TO ANY KOREAN RESIDENT EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAWS AND REGULATIONS (INCLUDING THE SALE OF THE NOTES TO QUALIFIED INSTITUTIONAL INVESTORS IN THE PRIMARY MARKET IF (A) THE AMOUNT ACQUIRED BY QUALIFIED INSTITUTIONAL INVESTORS IN THE PRIMARY MARKET IS LIMITED TO LESS THAN 20% OF THE AGGREGATE ISSUE AMOUNT AND (B) THE NOTES HAVE BEEN (I) LISTED IN ONE OF THE MAJOR MARKETS DESIGNATED BY THE FINANCIAL SUPERVISORY SERVICE OR (II) REGISTERED WITH OR REPORTED TO A FINANCIAL SUPERVISORY AUTHORITY LOCATED IN ONE OF SUCH MAJOR MARKETS OR (III) OFFERED THROUGH SUCH PROCEDURES AS MAY BE CONSIDERED A PUBLIC OFFERING). IN ADDITION, TO THE EXTENT REQUIRED BY THE APPLICABLE LAWS AND REGULATIONS OF KOREA, UNTIL THE EXPIRATION OF ONE YEAR AFTER THE ISSUANCE OF ANY NOTES, SUCH NOTES MAY NOT BE TRANSFERRED TO ANY RESIDENT OF KOREA EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAW AND REGULATIONS (INCLUDING THE SALE OF THE NOTES TO THE QUALIFIED INSTITUTIONAL INVESTORS IN THE SECONDARY MARKET IF THE NOTES HAVE BEEN (A) LISTED IN ONE OF THE MAJOR MARKETS DESIGNATED BY THE FINANCIAL SUPERVISORY SERVICE OR (B) REGISTERED WITH OR REPORTED TO A FINANCIAL SUPERVISORY AUTHORITY LOCATED IN ONE OF SUCH MAJOR MARKETS OR

(C) OFFERED THROUGH SUCH PROCEDURES AS MAY BE CONSIDERED A PUBLIC OFFERING). AS USED HEREIN, THE TERM "KOREAN RESIDENT" HAS THE MEANING GIVEN TO IT BY THE FOREIGN EXCHANGE TRANSACTION LAW OF KOREA AND THE REGULATIONS THEREUNDER AND THE TERM "QUALIFIED INSTITUTIONAL INVESTORS" HAS THE MEANING GIVEN TO IT BY THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA AND ITS ENFORCEMENT DECREE.

[*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:	NongHyup Bank
2.	[(i)] Series Number:	[•]
	[(ii) Tranche Number:	[•]]
	(*If fungible with an existing Series, details of that Series, including the date on which the Notes become fungible*)]	
3.	Specified Currency or Currencies:	[•] *(If Notes are being cleared through DTC with interest and or principal payable in a currency other than U.S. dollars, check whether DTC will accept payments in such currency)*
4.	Aggregate Nominal Amount:	[•]
	[(i)] Series:	[•]
	[(ii) Tranche:	[•]]
5.	[(i)] Issue Price:	[•]% of the Aggregate Nominal Amount [plus accrued interest from [*insert date*] *(in the case of fungible issues only, if applicable)*]
	[(ii) Net proceeds	[•] (*Required only for listed issues*)]

6.	(i)	Specified Denominations *(in the case of Registered Notes, this means the minimum integral amount in which transfers can be made)*:	[•] *(N.B. Pursuant to the Prospectus Regulation (Regulation (EU) 2017/1129), Notes to be admitted to trading on a regulated market within the European Economic Area or the UK must have a minimum denomination of €100,000 (or equivalent) in order to benefit from Transparency Directive exemptions in respect of wholesale securities and the wholesale exemption set out in Article 1(4) of the Prospectus Regulation. If an issue of Notes is (i) NOT admitted to trading on an European Economic Area or UK exchange and (ii) only offered in the European Economic Area or the UK in circumstances where a prospectus is not required to be published under the Prospectus Regulation, the €100,000 minimum denomination is not required.)* *(N.B. If the specified denomination is expressed to be €100,000 or its equivalent and multiples of a lower principal amount (for example €1,000), insert the additional wording as follows:* *"€100,000 and integral multiples of [€1,000] in excess thereof up to and including [€199,000]. No notes in definitive form will be issued with a denomination above [€199,000].")*
	(ii)	Calculation Amount:	[•]
7.	(i)	Issue Date:	[•]
	(ii)	Interest Commencement Date:	[*Specify*/Issue Date/Not Applicable]
8.	Maturity Date:		[*Specify date or (for Floating Rate Notes) Interest Payment Date falling in or nearest to the relevant month and year*] [(*N.B. Subordinated Notes shall have a minimum maturity of five years.*)]
9.	Interest Basis:		[[•]% Fixed Rate] [[LIBOR/EURIBOR/*specify reference rate*] +/- [•]% Floating Rate] [Zero Coupon] [Index Linked Interest] [Dual Currency Interest] [Other (*Specify*)] (further particulars specified below)
10.	Redemption/Payment Basis:		[Redemption at par] [Index Linked Redemption] [Dual Currency Redemption] [Partly Paid] [Instalment] [Other (*Specify*)]

11.	Change of Interest Basis or Redemption/Payment Basis:	[*Specify details of any provision for convertibility of Notes into another interest or redemption/payment basis*]
12.	Put/Call Options:	[Investor Put] [Issuer Call] [(further particulars specified below)]
13.	(i) Status of the Notes:	[Senior/[Dated/Perpetual]/Subordinated]
	(ii) Date of [Board] approval for issuance of Notes obtained:	[•]/[None required] (*N.B. Only relevant where Board (or similar) authorisation is required for the particular tranche of Notes*)
	(iii) Date of regulatory approval/ consent/report for issuance of Notes obtained:	[•]/[None required] (*N.B. Only relevant where regulatory (or similar) approval or consent is required for the particular tranche of Notes*)
14.	Listing:	[Singapore/*specify other*/None] (*N.B. Consider disclosure requirements under the Prospectus Directive applicable to securities admitted to an EU regulated market*)
15.	Method of distribution:	[Syndicated/Non-syndicated]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	**Fixed Rate Note Provisions**	[Applicable/Not Applicable] (*If not applicable, delete the remaining subparagraphs of this paragraph*)
	(i) Rate(s) of Interest:	[•]% per annum [payable [annually/semi-annually/ quarterly/other (*specify*)] in arrear]
	(ii) Interest Payment Date(s):	[[•] in each year [adjusted in accordance with [*specify Business Day Convention and any applicable Business Centre(s) for the definition of "Business Day"*]/not adjusted]
	(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] [•]
	(v) Day Count Fraction:	[30/360 or Actual/Actual (ICMA/ISDA)/other]
	(vi) Determination Date(s):	[•] in each year (*Insert (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. only relevant where Day Count Fraction is Actual/Actual (ICMA)).*)

	(vii) Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Not Applicable/*give details*]
17.	**Floating Rate Note Provisions**	[Applicable/Not Applicable] (*If not applicable, delete the remaining subparagraphs of this paragraph*)
	(i) Specified Period(s):	[•] *(Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable")*
	(ii) Specified Interest Payment Dates:	[•] *(Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "Not Applicable")*
	(iii) Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/other (*give details*)]
	(iv) Additional Business Centre(s):	[Not Applicable/*give details*]
	(v) Manner in which the Rate(s) of Interest and/or Interest Amount(s) is/are to be determined:	[Screen Rate Determination/ISDA Determination/other (*give details*)]
	(vi) Party responsible for calculating the Rate(s) of Interest and/or Interest Amount(s) (if not the Principal Paying Agent):	[[*Name*] shall be the Calculation Agent *(no need to specify if the Principal Paying Agent is to perform this function)*]
	(vii) Screen Rate Determination:	
	Reference Rate:	[*For example, LIBOR or EURIBOR*]
	Interest Determination Date(s):	[•]
	Relevant Screen Page:	[*For example, Reuters LIBOR 01/EURIBOR 01*]
	(viii) ISDA Determination:	
	Floating Rate Option:	[•]
	Designated Maturity:	[•]

		Reset Date:	[•]
	(ix)	Margin(s):	[+/-][•]% per annum
	(x)	Minimum Rate of Interest:	[•]% per annum
	(xi)	Maximum Rate of Interest:	[•]% per annum
	(xii)	Day Count Fraction:	[•] Actual/365 (Fixed) Actual/360 30/360 30E/360 30E/360 (ISDA) *Other*] (*See definition of "Day Count Fraction" in Condition [2(a)] for alternatives*)
	(xiii)	Fall back provisions, rounding provisions, denominator and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[•]
18.	Zero Coupon Note Provisions		[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs 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:	[Conditions 8(b) and 10(f) apply/specify other] (Consider applicable day count fraction if not U.S. dollar denominated)
19.	Index Linked Interest Note/other variable-linked interest Note Provisions		[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs of this paragraph)
	(i)	Index/Formula:	[give or annex details]
	(ii)	Calculation Agent responsible for calculating the interest due:	[•]

(iii)	Party responsible for determining Coupon where calculated by reference to Index and/or Formula and/or other variable:	[•]
(iv)	Interest Determination Date(s):	[•]
(v)	Provisions for determining Coupon where calculation by reference to Index and/or Formula is impossible or impracticable:	[need to include a description of market disruption or settlement disruption events and adjustment provisions]
(vi)	Interest or calculation period(s):	[•]
(vii)	Specified Period:	[•] (Specified Period and Specified Interest Payment Dates are alternatives. A Specified Period, rather than Specified Interest Payment Dates, will only be relevant if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention. Otherwise, insert "Not Applicable")
(viii)	Specified Interest Payment Dates:	[•] (Specified Period and Specified Interest Payment Dates are alternatives. If the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention, insert "Not Applicable")
(ix)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/other (give details)]
(x)	Additional Business Centre(s):	[•]
(xi)	Minimum Rate/Amount of Interest:	[•]% per annum
(xii)	Maximum Rate/Amount of Interest:	[•]% per annum
(xiii)	Day Count Fraction:	[•]

20. **Dual Currency Note Provisions** — [Applicable/Not Applicable]
(*If not applicable, delete the remaining subparagraphs of this paragraph*)

(i)	Rate of Exchange/method of calculating Rate of Exchange:	[*give or annex details*]

	(ii)	Calculation Agent, if any, responsible for calculating the principal and/or interest due:	[•]
	(iii)	Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable:	[*need to include a description of market disruption or settlement disruption events and adjustment provisions*]
	(iv)	Person at whose option Specified Currency(ies) is/are payable:	[•]

PROVISIONS RELATING TO REDEMPTION

21.	**Call Option**		[Applicable/Not Applicable] (*If not applicable, delete the remaining subparagraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[•]
	(ii)	Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s):	[•] per Calculation Amount
	(iii)	If redeemable in part:	
	(a)	Minimum Redemption Amount:	[•] per Calculation Amount
	(b)	Maximum Redemption Amount:	[•] per Calculation Amount
	(iv)	Notice period:	[•] (*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 Principal Paying Agent*)
22.	**Put Option**		[Applicable/Not Applicable] (*If not applicable, delete the remaining subparagraphs of this paragraph*)
	(i)	Optional Redemption Date(s):	[•]
	(ii)	Optional Redemption Amount(s) of each Note and method, if any, of calculation of such amount(s):	[•] per Calculation Amount

	(iii)	Notice period:	[•] (*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 Principal Paying Agent*)
23.	**Final Redemption Amount**		[•] per Calculation Amount
	In cases where the Final Redemption Amount is Index-Linked or other variable-linked:		
	(i)	Index/Formula/variable:	[*give or annex details*]
	(ii)	Calculation Agent responsible for calculating the Final Redemption Amount:	[•]
	(iii)	Provisions for determining Final Redemption Amount where calculated by reference to Index and/or Formula and/or other variable:	[•]
	(iv)	Date for determining Final Redemption Amount where calculation by reference to Index and/or Formula and/or other variable:	[•]
	(v)	Provisions for determining Final Redemption Amount where calculation by reference to Index and/or Formula and/or other variable is impossible or impracticable or otherwise disrupted:	[•]
	(vi)	Minimum Final Redemption Amount:	[•] per Calculation Amount
	(vii)	Maximum Final Redemption Amount:	[•] per Calculation Amount

24.	**Early Redemption Amount**	[Not Applicable
	Early Redemption Amount(s) per Calculation Amount payable on redemption for taxation reasons or on event of default or other early redemption and/or the method of calculating the same (if required or if different from that set out in the Conditions):	*(If both the Early Redemption Amount (Tax) and the Early Termination Amount are the principal amount of the Notes/specify the Early Redemption Amount (Tax) and/or the Early Termination Amount if different from the principal amount of the Notes)*]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

25.	Form of Notes:	**Bearer Notes:** [Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Notes on [[•] days' notice/at any time/in the limited circumstances described in the Permanent Global Note] [Temporary Global Note exchangeable for Definitive Notes on [•] days' notice] * (*N.B. If the Specified Denomination of the Notes in paragraph 6(i) includes language substantially to the following effect: "[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€199,000]," the Temporary Global Note shall not be exchangeable on* [•] *day's notice/at any time.*) [Permanent Bearer Global Note exchangeable for Definitive Notes on [•] days' notice given at any time/in the limited circumstances described in the Permanent Global Note] * (*N.B. If the Specified Denomination of the Notes in paragraph 6(i) includes language substantially to the following effect: "[€100,000] and integral multiples of [€1,000] in excess thereof up to and including [€199,000]," the Permanent Global Note shall not be exchangeable on* [•] *day's notice/at any time.*) **Registered Notes:** [Unrestricted Global Certificate exchangeable for unrestricted Individual Note Certificates on [•] days' notice/at any time/in the limited circumstances described in the Unrestricted Global Certificate] [and] [Restricted Global Certificate exchangeable for restricted Individual Note Certificates on [•] days' notice/at any time/in the limited circumstances described in the Restricted Global Certificate]

26.	Additional Financial Centre(s) or other special provisions relating to payment dates:	[Not Applicable/*give details*] (*Note that this paragraph relates to the place of payment and not interest period end dates, to which subparagraphs 17(iii) and 19(vii) relate*)
27.	Talons for future Coupons or Receipts to be attached to Definitive Notes (and dates on which such Talons mature):	[Yes/No. [*If yes, give details*]]
28.	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.*]
29.	Details relating to Instalment Notes:	
	(i) Instalment Amount(s):	[Not Applicable/*give details*]
	(ii) Instalment Date(s):	[Not Applicable/*give details*]
30.	Redenomination renominalisation and reconventioning provisions:	[Not Applicable/The provisions [in Condition [•] apply]] (*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)*)
31.	[Consolidation provisions:	[Not Applicable/The provisions [in Condition [19] (*Further Issues*)] [annexed to this Pricing Supplement] apply]]
32.	Other terms or special conditions:	[Not Applicable/*give details*]

DISTRIBUTION

33.	(i) If syndicated, names of Managers:	[Not Applicable/*give names*]
	(ii) Date of [Subscription] Agreement:	[•]
	(iii) Stabilising Manager(s) (if any):	[Not Applicable/*give name(s)*]
34.	If non-syndicated, name of relevant Dealer:	[Not Applicable/*give name*]

35.	U.S. Selling Restrictions:	Reg. S Category [1/2] (*In the case of Category 1, the Issuer shall provide a representation and warranty stating that there is no substantial market interest (as defined in Regulation S) in its debt securities. If such representation and warranty is not provided, then Category 2 shall apply. In addition, Selling Restrictions set forth in Schedule 1 to the Dealer Agreement should be complied with*); *(In the case of Bearer Notes)*–[TEFRA C/TEFRA D/ TEFRA not applicable] *(In the case of Registered Notes)*–[Not] Rule 144A Eligible
36.	Prohibition of Sales to EEA or 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.*)
37.	Additional selling restrictions:	[Not Applicable/*give details*]

OPERATIONAL INFORMATION

38.	Any clearing system(s) other than Euroclear and Clearstream and the relevant identification number(s):	[Not applicable/*give name(s) and number(s)*] (*In the case of CMU Notes, include the CMU Instrument Number*)
39.	Delivery:	Delivery [against/free of] payment
40.	[In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:]	[Not applicable/[Luxembourg]]
41.	Additional Paying Agent(s) (if any):	[•]

	ISIN:	[•]
	Common Code:	[•]
	[FSIN:	[•]/[Not Applicable]]
	[CFI Code:	[•]/[Not Applicable]]
	[CUSIP	[•]]
	[CINS:	[•]]
	(insert here any other relevant codes)	

[*If a private banking rebate is paid, please include the following*: "The Issuer has agreed with the [Dealers/Managers] that it will pay a commission to certain private banks in connection with the distribution of the Notes to their clients. This commission will be based on the principal amount of the Notes so distributed, and may be deducted from the purchase price for the Notes payable by such private banks upon settlement."]

[USE OF PROCEEDS

[*Give details if different from the "Use of Proceeds" section in the Offering Circular*.]]

[RATING OF THE NOTES

The Notes are expected to be rated [•] by Fitch Inc., [•] by Moody's Investors Service, Inc. and [•] by Standard & Poor's Ratings Services, a division of the McGraw-Hill Companies, Inc. Such ratings do not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision or withdrawal at any time by such rating organisations. Each such rating should be evaluated independently of any other rating of the Notes.]

[STABILISING

In connection with this issue, [*insert name of Stabilising Manager*] (the "**Stabilising Manager**") (or persons acting on behalf of any Stabilising Manager) 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 Stabilising Manager (or persons acting on behalf of a Stabilising Manager) will undertake stabilisation action. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the 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 Notes and 60 days after the date of the allotment of the Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilising Manager (or persons acting on behalf of any Stabilising Manager) in accordance with all applicable laws and rules.]

[LISTING APPLICATION

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the US$8,000,000,000 Global Medium Term Note Programme of NongHyup Bank. The Singapore Exchange Securities Trading Limited (the "**SGX-ST**") 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 SGX-ST 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 authorised

TERMS AND CONDITIONS OF THE NOTES

The following is the text of the terms and conditions which, as supplemented, amended and/or replaced by the relevant Pricing Supplement, will be endorsed on each Note in definitive form issued under the Programme. The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "*Summary of Provisions Relating to the Notes while in Global Form*."

1. Introduction

(a) *Programme*: NongHyup Bank (the "**Issuer**") has established a Global Medium Term Note Programme (the "**Programme**") for the issuance of up to US$8,000,000,000 in aggregate principal amount of notes (the "**Notes**").

(b) *Pricing Supplement*: Notes issued under the Programme are issued in series (each a "**Series**") and each Series may comprise one or more tranches (each a "**Tranche**") of Notes. Each Tranche is the subject of a pricing supplement (the "**Pricing Supplement**") which supplements these terms and conditions (the "**Conditions**"). The terms and conditions applicable to any particular Tranche of Notes are these Conditions as supplemented, amended and/or replaced by the relevant Pricing Supplement. In the event of any inconsistency between these Conditions and the relevant Pricing Supplement, the relevant Pricing Supplement shall prevail.

(c) *Agency Agreement*: The Notes are the subject of an amended and restated agency agreement dated 5 September 2014 (as amended and/or supplemented from time to time, the "**Agency Agreement**") between the Issuer, Deutsche Bank AG, Hong Kong Branch as principal paying agent (the "**Principal Paying Agent**") and paying agent, Deutsche Bank Trust Company Americas as U.S. registrar (the "**U.S. Registrar**"), U.S. paying agent (the "**U.S. Paying Agent**") and U.S. transfer agent (the "**U.S. Transfer Agent**"), Deutsche Bank AG, Hong Kong Branch as exchange agent ("**Exchange Agent**"), Deutsche Bank AG, Hong Kong Branch as registrar ("**CMU Registrar**") and transfer agent ("**CMU Transfer Agent**"), Deutsche Bank AG, Hong Kong Branch as CMU lodging and paying agent ("**CMU Lodging and Paying Agent**"), and Deutsche Bank Luxembourg S.A. as registrar (the "**Euroclear/Clearstream Registrar**") and transfer agent (the "**Euroclear/Clearstream Transfer Agent**"). The Principal Paying Agent, the U.S. Paying Agent, the CMU Lodging and Paying Agent and other paying agents appointed under the Agency Agreement are referred to as "**Paying Agents**," and any of them, as "**Paying Agent**." The Euroclear/Clearstream Transfer Agent, the U.S. Transfer Agent and the CMU Transfer Agent and other transfer agents appointed under the Agency Agreement are referred to as "**Transfer Agents**," and any of them as "**Transfer Agent**." The Euroclear/Clearstream Registrar, the U.S. Registrar and the CMU Registrar are referred to as the "**Registrars**," and any of them, as "**Registrar**." The references herein to Exchange Agent, Registrar, Paying Agent, Transfer Agent and CMU Lodging and Paying Agent (each, an "**Agent**"), shall include any respective successor thereof, and the references herein to Paying Agents and Transfer Agents shall include any respective additional agents or successors thereto. For purposes of these Conditions, all references to the Registrar or the Transfer Agent shall, with respect to a Series of Notes to be held in and/or cleared through Euroclear Bank SA/NV ("**Euroclear**") or Clearstream Banking S.A. ("**Clearstream**"), be deemed to be a reference to Deutsche Bank Luxembourg S.A. in its capacity as Euroclear/Clearstream Registrar or Euroclear/Clearstream Transfer Agent, as applicable, and all references to the Paying Agent, the Registrar or the Transfer Agent shall, (i) with respect to a Series of Notes to be held in and/or cleared through DTC, be deemed to be a reference to Deutsche Bank Trust Company Americas in its capacity as U.S. Registrar, U.S. Paying Agent or U.S. Transfer Agent, as applicable, and (ii) with respect to a Series of Notes to be held in and/or cleared through the CMU Service, be deemed to be a reference to Deutsche Bank AG, Hong Kong Branch in its capacity as CMU Lodging and Paying Agent, CMU Registrar or CMU Transfer Agent, as applicable, and all such references shall be construed accordingly.

(d) *Deed of Covenant*: The Notes may be issued in bearer form ("**Bearer Notes**"), or in registered form ("**Registered Notes**"). Registered Notes are constituted by a deed of covenant dated 5 September 2014 (the "**Deed of Covenant**") entered into by the Issuer.

(e) *The Notes*: All subsequent references in these Conditions to "**Notes**" are to the Notes which are the subject of the relevant Pricing Supplement. Copies of the relevant Pricing Supplement are available for viewing at the Specified Office of each of the Paying Agents and Transfer Agents save that, if this Note is an unlisted Note of any Series, the applicable Pricing Supplement will only be obtainable by a Noteholder holding one or more unlisted Notes of that Series and such Noteholder must produce evidence satisfactory to the Issuer and the relevant Agent as to its holding of such Notes and identity.

(f) *Summaries*: Certain provisions of these Conditions are summaries of the Agency Agreement and the Deed of Covenant and are subject to their detailed provisions. Noteholders and the holders of the related interest coupons, if any, (the "**Couponholders**" and the "**Coupons**," respectively) are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement and the Deed of Covenant applicable to them. Copies of the Agency Agreement and the Deed of Covenant are available for inspection by Noteholders during normal business hours at the Specified Offices of each of the Agents, the initial Specified Offices of which are set out below.

2. Interpretation

(a) *Definitions*: In these Conditions the following expressions have the following meanings:

"**Accrual Yield**" has the meaning given in the relevant Pricing Supplement;

"**Additional Business Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement;

"**Additional Financial Centre(s)**" means the city or cities specified as such in the relevant Pricing Supplement;

"**Business Day**," other than in Condition 3(g) (*Registration and delivery of Note Certificates*), means:

(i) in relation to any sum payable in Euro, a TARGET Settlement Day and a day on which commercial banks and foreign exchange markets settle payments generally in each (if any) Additional Business Centre;

(ii) in relation to any sum payable in a currency other than Euro and Renminbi, a day on which commercial banks and foreign exchange markets settle payments generally, in the Principal Financial Centre of the relevant currency and in each (if any) Additional Business Centre; and

(iii) for the purposes of Notes denominated in Renminbi only, any day (other than a Sunday or a Saturday) on which commercial banks and foreign exchange markets are open for business and settle Renminbi payments in Hong Kong and are not authorised or obligated by law or executive order to be closed;

"**Business Day Convention**," in relation to any particular date, has the meaning given in the relevant Pricing Supplement and, if so specified in the relevant Pricing Supplement, may have different meanings in relation to different dates and, in this context, the following expressions shall have the following meanings:

"**Following Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day;

(i) "**Modified Following Business Day Convention**" or "**Modified Business Day Convention**" means that the relevant date shall be postponed to the first following day that is a Business Day unless that day falls in the next calendar month in which case that date will be the first preceding day that is a Business Day;

(ii) "**Preceding Business Day Convention**" means that the relevant date shall be brought forward to the first preceding day that is a Business Day;

(iii) "**FRN Convention**," "**Floating Rate Convention**" or "**Eurodollar Convention**" means that each relevant date shall be the date which numerically corresponds to the preceding such date in the calendar month which is the number of months specified in the relevant Pricing Supplement as the Specified Period after the calendar month in which the preceding such date occurred **provided, however, that**:

(A) if there is no such numerically corresponding day in the calendar month in which any such date should occur, then such date will be the last day which is a Business Day in that calendar month;

(B) if any such date would otherwise fall on a day which is not a Business Day, then such date will be the first following day which is a Business Day unless that day falls in the next calendar month, in which case it will be the first preceding day which is a Business Day; and

(C) if the preceding such date occurred on the last day in a calendar month which was a Business Day, then all subsequent such dates will be the last day which is a Business Day in the calendar month which is the specified number of months after the calendar month in which the preceding such date occurred; and

(iv) "**No Adjustment**" means that the relevant date shall not be adjusted in accordance with any Business Day Convention;

"**Calculation Agent**" means the Principal Paying Agent or such other Person specified in the relevant Pricing Supplement as the party responsible for calculating the Rate(s) of Interest and Interest Amount(s) and/or such other amount(s) as may be specified in the relevant Pricing Supplement;

"**Calculation Amount**" has the meaning given in the relevant Pricing Supplement;

"**CMU Service**" means the Central Moneymarkets Unit Service, operated by the Hong Kong Monetary Authority;

"**Coupon Sheet**" means, in respect of a Note, a coupon sheet relating to the Note;

"**Day Count Fraction**" means, in respect of the calculation of an amount for any period of time (the "**Calculation Period**"), such day count fraction as may be specified in these Conditions or the relevant Pricing Supplement and:

(i) if "**Actual/Actual (ICMA)**" is so specified, means:

(A) where the Calculation Period is equal to or shorter than the Regular Period during which it falls, the actual number of days in the Calculation Period divided by the product of (1) the actual number of days in such Regular Period and (2) the number of Regular Periods in any year; and

(B) where the Calculation Period is longer than one Regular Period, the sum of:

(1) the actual number of days in such Calculation Period falling in the Regular Period in which it begins divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year; and

(2) the actual number of days in such Calculation Period falling in the next Regular Period divided by the product of (a) the actual number of days in such Regular Period and (b) the number of Regular Periods in any year;

(ii) if "**Actual/365**" or "**Actual/Actual (ISDA)**" is so specified, means the actual number of days in the Calculation Period divided by 365 (or, if any portion of the Calculation Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period falling in a non-leap year divided by 365);

(iii) if "**Actual/365 (Fixed)**" is so specified, means the actual number of days in the Calculation Period divided by 365;

(iv) if "**Actual/360**" is so specified, means the actual number of days in the Calculation Period divided by 360;

(v) "**30/360**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y - Y1)] + [30 \times (M2 - M)] + (D2 - D1)]}{360}$$

where:

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

"**Y2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

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

"**M2**" is the calendar month, expressed as number, in which the day immediately following the last day included in the Calculation Period falls;

"**D1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D1 will be 30; and "D2" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31 and D1 is greater than 29, in which case D2 will be 30;

(vi) if "**30E/360**" or "**Eurobond Basis**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y - Y1)] + [30 \times (M2 - M)] + (D2 - D1)]}{360}$$

where:

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

"**Y2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

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

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

"**D1**" is the first calendar day, expressed as a number, of the Calculation Period, unless such number would be 31, in which case D1 will be 30; and "D2" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless such number would be 31, in which case D2 will be 30; and

(vii) if "**30E/360 (ISDA)**" is so specified, the number of days in the Calculation Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360\times(Y - Y1)] + [30\times(M2 - M)] + (D2 - D1)]}{360}$$

where:

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

"**Y2**" is the year, expressed as a number, in which the day immediately following the last day included in the Calculation Period falls;

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

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

"**D1**" is the first calendar day, expressed as a number, of the Calculation 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

"**D2**" is the calendar day, expressed as a number, immediately following the last day included in the Calculation Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D2 will be 30,

provided, however, that in each such case the number of days in the Calculation Period is calculated from and including the first day of the Calculation Period to but excluding the last day of the Calculation Period;

"**DTC**" means The Depository Trust Company;

"**Early Redemption Amount (Tax)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**Early Termination Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, these Conditions or the relevant Pricing Supplement;

"**Euro**" means the currency of the European Union;

"**FSS**" means the Financial Supervisory Service of Korea;

"**Final Redemption Amount**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**First Interest Payment Date**" means the date specified in the relevant Pricing Supplement;
"**Fixed Coupon Amount**" has the meaning given in the relevant Pricing Supplement;

"**Holder**," in the case of Bearer Notes, has the meaning given in Condition 3(b) (*Form, Denomination, Title and Transfer–Title to Bearer Notes*) and, in the case of Registered Notes, has the meaning given in Condition 3(d) (*Form, Denomination, Title and Transfer–Title to Registered Notes*);

"**Hong Kong**" means the Hong Kong Special Administrative Region of the People's Republic of China;

"**Indebtedness**" means all obligations created, incurred or assumed by the Issuer or any of its Principal Subsidiaries for the payment or repayment of moneys relating to or in connection with (a) any indebtedness of the Issuer or any of its Principal Subsidiaries in respect of moneys borrowed by it; (b) any indebtedness of the Issuer or any of its Principal Subsidiaries under acceptance or documentary credit facilities; (c) any indebtedness of the Issuer or any of its Principal Subsidiaries under bills, bonds, debentures, notes or similar instruments on which the Issuer or any of its Principal Subsidiaries is liable; (d) any obligations of the Issuer or any of its Principal Subsidiaries under leases which in accordance with accounting principles generally accepted in Korea are required to be capitalised for financial reporting purposes; (e) any indebtedness of the Issuer or any of its Principal Subsidiaries (whether actual or contingent) for moneys owing under any instrument entered into by the Issuer or any of its Principal Subsidiaries in respect of the acquisition cost of assets payment of which is deferred for a period in excess of six months after acquisition thereof; and (f) indebtedness of the Issuer or any of its Principal Subsidiaries (actual or contingent) under guarantees, security, indemnities or other commitments designed to assure any creditors in respect of the payment of any indebtedness of any other person;

"**Interest Amount**" means, in relation to a Note and an Interest Period, the amount of interest payable in respect of that Note for that Interest Period;

"**Interest Commencement Date**" means the Issue Date of the Notes or such other date as may be specified as the Interest Commencement Date in the relevant Pricing Supplement;

"**Interest Determination Date**" has the meaning given in the relevant Pricing Supplement;

"**Interest Payment Date**" means the First Interest Payment Date and any date or dates specified as such in, or determined in accordance with the provisions of, the relevant Pricing Supplement and, if a Business Day Convention is specified in the relevant Pricing Supplement:

(i) as the same may be adjusted in accordance with the relevant Business Day Convention; or

(ii) if the Business Day Convention is the FRN Convention, Floating Rate Convention or Eurodollar Convention and an interval of a number of calendar months is specified in the relevant Pricing Supplement as being the Specified Period, each of such dates as may occur in accordance with the FRN Convention, Floating Rate Convention or Eurodollar Convention at such Specified Period of calendar months following the Interest Commencement Date (in the case of the first Interest Payment Date) or the previous Interest Payment Date (in any other case);

"**Interest Period**" means each period beginning on (and including) the Interest Commencement Date or any Interest Payment Date and ending on (but excluding) the next Interest Payment Date;

"**ISDA Definitions**" means the 2006 ISDA Definitions (as amended and updated as at the date of issue of the first Tranche of the Notes of the relevant Series (as specified in the relevant Pricing Supplement) as published by the International Swaps and Derivatives Association, Inc.) unless otherwise specified in the relevant Pricing Supplement;

"**Issue Date**" has the meaning given in the relevant Pricing Supplement;

"**Margin**" has the meaning given in the relevant Pricing Supplement;

"**Maturity Date**" has the meaning given in the relevant Pricing Supplement;

"**Maximum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Minimum Redemption Amount**" has the meaning given in the relevant Pricing Supplement;

"**Noteholder**," in the case of Bearer Notes, has the meaning given in Condition 3(b) *(Form, Denomination, Title and Transfer–Title to Bearer Notes*) and, in the case of Registered Notes, has the meaning given in Condition 3(d) (*Form, Denomination, Title and Transfer–Title to Registered Notes*);

"**Optional Redemption Amount (Call)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**Optional Redemption Amount (Put)**" means, in respect of any Note, its principal amount or such other amount as may be specified in, or determined in accordance with, the relevant Pricing Supplement;

"**Optional Redemption Date (Call)**" has the meaning given in the relevant Pricing Supplement;

"**Optional Redemption Date (Put)**" has the meaning given in the relevant Pricing Supplement;

"**Payment Business Day**" means:

(i) if the currency of payment is Euro, any day which is:

(A) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies; and (b) a day on which commercial banks are open for general business (including dealing in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the CMU Lodging and Paying Agent has its Specified Office; and

(B) in the case of payment by transfer to an account, (a) a TARGET Settlement Day and (b) a day on which dealings in foreign currencies may be carried on in each (if any) Additional Financial Centre; or

(ii) if the currency of payment is not Euro, any day which is:

(A) a day on which (a) banks in the relevant place of presentation are open for presentation and payment of bearer debt securities and for dealings in foreign currencies and (b) a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Principal Paying Agent or, as the case may be, the CMU Lodging and Paying Agent has its Specified Office; and

(B) in the case of payment by transfer to an account, a day on which dealings in foreign currencies (including, in the case of Notes denominated in Renminbi, settlement of Renminbi payments) may be carried on in the Principal Financial Centre of the currency of payment and in each (if any) Additional Financial Centre;

(iii) in the case of any payment in respect of a Registered 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 Note) has elected to receive any part of such payment in U.S. dollars, a day on which commercial banks are not authorised or required by law or regulation to be closed in New York City.

"**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state or agency of a state or other entity, whether or not having separate legal personality;

"**Principal Financial Centre**" means, in relation to any currency, the principal financial centre for that currency **provided, however, that**:

(i) in relation to Euro, it means the principal financial centre of such Member State of the European Communities as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent;

(ii) in relation to Australian dollars, it means Sydney or Melbourne and in relation to New Zealand dollars, it means either Auckland or Wellington, in each case as is selected (in the case of a payment) by the payee or (in the case of a calculation) by the Calculation Agent; and

(iii) in relation to Renminbi, it means Hong Kong or the principal financial centre as is specified in the applicable Pricing Supplement;

"**Put Option Notice**" means a notice which must be delivered to a Paying Agent by any Noteholder wanting to exercise a right to redeem a Note at the option of the Noteholder;

"**Rate of Interest**" means the rate or rates (expressed as a percentage per annum) of interest payable in respect of the Notes specified in the relevant Pricing Supplement or calculated or determined in accordance with the provisions of these Conditions and/or the relevant Pricing Supplement;

"**Receipt**" means receipts for the payment of the instalments of principal (other than the final instalment) attached on issue to Bearer Notes in definitive form that are repayable in instalments. Definitive Notes in registered form do not have Receipts or Coupons attached on issue.

"**Redemption Amount**" means, as appropriate, the Final Redemption Amount, the Early Redemption Amount (Tax), the Optional Redemption Amount (Call), the Optional Redemption Amount (Put), the Early Termination Amount or such other amount in the nature of a redemption amount as may be specified in, or determined in accordance with the provisions of, the relevant Pricing Supplement;

"**Reference Banks**" has the meaning given in the relevant Pricing Supplement or, if none, four major banks selected by the Calculation Agent in the market that is most closely connected with the Reference Rate;

"**Reference Price**" has the meaning given in the relevant Pricing Supplement;

"**Reference Rate**" has the meaning given in the relevant Pricing Supplement;

"**Regular Period**" means:

(i) in the case of Notes where interest is scheduled to be paid only by means of regular payments, each period from and including the Interest Commencement Date to but excluding the first Interest Payment Date and each successive period from and including one Interest Payment Date to but excluding the next Interest Payment Date;

(ii) in the case of Notes where, apart from the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls; and

(iii) in the case of Notes where, apart from one Interest Period other than the first Interest Period, interest is scheduled to be paid only by means of regular payments, each period from and including a Regular Date falling in any year to but excluding the next Regular Date, where "**Regular Date**" means the day and month (but not the year) on which any Interest Payment Date falls other than the Interest Payment Date falling at the end of the irregular Interest Period.

"**Relevant Date**" means, in relation to any payment, whichever is the later of (a) the date on which the payment in question first becomes due and (b) if the full amount payable has not been received in the Principal Financial Centre of the currency of payment by the Principal Paying Agent on or prior to such due date, the date on which (the full amount having been so received) notice to that effect has been given to the Noteholders;

"**Relevant Financial Centre**" has the meaning given in the relevant Pricing Supplement;

"**Relevant Screen Page**" means the page, section or other part of a particular information service (including, without limitation, Reuters) specified as the Relevant Screen Page in the relevant Pricing Supplement, or such other page, section or other part as may replace it on that information service or such other information service, in each case, as may be nominated by the Person providing or sponsoring the information appearing there for the purpose of displaying rates or prices comparable to the Reference Rate;

"**Relevant Time**" has the meaning given in the relevant Pricing Supplement;

"**Renminbi**" means the currency of the People's Republic of China;

"**Reserved Matter**" means any proposal to change any date fixed for payment of principal or interest in respect of the Notes, to reduce the amount of principal or interest payable on any date in respect of the Notes, to alter the method of calculating the amount of any payment in respect of the Notes or the date for any such payment, to change the currency of any payment under the Notes or to change the quorum requirements relating to meetings or the majority required to pass an Extraordinary Resolution;

"**Securities Act**" means the United States Securities Act of 1933, as amended;

"**Security Interest**" means any mortgage, charge, pledge, lien or other security interest including, without limitation, anything analogous to any of the foregoing under the laws of any jurisdiction;

"**Senior Notes**" means Notes whose status is specified in the applicable Pricing Supplement as Senior;

"**Specified Currency**" has the meaning given in the relevant Pricing Supplement;

"**Specified Denomination(s)**" has the meaning given in the relevant Pricing Supplement;

"**Specified Office**" has the meaning given in the Agency Agreement;

"**Specified Period**" has the meaning given in the relevant Pricing Supplement;

"**Subordinated Notes**" means Notes specified in the applicable Pricing Supplement as Subordinated Notes;

"**TARGET Settlement Day**" means any day on which TARGET2 is open for the settlement of payments in Euro;

"**TARGET2**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer payment system which utilises a single shared platform and which was launched on 19 November 2007;

"**Treaty**" means the Treaty establishing the European Communities, as amended; and "Zero Coupon Note" means a Note specified as such in the relevant Pricing Supplement.

(b) *Interpretation*: In these Conditions:

(i) if the Notes are Zero Coupon Notes, references to Coupons and Couponholders are not applicable;

(ii) if Talons are specified in the relevant Pricing Supplement as being attached to the Notes at the time of issue, references to Coupons shall be deemed to include references to Talons;

(iii) if Talons are not specified in the relevant Pricing Supplement as being attached to the Notes at the time of issue, references to Talons are not applicable;

(iv) any reference to principal shall be deemed to include the Redemption Amount, any additional amounts in respect of principal which may be payable under Condition 13 (Taxation), any premium payable in respect of a Note and any other amount in the nature of principal payable pursuant to these Conditions;

(v) any reference to interest shall be deemed to include any additional amounts in respect of interest which may be payable under Condition 13 (*Taxation*) and any other amount in the nature of interest payable pursuant to these Conditions;

(vi) references to Notes being "**outstanding**" shall be construed in accordance with the Agency Agreement;

(vii) if an expression is stated in Condition 2(a) (*Interpretation–Definitions*) to have the meaning given in the relevant Pricing Supplement, but the relevant Pricing Supplement gives no such meaning or specifies that such expression is "**not applicable**" then such expression is not applicable to the Notes; and

(viii) any reference to the Agency Agreement shall be construed as a reference to the Agency Agreement, as amended and/or supplemented up to and including the Issue Date of the Notes.

3. Form, Denomination, Title and Transfer

(a) *Bearer Notes*: Bearer Notes are in the Specified Denomination(s) with Coupons and, if specified in the relevant Pricing Supplement, talons for further Coupons ("**Talons**") attached at the time of issue. In the case of a Series of Bearer Notes with more than one Specified Denomination, Bearer Notes of one Specified Denomination will not be exchangeable for Bearer Notes of another Specified Denomination.

(b) *Title to Bearer Notes*: Title to Bearer Notes and the Coupons will pass by delivery. In the case of Bearer Notes, "Holder" means the holder of such Bearer Note and "Noteholder" and "Couponholder" shall be construed accordingly.

(c) *Registered Notes*: Registered Notes are in the Specified Denomination(s), which may include a minimum denomination specified in the relevant Pricing Supplement and higher integral multiples of a smaller amount specified in the relevant Pricing Supplement.

(d) *Title to Registered Notes*: The Registrar will maintain a register outside the United Kingdom in accordance with the provisions of the Agency Agreement. A certificate (each, a "**Note Certificate**") will be issued to each Holder of Registered Notes in respect of its registered holding. Each Note Certificate will be numbered serially with an identifying number which will be recorded in the register (the "**Register**"). In the case of Registered Notes, "Holder" means the person in whose name such Registered Note is for the time being registered in the Register (or, in the case of a joint holding, the first named thereof) and "**Noteholder**" shall be construed accordingly.

(e) *Ownership*: The Holder of any Note or Coupon shall (except as otherwise required by law) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any other interest therein, any writing thereon or, in the case of Registered Notes, on the Note Certificate relating thereto (other than the endorsed form of transfer) or any notice of any previous loss or theft thereof) and no Person shall be liable for so treating such Holder. No person shall have any right to enforce any term or condition of any Note under the Contracts (Rights of Third Parties) Act 1999.

(f) *Transfers of Registered Notes*: Subject to paragraphs (i) (*Closed periods*) and (j) (*Regulations concerning transfers and registration*) below, a Registered Note may be transferred upon surrender of the relevant Note Certificate, with the endorsed form of transfer duly completed, at the Specified Office of the Registrar or any Transfer Agent, together with such evidence as the Registrar or (as the case may be) such Transfer Agent may reasonably require to prove the title of the transferor and the authority of the individuals who have executed the form of transfer; **provided**, **however**, **that** a Registered Note may not be transferred unless the principal amount of Registered Notes transferred and (where not all of the Registered Notes held by a Holder are being transferred) the principal amount of the balance of Registered Notes not transferred are Specified Denominations. Where not all the Registered Notes represented by the surrendered Note Certificate are the subject of the transfer, a new Note Certificate in respect of the balance of the Registered Notes will be issued to the transferor.

(g) *Registration and delivery of Note Certificates*: Within three business days of the surrender of a Note Certificate in accordance with paragraph (f) (Transfers of Registered Notes) above, the Registrar will register the transfer in question and deliver a new Note Certificate of a like principal amount to the Registered Notes transferred to each relevant Holder at its Specified Office or (as the case may be) the Specified Office of any Transfer Agent or (at the request and risk of any such relevant Holder) by uninsured first class mail (airmail if overseas) to the address specified for the purpose by such relevant Holder. In this paragraph, "**business day**" means a day on which commercial banks are open for general business (including dealings in foreign currencies) in the city where the Registrar or (as the case may be) the relevant Transfer Agent has its Specified Office.

(h) *No charge*: The transfer of a Registered Note will be effected without charge by or on behalf of the Issuer or the Registrar or any Transfer Agent but against such indemnity as the Registrar or (as the case may be) such Transfer Agent may require in respect of any tax or other duty of whatsoever nature which may be levied or imposed in connection with such transfer.

(i) *Closed periods*: Noteholders may not require transfers to be registered:

(i) during the period of 15 days ending on the due date for any payment of principal or interest in respect of the Registered Notes;

(ii) during the period of 15 days ending on any date on which Notes may be called for redemption by the Issuer at its option pursuant to Condition 10(b) (*Redemption for tax reasons*) or Condition 10(c) (Redemption at the option of the Issuer); and

(iii) after a Put Option Notice has been delivered in respect of the relevant Note(s) in accordance with Condition 10(e) (*Redemption of the Senior Notes only at the option of the Noteholders*).

(j) *Regulations concerning transfers and registration*: All transfers of Registered Notes and entries on the Register are subject to the detailed regulations concerning the transfer of Registered Notes scheduled to the Agency Agreement. The regulations may be changed by the Issuer with the prior written approval of the Registrar. A copy of the current regulations will be mailed (free of charge) by the Registrar to any Noteholder who requests in writing a copy of such regulations.

4. Status

(a) *Status of the Senior Notes*: Notes whose status is specified in the applicable Pricing Supplement as Senior Notes constitute direct, unconditional, unsubordinated and (subject to Condition 5 (*Negative Pledge*)) unsecured obligations of the Issuer and rank *pari passu* among themselves and (save for certain obligations required to be preferred by law) equally with all other unsecured obligations (other than subordinated obligations, if any) of the Issuer, from time to time outstanding.

(b) *Status of the Subordinated Notes and relevant provisions:*

This Condition 4(b) applies only to Notes specified in the applicable Pricing Supplement as Subordinated Notes.

Subordinated Notes constitute direct, general, subordinated and unsecured obligations of the Issuer which rank *pari passu* among themselves and in priority to claims of holders of all classes of equity (including holders of preference shares (if any)) of the Issuer.

(A) 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.

(B) 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).

(C) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Liquidation 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 is paid in full or provided to be paid in full in such liquidation proceedings.

(D) 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 four 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.

(E) Subject to applicable laws, no holder of any Subordinated Note, relevant Receipts or Coupons may exercise, claim or plead any right of set-off, counter-claim or retention in respect of any amount owed to it by the Issuer in respect of, or arising under or in connection with such Subordinated Note, Receipt or Coupon and each holder of such Subordinated Note, Receipts or Coupons shall, by virtue of his holding of any Subordinated Note, Receipt or Coupon, be deemed to have waived all such rights of set-off, counter-claim or retention. Notwithstanding the preceding sentence, if any of the amounts owing to the holder of any Subordinated Notes, the relevant Receipts or Coupons by the Issuer in respect of, or arising under or in connection with the Subordinated Notes is discharged by set-off, the holder of such Subordinated Note, Receipt or Coupon shall, subject to applicable laws, immediately pay an amount equal to the amount of such discharge to the Issuer (or, in the event of its winding-up or administration, the liquidator or, as appropriate, administrator of the Issuer) and, until such time as payment is made, shall hold an amount equal to such amount in trust for the Issuer (or the liquidator or, as appropriate, administrator of the Issuer (as the case may be) and accordingly any such discharge shall be deemed not to have taken place.

(F) 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 10 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 theses subordination provisions.

(G) 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 Article 527-5, Paragraph 3 and Article 232 of the Korean Commercial Code in connection with a merger of the Issuer with another entity.

In these Conditions:

"**Bankruptcy Event**" shall mean a court of competent jurisdiction in Korea having adjudicated the Issuer to be bankrupt pursuant to the provisions of the Debtor Rehabilitation and Bankruptcy Act of Korea or any successor legislation thereto;

"**Foreign Event**" shall mean in any jurisdiction other than Korea, the Issuer having become subject to bankruptcy, corporate reorganisation or other equivalent proceedings pursuant to any applicable law of any jurisdiction other than Korea;

"**Liquidation Event**" shall mean the Issuer being dissolved and liquidated under the Korean Commercial Code;

"**Korea**" shall mean the Republic of Korea;

"**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 Debtor Rehabilitation and Bankruptcy Act of Korea or any successor legislation thereto;

"**Senior Indebtedness of the Issuer**" shall mean all deposits and other liabilities of the Issuer (other than (i) those which are subject to provisions equivalent to the payment conditions in paragraph (A), (B), (C) or (D) above and (ii) those which rank or are expressed to rank *pari passu* with or junior to the Subordinated Notes); and

"**Subordination Event**" shall mean any Bankruptcy Event, Rehabilitation Event, Liquidation Event or Foreign Event.

(c) *Loss Absorption upon a Trigger Event in respect of Subordinated Notes*

(i) *Write-off on a Trigger Event:* With respect to any Subordinated Notes, effective as of the third Korean Business Day from the occurrence of a Trigger Event, 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 such Subordinated Note (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 have 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 to the holders of the Subordinated Notes, but the 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 4(c) 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 of Korea; and

"**Trigger Event Notice**" means a 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 20 (*Notices*) and which shall state in reasonable detail the nature of the relevant Trigger Event.

5. Negative Pledge

(a) *Negative Pledge*: So long as any of the Senior Notes remain outstanding (as defined in the Agency Agreement), the Issuer will not, and will procure that no Principal Subsidiary (as defined below) will, create or permit to subsist any Security Interest upon or over the whole or any part of the property, assets or revenues (whether present or future) of the Issuer or any Principal Subsidiary to secure for the benefit of the holders of any International Investment Securities (as defined below):

(i) any payment of any sum due in respect of any such International Investment Securities;

(ii) any payment under any guarantee or other like obligation in respect of any such International Investment Securities; or

(iii) any 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 holders of the Senior Notes either the same security as is available for the benefit of the holders of such International Investment Securities guarantee, indemnity or other like obligation or such other arrangement (whether or not comprising a Security Interest) as shall be approved for the purpose by an Extraordinary Resolution (as defined below) of the holders of the Senior Notes.

(b) *Interpretation*

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.

"**Extraordinary Resolution**" has the meaning given in the Agency Agreement;

"**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 authorisation 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 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.

"**Principal Subsidiary**" means at any time a Subsidiary of the Issuer:

(i) whose net profits (consolidated in the case of a Subsidiary which itself has Subsidiaries) or whose total assets (consolidated in the case of a Subsidiary which itself has Subsidiaries) represent in each case (or, in the case of a Subsidiary acquired after the end of the financial period to which the then latest audited separate accounts of the Issuer relate, are equal to) not less than 10% of the separate net profits of the Issuer, or, as the case may be, separate total assets, of the Issuer, all as calculated respectively by reference to the then latest audited accounts (consolidated or, as the case may be, separate) of such Subsidiary and the then latest audited separate accounts of the Issuer, **provided that** if the then latest audited separate accounts of the Issuer show a net loss for the relevant financial period then there shall be substituted for the words "net profits" the words "gross revenues" for the purposes of this definition;

(ii) to which is transferred the whole or substantially the whole of the undertaking and assets of a Subsidiary of the Issuer which immediately prior to such transfer is a Principal Subsidiary, **provided that** the transferor Subsidiary shall upon such transfer forthwith cease to be a Principal Subsidiary; or

(iii) to which is transferred an undertaking or assets which, taken together with the undertaking or assets of the transferee Subsidiary, generated (or, in the case of the transferee Subsidiary being acquired after the end of the financial period to which the then latest audited separate accounts of the Issuer relate, generate net profits equal to) not less than 10% of the separate net profits of the Issuer, or represent (or, in the case aforesaid, are equal to) not less than 10% of the separate total assets of the Issuer, all as calculated as referred to in subparagraph (i) above, **provided that** the transferor Subsidiary (if a Principal Subsidiary) shall upon such transfer forthwith cease to be a Principal Subsidiary unless immediately following such transfer its undertaking and assets generate (or, in the case aforesaid, generate net profits equal to) not less than 10% of the separate net profits of the Issuer, or its assets represent (or, in the case aforesaid, are equal to) not less than 10% of the separate total assets of the Issuer, all as calculated as referred to in subparagraph (i) above.

For the purposes of this definition:

(i) if, in the case of a Subsidiary which itself has Subsidiaries, no consolidated accounts are prepared and audited, its consolidated net profits and consolidated total assets shall be determined on the basis of pro forma consolidated accounts (which need not be audited) of the relevant Subsidiary and its Subsidiaries prepared for this purpose by the Issuer;

(ii) if (a) any Subsidiary shall not in respect of any relevant financial period for whatever reason produce audited accounts or (b) any Subsidiary shall not have produced at the relevant time for the calculations required pursuant to this definition audited accounts for the same period as the period to which the latest audited separate accounts of the Issuer relate, then there shall be substituted for the purposes of this definition the management accounts of such Subsidiary for such period;

(iii) where any Subsidiary is not wholly-owned by another Subsidiary there shall be excluded from all calculations all amounts attributable to minority interests;

(iv) in calculating any amount all amounts owing by or to the Issuer and any Subsidiary to or by the Issuer and any Subsidiary shall be excluded; and

(v) in the event that accounts of any companies being compared are prepared on the basis of different generally accepted accounting principles, there shall be made such adjustments to any relevant financial items as are necessary to achieve a true and fair comparison of such financial items.

A report by the directors of the Issuer that in their opinion a Subsidiary of the Issuer is or is not or was or was not at any particular time or throughout any specified period a Principal Subsidiary, shall (in the absence of manifest or proven error), be conclusive and binding on all parties.

"**Subsidiary**" means any corporation or other business entity of which the Issuer owns or controls (in either case, either directly or through another Subsidiary or other Subsidiaries) 50% or more of the issued share capital or other ownership interest having ordinary voting power to elect directors, managers or trustees of such corporation or other business entity (other than capital stock or other ownership interest of any other class or classes which has voting power only upon the occurrence of any contingency).

6. Fixed Rate Note Provisions

(a) *Application*: This Condition 6 is applicable to the Notes only if the Fixed Rate Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) *Accrual of interest*: The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Conditions 11 (*Payments–Bearer Notes*) and 12 (*Payments–Registered Notes*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition 6 (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) *Fixed Coupon Amount*: The amount of interest payable in respect of each Note for any Interest Period shall be the relevant Fixed Coupon Amount and, if the Notes are in more than one Specified Denomination, shall be the relevant Fixed Coupon Amount in respect of the relevant Specified Denomination.

(d) *Calculation of interest amount*: The amount of interest payable in respect of each Note for any period for which a Fixed Coupon Amount is not specified shall be calculated by applying the Rate of Interest to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of such Note divided by the Calculation Amount. For this purpose a "**sub-unit**" means, in the case of any currency other than Euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of Euro, means one cent.

7. Floating Rate Note and Index-Linked Interest Note Provisions

(a) *Application*: This Condition 7 is applicable to the Notes only if the Floating Rate Note Provisions or the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) *Accrual of interest*: The Notes bear interest from the Interest Commencement Date at the Rate of Interest payable in arrear on each Interest Payment Date, subject as provided in Conditions 11 (*Payments–Bearer Notes*) and 12 (*Payments–Registered Notes*). Each Note will cease to bear interest from the due date for final redemption unless, upon due presentation, payment of the Redemption Amount is improperly withheld or refused, in which case it will continue to bear interest in accordance with this Condition (as well after as before judgment) until whichever is the earlier of (i) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (ii) the day which is seven days after the Principal Paying Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

(c) *Screen Rate Determination*: If Screen Rate Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be determined by the Calculation Agent on the following basis:

(i) if the Reference Rate is a composite quotation or customarily supplied by one entity, the Calculation Agent will determine the Reference Rate which appears on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(ii) in any other case, the Calculation Agent will determine the arithmetic mean of the Reference Rates which appear on the Relevant Screen Page as of the Relevant Time on the relevant Interest Determination Date;

(iii) if, in the case of (i) above, such rate does not appear on that page or, in the case of (ii) above, fewer than two such rates appear on that page or if, in either case, the Relevant Screen Page is unavailable, the Calculation Agent will:

(A) request the principal Relevant Financial Centre office of each of the Reference Banks to provide a quotation of the Reference Rate at approximately the Relevant Time on the Interest Determination Date to prime banks in the Relevant Financial Centre interbank market in an amount that is representative for a single transaction in that market at that time; and

(B) determine the arithmetic mean of such quotations; and

(iv) if fewer than two such quotations are provided as requested, the Calculation Agent will determine the arithmetic mean of the rates (being the nearest to the Reference Rate, as determined by the Calculation Agent) quoted by major banks in the Principal Financial Centre of the Specified Currency, selected by the Calculation Agent, at approximately 11.00 a.m. (local time in the Principal Financial Centre of the Specified Currency) on the first day of the relevant Interest Period for loans in the Specified Currency for a period equal to the relevant Interest Period and in an amount that is representative for a single transaction in that market at that time,

and the Rate of Interest for such Interest Period shall be the sum of the Margin and the rate or (as the case may be) the arithmetic mean so determined; **provided, however, that** if the Calculation Agent is unable to determine a rate or (as the case may be) an arithmetic mean in accordance with the above provisions in relation to any Interest Period, the Rate of Interest applicable to the Notes during such Interest Period will be the sum of the Margin and the rate or (as the case may be) the arithmetic mean last determined in relation to the Notes in respect of a preceding Interest Period; **provided, further, that** Condition 7(f) shall apply if a Benchmark Transition Event (as defined in such Condition) has occurred.

(d) *ISDA Determination*: If ISDA Determination is specified in the relevant Pricing Supplement as the manner in which the Rate(s) of Interest is/are to be determined, the Rate of Interest applicable to the Notes for each Interest Period will be the sum of the Margin and the relevant ISDA Rate where "**ISDA Rate**" in relation to any Interest Period means a rate equal to the Floating Rate (as defined in the ISDA Definitions) 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 interest rate swap transaction under the terms of an agreement incorporating the ISDA Definitions and under which:

(i) the Floating Rate Option (as defined in the ISDA Definitions) is as specified in the relevant Pricing Supplement;

(ii) the Designated Maturity (as defined in the ISDA Definitions) is a period specified in the relevant Pricing Supplement; and

(iii) the relevant Reset Date (as defined in the ISDA Definitions) is either (A) if the relevant Floating Rate Option is based on (x) the London inter-bank offered rate (LIBOR), (y) the Eurozone interbank offered rate (EURIBOR) or (z) the Hong Kong inter-bank offered rate (HIBOR) for a currency, the first day of that Interest Period or (B) in any other case, as specified in the relevant Pricing Supplement.

(e) *Index-Linked Interest*: If the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable, the Rate(s) of Interest applicable to the Notes for each Interest Period will be determined in the manner specified in the relevant Pricing Supplement.

(f) *Effect of Benchmark Transition Event*

(i) *Benchmark Replacement:* If the Issuer or its designee determines that a Benchmark Transition Event (as defined below) and its related Benchmark Replacement Date (as defined below) have occurred prior to the Reference Time (as defined below) in respect of any determination of the Benchmark (as defined below) on any date, the Benchmark Replacement (as defined below) will replace the then-current Benchmark for all purposes relating to the 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 below) from time to time.

At the request of the Issuer, but subject to receipt by the Principal Paying Agent of a certificate signed by two duly authorised officers of the Issuer pursuant to Condition 7(f)(iv) and at least five London banking days' prior notice thereof, the Paying 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 Paying Agents shall not be obliged so to concur if, in the opinion of any of the Paying 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 Paying 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 7(f)(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 7(f), 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 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 7(f) will be notified promptly by the Issuer to the Principal Paying Agent and, in accordance with Condition 20 (*Notices*), 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 of the same, the Issuer shall deliver to the Principal Paying Agent a certificate signed by two duly authorised 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 7(f); and

(B) certifying that the Benchmark Replacement Conforming Changes are necessary to ensure the proper operation of the Benchmark Replacement.

The Benchmark Replacement (including any Benchmark Replacement Adjustment) and the Benchmark Replacement Conforming Changes (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Benchmark Replacement (including any Benchmark Replacement Adjustment) and the Benchmark Replacement Conforming Changes (if any) be binding on the Issuer, the Paying Agents and the Noteholders.

(v) *Certain defined terms*: As used in this Condition 7(f):

"**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 (2) 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 then-current 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) 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.

"**Federal Reserve Bank of New York's Website**" 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 Website.

"**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.

(vi) *Others*: Notwithstanding any other provision of this Condition 7(f), the Principal Paying Agent is not obliged to concur with the Issuer or its designee in respect of any changes or amendments as contemplated under this Condition 7(f), which, in the sole opinion of the Principal Paying Agent, would have the effect of (A) exposing the Principal Paying Agent to any liability against which it has not been indemnified and/or secured and/or prefunded to its satisfaction or (B) increasing the obligations or duties, or decreasing the rights or protections, of the Principal Paying Agent in the Agency Agreement and/or these Conditions.

Notwithstanding any other provision of this Condition 7(f), if in the opinion of the Principal Paying Agent there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this Condition 7(f), the Principal Paying Agent shall promptly notify the Issuer thereof and the Issuer or its designee shall direct the Principal Paying Agent in writing as to which alternative course of action to adopt. If the Principal Paying 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 Principal Paying Agent shall be under no obligation to make such calculation or determination and shall not incur any liability for not doing so.

(g) *Maximum or Minimum Rate of Interest*: If any Maximum Rate of Interest or Minimum Rate of Interest is specified in the relevant Pricing Supplement, then the Rate of Interest shall in no event be greater than the maximum or be less than the minimum so specified.

(h) *Calculation of Interest Amount*: The Calculation Agent will, as soon as practicable after the time at which the Rate of Interest is to be determined in relation to each Interest Period, calculate the Interest Amount payable in respect of each Note for such Interest Period. The Interest Amount will be calculated by applying the Rate of Interest for such Interest Period to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest sub-unit of the Specified Currency (half a sub-unit being rounded upwards) and multiplying such rounded figure by a fraction equal to the Specified Denomination of the relevant Note divided by the Calculation Amount. For this purpose a "sub-unit" means, in the case of any currency other than Euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, in the case of Euro, means one cent.

(i) *Calculation of other amounts*: If the relevant Pricing Supplement specifies that any other amount is to be calculated by the Calculation Agent, the Calculation Agent will, as soon as practicable after the time or times at which any such amount is to be determined, calculate the relevant amount. The relevant amount will be calculated by the Calculation Agent in the manner specified in the relevant Pricing Supplement.

(j) *Publication*: The Calculation Agent will cause each Rate of Interest and Interest Amount determined by it, together with the relevant Interest Payment Date, and any other amount(s) required to be determined by it together with any relevant payment date(s) to be notified to the Paying Agents and each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation as soon as practicable after such determination but (in the case of each Rate of Interest, Interest Amount and Interest Payment Date) in any event not later than the first day of the relevant Interest Period. Notice thereof shall also promptly be given to the Noteholders. The Calculation Agent will be entitled to recalculate any Interest Amount (on the basis of the foregoing provisions) without notice in the event of an extension or shortening of the relevant Interest Period. If the Calculation Amount is less than the minimum Specified Denomination, the Calculation Agent shall not be obliged to publish each Interest Amount but instead may publish only the Calculation Amount and the Interest Amount in respect of a Note having the minimum Specified Denomination.

(k) *Notifications etc.*: All notifications, opinions, determinations, certificates, calculations, quotations and decisions given, expressed, made or obtained for the purposes of this Condition by the Calculation Agent will (in the absence of manifest error) be binding on the Issuer, the Paying Agents, the Noteholders and the Couponholders and (subject as aforesaid) no liability to any such Person will attach to the Calculation Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions for such purposes.

8. Zero Coupon Note Provisions

(a) *Application*: This Condition 8 is applicable to the Notes only if the Zero Coupon Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) *Late payment on Zero Coupon Notes*: If the Redemption Amount payable in respect of any Zero Coupon Note is improperly withheld or refused, the Redemption Amount shall thereafter be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price on the basis of the relevant Day Count Fraction from (and including) the Issue Date to (but excluding) whichever is the earlier of (A) the day on which all sums due in respect of such Note up to that day are received by or on behalf of the relevant Noteholder and (B) the day which is seven days after the Principal Paying Agent has notified the Noteholders that it has received all sums due in respect of the Notes up to such seventh day (except to the extent that there is any subsequent default in payment).

9. Dual Currency Note Provisions

(a) *Application*: This Condition 9 is applicable to the Notes only if the Dual Currency Note Provisions are specified in the relevant Pricing Supplement as being applicable.

(b) *Rate of Interest*: 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 relevant Pricing Supplement.

10. Redemption and Purchase

(a) *Scheduled redemption*: Unless previously redeemed, or purchased and cancelled, the Notes will be redeemed at their Final Redemption Amount on the Maturity Date, subject as provided in Conditions 11 (*Payments–Bearer Notes*) and 12 (*Payments–Registered Notes*).

(b) *Redemption for tax reasons*: The Notes may be redeemed at the option of the Issuer in whole, but not in part:

(i) at any time (if neither the Floating Rate Note Provisions or the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable); or

(ii) on any Interest Payment Date (if the Floating Rate Note Provisions or the Index-Linked Interest Note Provisions are specified in the relevant Pricing Supplement as being applicable),

on giving not less than 30 nor more than 60 days' notice to the Noteholders (which notice shall be irrevocable), at their Early Redemption Amount (Tax), together with interest accrued (if any) to (but excluding) the date fixed for redemption, if:

(A) the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 13 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of Korea or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including a holding by a court of competent jurisdiction), which change or amendment becomes effective on or after the date of issue of the first Tranche of the Notes; and

(B) such obligation cannot be avoided by the Issuer taking reasonable measures available to it; and

(C) in the case of Subordinated Notes, the prior approval of the FSS or any such other relevant regulatory authority in Korea shall have been obtained, if necessary,

provided, however, that no such notice of redemption shall be given earlier than:

(1) where the Notes may be redeemed at any time, 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due; or

(2) where the Notes may be redeemed only on an Interest Payment Date, 60 days prior to the Interest Payment Date occurring immediately before the earliest date on which the Issuer would be obliged to pay such additional amounts if a payment in respect of the Notes were then due.

Prior to the publication of any notice of redemption pursuant to this paragraph, the Issuer shall deliver to the Principal Paying Agent (A) a certificate signed by one director 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 (B) an opinion of independent legal advisers of recognised 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. Upon the expiry of any such notice as is referred to in this Condition 10(b), the Issuer shall be bound to redeem the Notes in accordance with this Condition 10(b).

(c) *Redemption at the option of the Issuer*: If Call Option is specified in the relevant Pricing Supplement as being applicable, the Notes may be redeemed at the option of the Issuer in whole or, if so specified in the relevant Pricing Supplement, in part on any Optional Redemption Date (Call) at the relevant Optional Redemption Amount (Call) on the Issuer's having (1) in the case of Subordinated Notes, obtained the prior approval of the FSS or any such other relevant regulatory authority in Korea, if necessary, and (2) given:

(i) not less than 15 nor more than 30 days' notice to the Noteholders in accordance with Condition 20 (*Notices*); and

(ii) not less than 15 days before the giving of the notice referred to in (i), 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, such redemption shall not be made within five years after the date of issuance of such Notes and shall be subject to the prior approval of the FSS pursuant to FSS regulations 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 and/or Clearstream and/or DTC, 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 (*Events of Default*) 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 paragraph (c) and notice to that effect shall be given by the Issuer to the Noteholders in accordance with Condition 14 (*Events of Default*) at least five days prior to the Selection Date.

(d) *Partial redemption*: If the Notes are to be redeemed in part only on any date in accordance with Condition 10(c) (*Redemption at the option of the Issuer*), in the case of Bearer Notes, the Notes to be redeemed shall be selected by the drawing of lots in such place as the Principal Paying Agent approves and in such manner as the Principal Paying Agent considers appropriate, subject to compliance with applicable law, the rules of each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation and the notice to Noteholders referred to in Condition 10(c) (*Redemption at the option of the Issuer*) shall specify the serial numbers of the Notes so to be redeemed, and, in the case of Registered Notes, each Note shall be redeemed in part in the proportion which the aggregate principal amount of the outstanding Notes to be redeemed on the relevant Optional Redemption Date (Call) bears to the aggregate principal amount of outstanding Notes on such date. If any Maximum Redemption Amount or Minimum Redemption Amount is specified in the relevant Pricing Supplement, then the Optional Redemption Amount (Call) shall in no event be greater than the maximum or be less than the minimum so specified.

(e) *Redemption of the Senior Notes only at the option of the Noteholders*: If Put Option is specified in the applicable Pricing Supplement with respect to any Series of Senior Notes only, upon the holder of any Senior Note giving the Issuer, in accordance with Condition 20 (*Notices*) not less than 15 nor more than 30 days' notice, the Issuer will, upon the expiry of such notice, redeem, subject to, and in accordance with, the terms specified in the applicable Pricing Supplement, such Senior Note on the Optional Redemption Date (Put) and at the Optional Redemption Amount (Put) 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 (Put). Registered Notes that are Senior Notes may be redeemed under this Condition 10(e) in any multiple of their lowest Specified Denomination.

To exercise the right to require redemption of any Senior Note, the holder of such Senior Note must deliver, 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 the Registrar, as the case may be, falling within the notice period, a duly completed and signed Put Option Notice (for the time being current) in which the holder must specify a bank account (or, if payment is required to be made by cheque, an address) to which payment is to be made under this Condition and, in the case of Registered Notes that are Senior 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 3(f) (*Transfers of Registered Notes*). If such Senior Note is in definitive form, the Put Option Notice must be accompanied by such Senior Note or evidence satisfactory to the Paying Agent concerned that such Senior Note will, following delivery of the Put Option Notice, be held to its order or under its control.

Any Put Option Notice 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 14 (*Events of Default*).

(f) *Early redemption of Zero Coupon Notes*: Unless otherwise specified in the relevant Pricing Supplement, the Redemption Amount payable on redemption of a Zero Coupon Note at any time before the Maturity Date shall be an amount equal to the sum of:

(i) the Reference Price; and

(ii) the product of the Accrual Yield (compounded annually) being applied to the Reference Price from (and including) the Issue Date to (but excluding) the date fixed for redemption or (as the case may be) the date upon which the Note becomes due and payable.

Where such calculation is to be made for a period which is not a whole number of years, the calculation in respect of the period of less than a full year shall be made on the basis of such Day Count Fraction as may be specified in the Pricing Supplement for the purposes of this Condition 10(f) or, if none is so specified, a Day Count Fraction of 30E/360.

(g) *Purchase*: The Issuer or any of its Subsidiaries may at any time purchase Senior Notes and, subject to obtaining the prior approval of the FSS or any such other relevant regulatory authority in Korea, if necessary, Subordinated Notes at any price, **provided**, **however**, **that**, in the case of Subordinated Notes, the Issuer and any person or entity over which the Issuer exercises substantial control, including any affiliate or subsidiary of the Issuer (an "**Issuer-Related Party**"), shall not purchase Subordinated Notes nor provide, directly or indirectly, funds to acquire Subordinated Notes by providing any collateral, guaranty or loan in favour of the person or entity which will acquire such Notes. In addition, neither the Issuer nor any Issuer-Related Party shall enhance, legally or economically, the payment seniority of the Subordinated Notes, nor provide, directly or indirectly through its affiliate or subsidiary, any collateral or guarantee in favour of the person or entity which acquires such Subordinated Notes. If purchases are made by tender, tenders must be available to all Noteholders alike. Such Notes may be held, reissued, resold or, at the option of the Issuer or, as the case may be, the relevant Subsidiary, surrendered to any Paying Agent and/or the Registrar for cancellation.

(h) *Cancellation*: All Notes so redeemed or purchased by the Issuer or any of its Subsidiaries and any unmatured Coupons attached to or surrendered with them shall be cancelled and may not be reissued or resold.

11. Payments – Bearer Notes

This Condition 11 is only applicable to Bearer Notes.

(a) *Principal:* Payments of principal shall be made only against presentation and (provided that payment is made in full) surrender of Bearer Notes at the Specified Office of any Paying Agent outside the United States (i) in the case of a currency other than Renminbi, by cheque drawn in the currency in which the payment is due on, or by transfer to an account denominated in that currency (or, if that currency is Euro, any other account to which Euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency, and (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Centre of that currency.

(b) *Interest*: Payments of interest shall, subject to paragraph (h) below, be made only against presentation and (**provided that** payment is made in full) surrender of the appropriate Coupons at the Specified Office of any Paying Agent outside the United States in the manner described in paragraph (a) above.

Payments of principal and interest in respect of Bearer Notes held in the CMU Service will be made to the person(s) for whose account(s) interests in the relevant Bearer Note are credited as being held with the CMU Service in accordance with the CMU Rules (as defined in the Agency

Agreement) at the relevant time as notified to the CMU Lodging and Paying Agent by the CMU Service in a relevant CMU Instrument Position Report (as defined in the Agency Agreement) or any other relevant notification by the CMU Service, which notification shall be conclusive evidence of the records of the CMU Service (save in the case of manifest or proven error) and payment made in accordance thereof shall discharge the obligations of the Issuer in respect of that payment.

(c) *Payments in New York City*: Payments of principal or interest may be made at the Specified Office of a Paying Agent in New York City if (i) the Issuer has appointed Paying Agents outside the United States with the reasonable expectation that such Paying Agents will be able to make payment of the full amount of the interest on the Notes in the currency in which the payment is due when due, (ii) payment of the full amount of such interest at the offices of all such Paying Agents is illegal or effectively precluded by exchange controls or other similar restrictions and (iii) payment is permitted by applicable United States law.

(d) *Payments subject to fiscal laws*: All payments in respect of the Bearer Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 13 (*Taxation*), and (ii) notwithstanding the provisions of Condition 13 (*Taxation*), any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Internal Revenue Code (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof or (without prejudice to the provisions of Condition 13 (*Taxation*)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders or Couponholders in respect of such payments.

(e) *Deductions for unmatured Coupons*: If the relevant Pricing Supplement specifies that the Fixed Rate Note Provisions are applicable and a Bearer Note is presented without all unmatured Coupons relating thereto:

(i) if the aggregate amount of the missing Coupons is less than or equal to the amount of principal due for payment, a sum equal to the aggregate amount of the missing Coupons will be deducted from the amount of principal due for payment; **provided, however, that** if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of such missing Coupons which the gross amount actually available for payment bears to the amount of principal due for payment;

(ii) if the aggregate amount of the missing Coupons is greater than the amount of principal due for payment:

(A) so many of such missing Coupons shall become void (in inverse order of maturity) as will result in the aggregate amount of the remainder of such missing Coupons (the "**Relevant Coupons**") being equal to the amount of principal due for payment; **provided, however, that** where this sub-paragraph would otherwise require a fraction of a missing Coupon to become void, such missing Coupon shall become void in its entirety; and

(B) a sum equal to the aggregate amount of the Relevant Coupons (or, if less, the amount of principal due for payment) will be deducted from the amount of principal due for payment; **provided, however, that** if the gross amount available for payment is less than the amount of principal due for payment, the sum deducted will be that proportion of the aggregate amount of the Relevant Coupons (or, as the case may be, the amount of principal due for payment) which the gross amount actually available for payment bears to the amount of principal due for payment.

Each sum of principal so deducted shall be paid in the manner provided in paragraph (a) above against presentation and (provided that payment is made in full) surrender of the relevant missing Coupons.

(f) *Unmatured Coupons void*: If the relevant Pricing Supplement specifies that this Condition 11(f) is applicable or that the Floating Rate Note Provisions or the Index-Linked Interest Note Provisions are applicable, on the due date for final redemption of any Note or early redemption in whole of such Note pursuant to Condition 10(b) (Redemption and Purchase–Redemption for tax reasons), Condition 10(c) (*Redemption and Purchase–Redemption at the option of the Issuer*), Condition 10(e) (*Redemption and Purchase–Redemption of the Senior Notes only at the option of the Noteholders*) or Condition 14 (*Events of Default*), all unmatured Coupons relating thereto (whether or not still attached) shall become void and no payment will be made in respect thereof.

(g) *Payments on business days*: If the due date for payment of any amount in respect of any Bearer Note or Coupon is not a Payment Business Day in the place of presentation, the Holder shall not be entitled to payment in such place of the amount due until the next succeeding Payment Business Day in such place and shall not be entitled to any further interest or other payment in respect of any such delay.

(h) *Payments other than in respect of matured Coupons*: Payments of interest other than in respect of matured Coupons shall be made only against presentation of the relevant Bearer Notes at the Specified Office of any Paying Agent outside the United States (or in New York City if permitted by paragraph (c) above).

(i) *Partial payments*: If a Paying Agent makes a partial payment in respect of any Bearer Note or Coupon presented to it for payment, such Paying Agent will endorse thereon a statement indicating the amount and date of such payment.

(j) *Exchange of Talons*: On or after the maturity date of the final Coupon which is (or was at the time of issue) part of a Coupon Sheet relating to the Bearer Notes, the Talon forming part of such Coupon Sheet may be exchanged at the Specified Office of the Principal Paying Agent for a further Coupon Sheet (including, if appropriate, a further Talon but excluding any Coupons in respect of which claims have already become void pursuant to Condition 15 (*Prescription*)). Upon the due date for redemption of any Bearer Note, any unexchanged Talon relating to such Note shall become void and no Coupon will be delivered in respect of such Talon.

12. Payments–Registered Notes

This Condition 12 is only applicable to Registered Notes.

(a) *Principal*: Payments of principal shall be made (i) in the case of a currency other than Renminbi, by cheque drawn in the currency in which the payment is due drawn on, or, upon application by a Holder of a Registered Note to the Specified Office of the Principal Paying Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is Euro, any other account to which Euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency (in the case of a sterling cheque, a town clearing branch of a bank in the City of London), and (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Centre of that currency, and (in the case of redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

(b) *Interest*: Payments of interest shall be made (i) in the case of a currency other than Renminbi, by cheque drawn in the currency in which the payment is due drawn on, or, upon application by a Holder of a Registered Note to the Specified Office of the Principal Paying Agent not later than the fifteenth day before the due date for any such payment, by transfer to an account denominated in that currency (or, if that currency is Euro, any other account to which Euro may be credited or transferred) and maintained by the payee with, a bank in the Principal Financial Centre of that currency (in the case of a sterling cheque, a town clearing branch of a bank in the City of London), and (ii) in the case of Renminbi, by transfer to an account denominated in that currency and maintained by the payee with a bank in the Principal Financial Centre of that currency, and (in the case of interest payable on redemption) upon surrender (or, in the case of part payment only, endorsement) of the relevant Note Certificates at the Specified Office of any Paying Agent.

Payments of principal and interest in respect of Registered Notes held in the CMU Service will be made to the person(s) for whose account(s) interests in the relevant Registered Note are credited as being held with the CMU Service in accordance with the CMU Rules (as defined in the Agency Agreement) at the relevant time as notified to the CMU Lodging and Paying Agent by the CMU Service in a relevant CMU Instrument Position Report (as defined in the Agency Agreement) or any other relevant notification by the CMU Service, which notification shall be conclusive evidence of the records of the CMU Service (save in the case of manifest or proven error) and payment made in accordance thereof shall discharge the obligations of the Issuer in respect of that payment.

(c) *Payments subject to fiscal laws*: All payments in respect of the Registered Notes are subject in all cases to (i) any applicable fiscal or other laws and regulations in the place of payment, but without prejudice to the provisions of Condition 13 (*Taxation*), and (ii) notwithstanding the provisions of Condition 13 (*Taxation*), any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof or (without prejudice to the provisions of Condition 13 (*Taxation*)) any law implementing an intergovernmental approach thereto. No commissions or expenses shall be charged to the Noteholders in respect of such payments.

(d) *Payments on business days*: Where payment is to be made by transfer to an account, payment instructions (for value the due date, or, if the due date is not a Payment Business Day, for value the next succeeding Payment Business Day) will be initiated and, where payment is to be made by cheque, the cheque will be mailed (i) (in the case of payments of principal and interest payable on redemption) on the later of the due date for payment and the day on which the relevant Note Certificate is surrendered (or, in the case of part payment only, endorsed) at the Specified Office of a Paying Agent and (ii) (in the case of payments of interest payable other than on redemption) on the due date for payment. A Holder of a Registered Note shall not be entitled to any interest or other payment in respect of any delay in payment resulting from (A) the due date for a payment not being a Payment Business Day or (B) a cheque mailed in accordance with this Condition 12 arriving after the due date for payment or being lost in the mail.

(e) *Partial payments*: If a Paying Agent makes a partial payment in respect of any Registered Note, the Issuer shall procure that the amount and date of such payment are noted on the Register and, in the case of partial payment upon presentation of a Note Certificate, that a statement indicating the amount and the date of such payment is endorsed on the relevant Note Certificate.

(f) *Record date*: Each payment in respect of a Registered Note will be made to the person shown as the Holder in the Register at the opening of business in the place of the Registrar's Specified Office on the fifth (in the case of Renminbi) and fifteenth (in the case of a currency other than Renminbi) day before the due date for such payment (the "**Record Date**"). Where payment in respect of a Registered Note is to be made by cheque, the cheque will be mailed to the address shown as the address of the Holder in the Register at the opening of business on the relevant Record Date.

13. Taxation

(a) *Gross up*: All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of the Republic of Korea or any political subdivision therein or any authority therein or thereof having power to tax, unless the withholding or deduction of such taxes, duties, assessments, or governmental charges is required by law. In that event, the Issuer shall pay such additional amounts as will result in receipt by the Noteholders and the Couponholders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such additional amounts shall be payable in respect of any Note or Coupon:

(i) held by or on behalf of a Holder, intermediary or beneficial owner which is liable to such taxes, duties, assessments or governmental charges in respect of such Note or Coupon by reason of its having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of the Note or Coupon;

(ii) to or on behalf of a Holder, intermediary or beneficial owner to the extent that such Holder, intermediary or beneficial owner would not be liable for or subject to such withholding or deduction by making a declaration of non-residence or other similar claim for exemption or deduction to the relevant tax authorities if such Holder, intermediary or beneficial owner is eligible to make such declaration or other claim and, after having been requested to make such a declaration or claim, such Holder, intermediary or beneficial owner fails to do so; or

(iii) where the relevant Note or Coupon or Note Certificate is presented or surrendered for payment more than 30 days after the Relevant Date except to the extent that the Holder of such Note or Coupon would have been entitled to such additional amounts on presenting or surrendering such Note or Coupon or Note Certificate for payment on the last day of such period of 30 days.

The Issuer will not pay any additional amounts for taxes on the Notes or Coupons except for taxes payable through deduction or withholding from payments of principal or interest. Examples of the types of taxes for which the Issuer will not pay additional amounts include the following: estate or inheritance taxes, gift taxes, sales or transfer taxes, personal property or related taxes, assessments or other governmental charges. The Issuer will also not pay any additional amounts for taxes imposed pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended, U.S. Treasury regulations or administrative guidance promulgated thereunder or any law implementing an intergovernmental approach thereto ("**FATCA**").

The Issuer will pay stamp or other similar taxes that may be imposed by the Republic of Korea, the United States or any political subdivision or taxing authority in one of those two countries on the fiscal agency agreement or be payable in connection with the issuance of the Notes.

(b) *Taxing jurisdiction*: If the Issuer becomes subject at any time to any taxing jurisdiction other than the Republic of Korea, references in these Conditions to the Republic of Korea shall be construed as references to the Republic of Korea and/or such other jurisdiction.

14. Events of Default

(a) *Events of Default relating to Senior Notes*

If any of the following events occurs and is continuing with respect to any Senior Note:

(i) default is made in the payment of any principal or interest due in respect of the Senior Notes or any of them and the default continues for a period of seven days in the case of principal and 14 days in the case of interest; or

(ii) if the Issuer fails to perform or observe any of its other obligations under or in respect of the Senior Notes and (except in any case where the failure is incapable of remedy when no such continuation or notice as is hereinafter mentioned will be required) the failure continues for the period of 30 days next following the service by any holder of a Senior Note on the Issuer of notice requiring the same to be remedied; or

(iii) any other notes, debentures, bonds or other Indebtedness having an aggregate principal amount of at least US$10,000,000 (or its equivalent in any other currency) shall become prematurely repayable following a default in respect of the terms thereof or steps are taken to enforce any security therefor, or the Issuer or any Principal Subsidiary defaults in the repayment of any such Indebtedness at the maturity thereof or any guarantee of or indemnity in respect of any Indebtedness of others given by the Issuer or any Principal Subsidiary shall not be honoured when due and called upon in accordance with its terms; or

(iv) if any order is made by any competent court or resolution passed for the winding up, liquidation or dissolution of the Issuer or any of its Principal Subsidiaries, save for the purposes of reorganisation on terms previously approved by an Extraordinary Resolution of the holders of the Senior Notes; or

(v) if the Issuer and its Subsidiaries, taken as a whole, ceases to carry on the whole or a substantial part of their business, save for the purposes of reorganisation on terms approved by an Extraordinary Resolution of the Noteholders, or the Issuer or any of its Principal Subsidiaries stops payment of, or is unable to, or admits inability to, pay, its debts (or any class of its debts) as they fall due, or is deemed unable to pay its debts pursuant to or for the purposes of any applicable law, or is adjudicated or found bankrupt or insolvent, the Issuer or any of its Principal Subsidiaries 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 dealers a moratorium in respect of any of its Indebtedness or any surety given by it; or

(vi) if (A) proceedings are initiated against the Issuer or any of its Principal Subsidiaries under any applicable liquidation, insolvency, composition, reorganisation or other similar laws, or an application is made (or documents filed with a court) for the appointment of an administrative or other receiver, manager, administrator or other similar official, or an administrative or other receiver, manager, administrator or other similar official is appointed, in relation to the Issuer or any of its Principal Subsidiaries or, as the case may be, in relation to the whole or a substantial part of the undertaking or assets of any of them, or an encumbrancer takes possession of the whole or a substantial part of the undertaking or assets of any of them, or a distress, execution, attachment, sequestration or other process is levied, enforced upon, sued out or put in force against the whole or a substantial part of the undertaking or assets of any of them and (B) in any case (other than the appointment of an administrator) is not discharged within 14 days; or

(vii) any event occurs which under the laws of Korea has an analogous effect to any of the events referred to in paragraphs (iv) to (vi) above; or

(viii) if the Issuer or any of its Principal Subsidiaries initiates or consents to judicial proceedings relating to itself under any applicable liquidation, insolvency, composition, reorganisation or other similar laws (including the obtaining of a moratorium) or makes a conveyance or assignment for the benefit of, or enters into any composition or other arrangement with, its creditors generally (or any class of its creditors) or any meeting is convened to consider a proposal for an arrangement or composition with its creditors generally (or any class of its creditors); or

(ix) if the Issuer repudiates its obligations in respect of the Senior Notes or does or causes to be done any act or thing evidencing an intention to repudiate such obligations; or

(x) if at any time any act, condition or thing required to be done, fulfilled or performed in order (A) to enable the Issuer lawfully to enter into, exercise its rights under and perform the obligations expressed to be assumed by it under and in respect of the Senior Notes, (B) to ensure that those obligations are legal, valid, binding and enforceable or (C) to make the Senior Notes, the Receipts and the Coupons admissible in evidence in the courts of Korea (other than their translation into the Korean language) is not done, fulfilled or performed; or

(xi) if at any time it is or becomes unlawful for the Issuer to perform or comply with any or all of its obligations under or in respect of the Senior Notes or any of the obligations of the Issuer thereunder are not or cease to be legal, valid and binding; or

(xii) (A) all or any substantial part of the undertaking, assets and revenues of the Issuer and its Subsidiaries, taken as a whole, is condemned, seized or otherwise appropriated by any person acting or purporting to act under the authority of any national, regional or local government of Korea or (B) the Issuer and its Subsidiaries, taken as a whole, is prevented by any such person from exercising normal control over all or any substantial part of its undertaking, assets and revenues,

then any Senior Note may, by written notice addressed by the Holder thereof to the Issuer and delivered to the Issuer or to the Specified Office of the Principal Paying Agent, be declared immediately due and payable, whereupon it shall become immediately due and payable at its Early Termination Amount together with accrued interest (if any) without further action or formality.

Notwithstanding above, any merger or reorganisation pursuant to an amendment to the National Agricultural Cooperative Federation Act, under which any successor bank, corporation or business entity assumes all of the Issuer's obligations under the Notes and the Deed of Covenant, and the Noteholders are provided the benefit of the creditor protection scheme under the Korean Commercial Code, shall not be deemed an Event of Default set forth in Conditions 14(a)(iv), (v), (vi), (vii), (viii), (ix) or (x) above.

(b) *Events of Default relating to Subordinated Notes*

(i) If any Bankruptcy Event or Liquidation Event shall occur and be 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 14(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.

15. Prescription

Claims for principal in respect of Bearer Notes shall become void unless the relevant Bearer Notes are presented for payment within 10 years of the appropriate Relevant Date. Claims for interest in respect of Bearer Notes shall become void unless the relevant Coupons are presented for payment within five years of the appropriate Relevant Date. Claims for principal and interest on redemption in respect of Registered Notes shall become void unless the relevant Note Certificates are surrendered for payment within 10 years of the appropriate Relevant Date.

16. Replacement of Notes and Coupons

If any Note, Note Certificate or Coupon is lost, stolen, mutilated, defaced or destroyed, it may be replaced at the Specified Office of the Principal Paying Agent, in the case of Bearer Notes, or the Registrar, in the case of Registered Notes (and, if the Notes are then admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent or Transfer Agent in any particular place, the Paying Agent or Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system), subject to all applicable laws and competent authority, stock exchange and/or quotation system requirements, upon payment by the claimant of the expenses incurred in connection with such replacement and on such terms as to evidence, security, indemnity and otherwise as the Issuer may reasonably require. Mutilated or defaced Notes, Note Certificates or Coupons must be surrendered before replacements will be issued.

17. Agents

In acting under the Agency Agreement and in connection with the Notes and the Coupons, the Agents act solely as agents of the Issuer and do not assume any obligations towards or relationship of agency or trust for or with any of the Noteholders or Couponholders.

The initial Agents and their initial Specified Offices are listed below. The initial Calculation Agent (if any) is specified in the relevant Pricing Supplement. The Issuer reserves the right at any time to vary or terminate the appointment of any Agent and to appoint a successor principal paying agent or registrar or Calculation Agent and additional or successor paying agents; **provided, however, that**:

(i) the Issuer shall at all times maintain a principal paying agent and a registrar; and

(ii) if a Calculation Agent is specified in the relevant Pricing Supplement, the Issuer shall at all times maintain a Calculation Agent; and

(iii) a CMU Lodging and Paying Agent in relation to Notes accepted for clearance through the CMU Service; and

(iv) if and for so long as the Notes are admitted to listing, trading and/or quotation by any competent authority, stock exchange and/or quotation system which requires the appointment of a Paying Agent and/or a Transfer Agent in any particular place, the Issuer shall maintain a Paying Agent and/or a Transfer Agent having its Specified Office in the place required by such competent authority, stock exchange and/or quotation system.

Notice of any change in any of the Agents or in their Specified Offices shall promptly be given to the Noteholders.

18. Meetings of Noteholders; Modification and Waiver

(a) *Meetings of Noteholders*: The Agency Agreement contains provisions for convening meetings of Noteholders to consider matters relating to the Notes, including the modification of any provision of these Conditions. Any such modification may be made if sanctioned by an Extraordinary Resolution. Such a meeting may be convened by the Issuer or Noteholders holding not less than

5% of the aggregate principal amount of the outstanding Notes. The quorum at any meeting convened to vote on an Extraordinary Resolution will be two or more Persons holding or representing not less than 50% of the aggregate principal amount of the outstanding Notes or, at any adjourned meeting, two or more Persons being or representing Noteholders whatever the principal amount of the Notes held or represented; **provided, however, that** Reserved Matters may only be sanctioned by an Extraordinary Resolution passed at a meeting of Noteholders at which two or more Persons holding or representing not less than two-thirds or, at any adjourned meeting one-third, of the aggregate principal amount of the outstanding Notes form a quorum. Any Extraordinary Resolution duly passed at any such meeting shall be binding on all the Noteholders and Couponholders, whether present or not.

In addition, a resolution in writing signed by or on behalf of Noteholders of not less than 90% of the aggregate principal amount outstanding will take effect as if it were an Extraordinary Resolution. Such a resolution in writing may be contained in one document or several documents in the same form, each signed by or on behalf of one or more Noteholders.

(b) *Meetings of more than one Series of Noteholders*: The provisions for meetings of Noteholders set out in Schedule 1 to the Agency Agreement include a provision whereby if and whenever the Issuer shall have issued and have outstanding Notes of more than one Series:

(i) a resolution which affects the Notes of more than one Series but does not give rise to a conflict of interest between the holders of Notes of any of the Series so affected shall be deemed to have been duly passed if passed at a single meeting of the holders of the Notes of all the Series so affected; and

(ii) a resolution which affects the Notes of more than one Series and gives or may give rise to a conflict of interest between the holders of the Notes of one Series or group of Series so affected and the holders of the Notes of another Series or group of Series so affected shall be deemed to have been duly passed only if it shall be duly passed at separate meetings of the holders of the Notes of each Series or group of Series so affected.

(c) *Modification*: The Notes, these Conditions and the Deed of Covenant may be amended without the consent of the Noteholders or the Couponholders to modify any provision of a formal, minor or technical nature or to correct a manifest error. In addition, the parties to the Agency Agreement may agree to modify any provision thereof, but the Issuer shall not agree, without the consent of the Noteholders, to any such modification unless it is of a formal, minor or technical nature, it is made to correct a manifest error or it is, in the opinion of such parties, not materially prejudicial to the interests of the Noteholders.

19. Further Issues

The Issuer may from time to time, without the consent of the Noteholders or the Couponholders, create and issue further notes having the same terms and conditions as the Notes in all respects (or in all respects except for the first payment of interest) so as to form a single series with the Notes.

20. Notices

(a) *Bearer Notes*: Notices to the Holders of Bearer Notes shall be valid if published in a leading English language daily newspaper published in Asia (which is expected to be the Asian Wall Street Journal). Any such notice shall be deemed to have been given on the date of first publication (or if required to be published in more than one newspaper, on the first date on which publication shall have been made in all the required newspapers). Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Holders of Bearer Notes.

(b) *Registered Notes*: Notices to the Holders of Registered Notes shall be sent to them by first class mail (or its equivalent) or (if posted to an overseas address) by airmail at their respective addresses on the Register. Any such notice shall be deemed to have been given on the fourth day after the date of mailing.

So long as the Notes are represented by a Global Note or a Global Note Certificate and such Global Note or Global Note Certificate is held on behalf of (i) Euroclear or Clearstream, DTC or any other clearing system (except as provided in (ii) below), notices to the holders of Notes of that Series may be given by delivery of the relevant notice to that clearing system for communication by it to entitled accountholders in substitution for publication as required by the Conditions or (ii) the CMU Service, notices to the holders of Notes of that Series may be given by delivery of the relevant notice to the Persons shown in a CMU Instrument Position Report issued by the Hong Kong Monetary Authority on the business day preceding the date of despatch of such notice.

21. Currency Indemnity

If any sum due from the Issuer in respect of the Notes or the Coupons or any order or judgment given or made in relation thereto has to be converted from the currency (the "**first currency**") in which the same is payable under these Conditions or such order or judgment into another currency (the "**second currency**") for the purpose of (a) making or filing a claim or proof against the Issuer, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to the Notes, the Issuer shall indemnify each Noteholder, on the written demand of such Noteholder addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Principal Paying Agent, against any loss suffered as a result of any discrepancy between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which such Noteholder may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof.

This indemnity constitutes a separate and independent obligation of the Issuer and shall give rise to a separate and independent cause of action.

22. Rounding

For the purposes of any calculations referred to in these Conditions (unless otherwise specified in these Conditions or the relevant Pricing Supplement), (a) all percentages resulting from such calculations will be rounded, if necessary, to the nearest one hundred-thousandth of a percentage point (with 0.000005% being rounded up to 0.00001%), (b) all United States dollar amounts used in or resulting from such calculations will be rounded to the nearest cent (with one half cent being rounded up), (c) all Japanese Yen amounts used in or resulting from such calculations will be rounded downwards to the next lower whole Japanese Yen amount, and (d) all amounts denominated in any other currency used in or resulting from such calculations will be rounded to the nearest two decimal places in such currency, with 0.005 being rounded upwards.

23. Governing Law and Jurisdiction

(a) *Governing law*: The Notes and any non-contractual obligations arising out of or in connection with the Notes are governed by English law except that in the case of Subordinated Notes, Condition 4(b) (*Status–Status of the Subordinated Notes and relevant provisions*) is governed by, and shall be construed in accordance with, Korean law.

(b) *English courts*: The courts of England have exclusive jurisdiction to settle any dispute (a "**Dispute**") arising out of or in connection with the Notes (including a dispute relating to the existence, validity or termination of the Notes or any non-contractual obligation arising out of or in connection with the Notes) or the consequences of its nullity.

(c) *Appropriate forum*: The Issuer agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and, accordingly, that it will not argue to the contrary.

(d) *Rights of the Noteholders to take proceedings outside England*: Condition 23(b) (*English courts*) is for the benefit of the Noteholders only. As a result, nothing in this Condition 23 prevents any Noteholder from taking proceedings relating to a Dispute ("**Proceedings**") in any other courts with jurisdiction. To the extent allowed by law, Noteholders may take concurrent Proceedings in any number of jurisdictions.

(e) *Process agent*: The Issuer agrees that the documents which start any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it by being delivered to Law Debenture Corporate Services Limited at Fifth Floor, 100 Wood Street, London EC2V 7EX. If such person is not or ceases to be effectively appointed to accept service of process on behalf of the Issuer, the Issuer shall, on the written demand of any Noteholder addressed and delivered to the Issuer or to the Specified Office of the Principal Paying Agent appoint a further person in England to accept service of process on its behalf and, failing such appointment within 15 days, any Noteholder shall be entitled to appoint such a person by written notice addressed to the Issuer and delivered to the Issuer or to the Specified Office of the Principal Paying Agent. Nothing in this paragraph shall affect the right of any Noteholder to serve process in any other manner permitted by law. This Condition applies to Proceedings in England and to Proceedings elsewhere.

(f) *Consent to enforcement etc.*: The Issuer consents generally in respect of any Proceedings to the giving of any relief or the issue of any process in connection with such Proceedings including (without limitation) the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgment which is made or given in such Proceedings.

(g) *Waiver of immunity*: To the extent that the Issuer may in any jurisdiction claim for itself or its assets or revenues immunity from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process and to the extent that such immunity (whether or not claimed) may be attributed in any such jurisdiction to the Issuer or its assets or revenues, the Issuer agrees not to claim and irrevocably waives such immunity to the full extent permitted by the laws of such jurisdiction.

USE OF PROCEEDS

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purposes or as may otherwise be disclosed in the applicable Pricing Supplement.

EXCHANGE RATES

The following table below sets forth, for the periods and dates indicated, information concerning the Market Average Exchange Rate in Won per US$1.00. 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.

For the year ended 31 December	Low	High	Average[(1)]	At End of Period
		(Won per US$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
2020 (through 6 July 2020)	1,153.1	1,280.1	1,206.9	1,200.4
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	1,212.3	1,237.6	1,225.2	1,225.2
May	1,217.7	1,242.0	1,228.7	1,238.5
June	1,192.8	1,237.6	1,210.0	1,200.7
July (through 6 July 2020)	1,198.5	1,201.6	1,200.4	1,200.4

Source: Seoul Money Brokerage Services, Ltd.

Note:

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

CAPITALISATION

The following table sets forth the capitalisation of the Issuer as of 31 March 2020. This information has been extracted without material adjustment from the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020.

		As of 31 March 2020
		(Unaudited) *(in billions of Won)*
Indebtedness:		
Borrowings	₩	12,805
Debentures		17,280
Sub total	₩	30,085
Equity:		
Capital stock[1]	₩	2,162
Other paid-in capital		9,848
Retained earnings		5,089
Other components of equity		(718)
Sub total	₩	16,381
Total[2]	₩	46,466

Notes:

(1) Issued and outstanding 432,438,179 fully paid common shares with par value per share of Won 5,000.

(2) Total, meaning total capitalisation, is equal to the sum of borrowings, debentures and total equity. Since 31 March 2020 and as of the date of this Offering Circular, there has been no material change in the capitalisation of the Issuer other than borrowings and repayments in the ordinary course of business.

SELECTED FINANCIAL INFORMATION

The following tables set forth selected consolidated financial information of the Issuer. The selected consolidated financial information as of and for the year ended 31 December 2018 has been derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular, the selected consolidated financial information as of and for the year ended 31 December 2019 has been derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular, and the selected consolidated financial information as of 31 March 2020 and for the three months ended 31 March 2019 and 2020 has been derived from the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019 included elsewhere in this Offering Circular, all of which have been prepared in accordance with K-IFRS.

The Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 have been audited by Ernst & Young Han Young, whose report thereon is included elsewhere in this Offering Circular. The Issuer's audited consolidated financial statements as of and for the year ended 31 December 2019 have been audited by, and the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and for the three months ended 31 March 2020 have been reviewed by, Deloitte Anjin LLC, whose reports thereon are included elsewhere in this Offering Circular.

In accordance with the application of K-IFRS 1115 beginning on 1 January 2018, the Issuer deducts commission expenses relating to credit cards from interest income or commission income so that such income is presented net of the associated commission expenses because such expenses are regarded as consideration paid to customers. While such deductions of commission expenses relating to credit cards from interest income or commission income are reflected in the financial statements for the year ended 31 December 2018 included for comparative purposes in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular, the Issuer's audited consolidated financial statements for the year ended 31 December 2018 included in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular were not restated to reflect such deductions. As stated above, the selected financial information for the year ended 31 December 2018 has been derived from the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular and accordingly does not reflect the deductions of commission expenses relating to credit cards from interest income or commission income. As a result, the Issuer's financial information for the three months ended 31 March 2019 and 2020 and the year ended 31 December 2019 presented below may not be directly comparable to the Issuer's financial information for the year ended 31 December 2018 presented below. For details relating to such deductions and the application of K-IFRS 1115, see Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

The Issuer's results of operations for the three months ended 31 March 2020 may not be indicative of its results for the full year 2020.

	For the year ended 31 December		For the three months ended 31 March	
	2018[1]	**2019**	**2019**	**2020**
	(Audited)	**(Audited)**	**(Unaudited)**	**(Unaudited)**
	(in billions of Won, except per share data)			
Consolidated Statement of Comprehensive Income Information				
Interest income	₩ 8,368	₩ 8,863	₩ 2,184	₩ 2,098
Interest expenses	(3,169)	(3,696)	(917)	(797)
Commission income	1,112	1,120	273	288
Commission expenses	(566)	(435)	(97)	(99)
Gain (loss) on financial instruments at fair value through profit or loss ("FVTPL"), net	192	(184)	46	(80)
Gain (loss) on financial assets at fair value through other comprehensive income ("FVTOCI"), net	(0)	22	9	44
Gain (loss) on disposal of financial assets at amortised cost, net	(18)	(30)	0	1
Other operating expenses, net	(418)	(69)	(101)	(103)
Operating income before expected credit losses and general and administrative expenses	5,501	5,591	1,397	1,352
Transfer in allowance for expected credit losses	(585)	(189)	(76)	(51)
Operating income before general and administrative expenses	4,916	5,402	1,321	1,301
General administrative expenses	(2,932)	(2,981)	(744)	(776)
Operating income	1,984	2,421	577	525
Gain on valuation of equity method investments, net	8	5	6	(2)
Other expenses, net	(328)	(328)	(78)	(78)
Income before income tax expense	1,664	2,098	505	445
Income tax expense	(441)	(581)	(139)	(129)
Net income	1,223	1,517	366	316
Remeasurements of defined benefit pension plans	(61)	(72)	(1)	0
Gain (loss) on equity securities at FVTOCI, net	(28)	(60)	6	(33)
Gain (loss) on debt securities at FVTOCI, net	84	53	30	25
Exchange differences on translation of foreign operations	2	6	3	9
Gain (loss) on valuation of investments in associates	(0)	0	0	
Other comprehensive income (loss)	(3)	(73)	38	1
Total comprehensive income (loss)	₩ 1,220	₩ 1,444	₩ 404	₩ 317
Basic earnings per share	₩ 2,806	₩ 3,469	₩ 837	₩ 721
Diluted earnings per share	₩ 2,806	₩ 3,469	₩ 837	₩ 721

Notes:

(1) Interest income, commission income and commission expenses for 2018 do not reflect certain adjustments made in connection with K-IFRS 1115 that are set forth in the financial statements for the year ended 31 December 2018 included for comparative purposes in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular. For information on such adjustments, see Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

	As of 31 December		As of 31 March
	2018	2019	2020
	(Audited)	(Audited)	(Unaudited)
		(in billions of Won)	
Consolidated Statement of Financial Position Information			
Assets			
Cash and due from banks	₩ 6,195	₩ 5,946	₩ 4,554
Financial assets at FVTPL	10,152	9,524	10,480
Derivative assets	465	536	1,132
Financial assets at FVTOCI	20,073	21,931	27,225
Securities at amortised cost	9,336	12,441	15,374
Loans at amortised cost	232,595	241,224	246,821
Investments in associates	98	103	99
Tangible assets	2,676	2,827	2,802
Investment properties	581	590	584
Intangible assets	397	437	452
Deferred income tax assets	579	514	477
Other assets	103	111	94
Non-current assets classified as held-for-sale	0	0	0
Total assets	₩ 283,250	₩ 296,184	₩ 310,094
Liabilities and Equity			
Deposits	₩ 224,230	₩ 236,384	₩ 247,414
Financial liabilities at FVTPL	13	13	13
Derivatives liabilities	522	511	1,102
Borrowings	11,283	11,172	12,805
Debentures	16,828	15,819	17,280
Provisions	463	361	374
Current income tax liabilities	161	277	336
Net defined benefit liabilities	375	470	623
Other liabilities	13,440	14,312	13,766
Share capital repayable on demand	0	0	0
Total liabilities	₩ 267,315	₩ 279,319	₩ 293,713
Capital stock	2,162	2,162	2,162
Other paid-in capital	9,848	9,848	9,848
Retained earnings	4,573	5,574	5,089
Other component of equity	(648)	(719)	(718)
Total equity	₩ 15,935	₩ 16,865	₩ 16,381
Total liabilities and equity	₩ 283,250	₩ 296,184	₩ 310,094

Selected Ratios on a Separate Basis

	As of or for the year ended 31 December		As of or for the three months ended 31 March	
	2018	**2019**	**2019**	**2020**
Average return on assets[(1)]	0.43%	0.51%	0.49%	0.42%
Average return on equity[(2)]	7.95	9.82	9.07	7.67
Non-performing loans/total loans[(3)]	0.85	0.55	0.88	0.54
Allowance/non-performing loans[(4)]	89.86	99.27	85.56	98.30
Non-performing loans/total assets	0.65	0.42	0.66	0.40
Net interest margin[(5)]	1.96	1.83	1.88	1.81
Net interest spread[(6)]	1.94	1.80	1.85	1.79
Risk-weighted (Tier I and Tier II) capital ratio[(7)(9)]	15.54	15.19	15.57	14.80
Core capital (Tier I) ratio[(8)(9)]	12.75	12.65	12.99	12.29

Notes:

(1) Represents net income (annualised for the three-month periods ended 31 March 2019 and 2020) divided by the daily average balance of total assets (calculated in accordance with FSS reporting guidelines).

(2) Represents net income (annualised for the three-month periods ended 31 March 2019 and 2020) divided by the daily average balance of total equity (calculated in accordance with FSS reporting guidelines).

(3) Represents the ratio of non-performing loans to total loans (calculated in accordance with FSS reporting guidelines).

(4) Represents the ratio of the sum of allowances for credit losses and regulatory reserve for credit losses to non-performing loans (calculated in accordance with FSS reporting guidelines).

(5) Represents net interest income (annualised for the three-month periods ended 31 March 2019 and 2020) divided by the daily average balance of interest-earning assets. 2018 information does not reflect certain adjustments in connection with K-IFRS 1115 that are reflected in the information for other periods.

(6) Represents the difference between the yield on average interest-earning assets and cost of average interest-bearing liabilities.

(7) "**Risk-weighted capital ratio**" means the ratio of the sum of Tier I and Tier II capital to risk-weighted assets. For details, see "*Supervision and Regulation–Capital Adequacy and Allowances.*"

(8) "**Core capital (Tier I) ratio**" means the ratio of core capital (Tier I) to risk-weighted assets. For details, see "*Supervision and Regulation–Capital Adequacy and Allowances.*"

(9) On a consolidated basis.

SELECTED STATISTICAL DATA

Average Balances and Related Interest

The following table sets forth the average balances of assets and liabilities of the Issuer, on a separate basis, for the periods indicated and, for interest-earning assets and interest-bearing liabilities, provides the amount of interest earned or paid and the average yields and costs. For the purposes of this table, average balances have been determined based upon daily average balances. The average yield on interest-earning assets is the ratio of interest income to average interest-earning assets and the average cost on interest-bearing liabilities is the ratio of interest expense to average interest-bearing liabilities.

	For the three months ended 31 March					
	2019			2020		
	Average balance	Interest income/ expense	Average yield/ average cost	Average balance	Interest income/ expense	Average yield/ average cost
	(in billions of Won, except percentages)					
Interest-earning assets:						
Due from banks	₩ 10,117	₩ 14	0.56%	₩ 10,015	₩ 7	0.28%
Securities	32,689	171	2.12	39,131	180	1.85
Financial assets at FVTPL	970	4	1.75	1,002	3	1.28
Financial assets at FVTOCI	22,346	115	2.08	24,269	110	1.82
Securities at amortised cost	9,373	52	2.24	13,860	67	1.96
Loans	222,244	1,963	3.58	230,251	1,877	3.27
Corporate	89,687	697	3.15	96,102	675	2.82
Retail	103,410	881	3.46	112,531	879	3.14
Public	8,627	64	2.99	4,550	29	2.58
Credit card	7,310	195	10.83	7,694	200	10.50
Other	13,210	126	3.87	9,374	94	4.02
Others	5,507	3	0.22	5,226	2	0.13
Total interest-earning-assets	₩ 270,557	₩ 2,151	3.22%	₩ 284,623	₩ 2,066	2.92%
Interest-bearing liabilities:						
Deposits	₩ 228,301	₩ 739	1.31%	₩ 239,281	₩ 639	1.07%
Demand deposits	32,153	25	0.31	38,278	29	0.31
Savings deposits	188,712	679	1.46	190,269	567	1.20
Other deposits	7,436	35	1.91	10,734	43	1.61
Borrowings	11,021	30	1.12	12,115	27	0.88
Debentures	16,492	109	2.68	16,742	100	2.40
Others	9,378	19	0.80	10,437	17	0.62
Total interest-bearing liabilities	₩ 265,192	₩ 897	1.37%	₩ 278,575	₩ 783	1.13%
Average asset liability ratio	102.02%			102.17%		
Net interest income and net interest spread		₩ 1,254	1.85%		₩ 1,283	1.79%
Net interest margin			1.88%			1.81%

	For the year ended 31 December					
	2018[1]			2019		
	Average balance	Interest income/ expense	Average yield/ average cost	Average balance	Interest income/ expense	Average yield/ average cost
	(in billions of Won, except percentages)					
Interest-earning assets:						
Due from banks	₩ 10,712	₩ 53	0.49%	₩ 12,118	₩ 76	0.63%
Securities	30,419	619	2.04	36,111	743	2.06
Financial assets at FVTPL	954	17	1.81	1,035	17	1.63
Financial assets at FVTOCI	20,253	399	1.97	25,116	509	2.03
Securities at amortised cost	9,212	203	2.21	9,960	217	2.18
Loans	214,080	7,566	3.53	226,609	7,926	3.49
Corporate	86,468	2,658	3.07	91,219	2,785	3.05
Retail	98,363	3,264	3.32	108,289	3,645	3.37
Public	11,007	310	2.82	6,196	182	2.93
Credit card	7,074	794	11.23	7,647	831	10.87
Other	11,168	540	4.83	13,258	483	3.65
Others	6,682	10	0.15	5,048	10	0.20
Total interest-earning-assets	₩ 261,893	₩ 8,248	3.15%	₩ 279,886	₩ 8,755	3.12%
Interest-bearing liabilities:						
Deposits	₩ 217,773	₩ 2,496	1.15%	₩ 238,768	₩ 3,032	1.27%
Demand deposits	31,443	104	0.33	33,201	98	0.29
Savings deposits	179,624	2,292	1.28	197,446	2,785	1.41
Other deposits	6,706	100	1.49	8,121	149	1.84
Borrowings	11,736	128	1.09	11,493	117	1.02
Debentures	16,825	428	2.54	15,567	413	2.65
Others	10,201	56	0.55	8,925	62	0.70
Total interest-bearing liabilities	₩ 256,535	₩ 3,108	1.21%	₩ 274,752	₩ 3,624	1.32%
Average asset liability ratio	102.09%			101.87%		
Net interest income and net interest spread		₩ 5,140	1.94%		₩ 5,131	1.80%
Net interest margin			1.96%			1.83%

Notes:

(1) Does not reflect certain adjustments in connection with K-IFRS 1115 that are reflected in the information for 2019.

Analysis of Changes in Interest Income and Interest Expense–Volume and Rate Analysis

The following table provides an analysis of changes in interest income, interest expense and net interest income between changes in volume and changes in rates of the Issuer, on a separate basis, for the periods indicated. Volume and rate variances have been calculated on the movement in average balances and the change in the interest rates on average interest-earning assets and average interest-bearing liabilities in proportion to absolute volume and rate change. The variance caused by the change in both volume and rate has been allocated in proportion to absolute volume and rate change.

	For the three months ended 31 March 2019 and 2020		
	Increase (decrease) due to		
	Net change	Change in average volume	Change in average rate
	(in billions of Won)		
Interest income from:			
Due from banks	₩ (7)	₩ (0)	₩ (7)
Securities	9	33	(24)
Financial assets at FVTPL	(1)	0	(1)
Financial assets at FVTOCI	(5)	8	(13)
Securities at amortised cost	15	25	(10)
Loans	(86)	88	(174)
Corporate	(22)	56	(78)
Retail	(2)	86	(88)
Public	(35)	(30)	(5)
Credit card	5	12	(7)
Other	(32)	(36)	4
Others	(1)	(0)	(1)
Total interest income	(85)	121	(206)
Interest expense on:			
Deposits	(100)	31	(131)
Demand deposits	4	4	0
Savings deposits	(112)	11	(123)
Other deposits	8	16	(8)
Borrowings	(3)	2	(5)
Debentures	(9)	2	(11)
Others	(2)	2	(4)
Total interest expense	(114)	37	(151)
Net interest income	₩ 29	₩ 84	₩ (55)

	For the three months ended 31 March 2019 and 2020		
	Increase (decrease) due to		
	Net change	**Change in average volume**	**Change in average rate**
	(in billions of Won)		
Interest income from:			
Due from banks	₩ 22	₩ 7	₩ 15
Securities	124	115	9
Financial assets at FVTPL	0	2	(2)
Financial assets at FVTOCI	110	96	14
Securities at amortised cost	14	17	(3)
Loans	360	503	(143)
Corporate	127	145	(18)
Retail	381	329	52
Public	(129)	(136)	7
Credit card	37	64	(27)
Other	(56)	101	(157)
Others	0	(2)	2
Total interest income	506	623	(117)
Interest expense on:			
Deposits	536	254	282
Demand deposits	(6)	6	(12)
Savings deposits	493	227	266
Other deposits	49	21	28
Borrowings	(11)	(3)	(8)
Debentures	(15)	(31)	16
Others	6	(7)	13
Total interest expense	516	213	303
Net interest income	₩ (10)	₩ 410	₩ (420)

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

Unless otherwise specified, the following discussion and analysis is based on the Issuer's audited consolidated financial statements as of and for the year ended 31 December 2019 as included in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018, the Issuer's audited consolidated financial statements as of and for the year ended 31 December 2018 as included in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 and the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019, which have been prepared in accordance with K-IFRS. This discussion should be read together with such audited and unaudited consolidated financial statements and the related notes included elsewhere in this Offering Circular.

Factors Affecting the Issuer's Financial Condition and Results of Operations

The Issuer's loan portfolio, financial condition and results of operations, and the comparability of the Issuer's financial results over successive periods have been and will continue to be influenced by a number of external factors, many of which are outside the Issuer's control, including the following:

- general Korean and global economic conditions;
- the Issuer's relationship with the Government and Government support;
- changes in securities values, the Issuer's exposure to exchange rates and interest rates relating to its positions; and
- accounting policies.

For a further description of these factors and certain other factors affecting the Issuer's financial performance, see "*Risk Factors*."

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 also made significant investments and engaged in aggressive marketing in consumer 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, continued to increase through the end of 2019, and accompanied by an increase in the prices of such property, the Issuer's retail loan portfolio (before allowance for loan losses and deferred loan origination costs and fees), on a separate basis, increased from Won 108,865 billion as of 31 December 2018 to Won 118,832 billion as of 31 December 2019 and Won 120,266 billion as of 31 March 2020. 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 increasing delinquencies and a deterioration in asset quality. As of 31 December 2018 and 2019 and 31 March 2020, on a separate basis, the Issuer's non-performing retail loans were Won 168 billion, Won 244 billion and Won 253 billion, respectively, representing a non-performing loan ratio (net of write-offs and loan sales) of 0.2%, 0.2% and 0.2%, respectively. See "*Risk Factors – Risks Relating to the Issuer's Loan Portfolio*."

The Issuer's total loans to SMEs, on a separate basis, increased from Won 79,284 billion as of 31 December 2018 to Won 84,737 billion as of 31 December 2019 and Won 87,173 billion as of 31 March 2020. The Issuer's loans to SMEs that were classified as substandard or below, on a separate basis, amounted to Won 986 billion, Won 671 billion and Won 720 billion, representing 1.2%, 0.8% and 0.8% of its total loans to those enterprises as of 31 December 2018, 31 December 2019 and 31 March 2020, respectively. See "*Risk Factors – Risks Relating to the Issuer's Loan Portfolio – The Issuer has significant exposure to small and medium-sized enterprises, and financial difficulties experienced by such companies may result in a deterioration of the Issuer's asset quality and have an adverse effect on the Issuer's financial condition*."

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 in 2020 and beyond 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;
- 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 Brexit; and
- political and social instability in various countries in the Middle East, including Syria, Iraq and Egypt.

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 was declared a "pandemic" by The World Health Organization on March 11, 2020, has led to global economic and financial disruptions, including 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 – General Risks Relating to the Issuer – The recent global outbreak of COVID-19 may adversely affect the Issuer's business, financial condition or results of operations*" and "*– An increase in interest rates would 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*."

In addition, the Issuer is 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 and has recently been subject to significant volatility as a result of the recent COVID-19 pandemic. A depreciation of the Won will increase the Issuer's cost of servicing its 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 pressure on securities prices, including the stock prices of Korean and foreign companies in which the Issuer holds an interest. Notwithstanding the Government's efforts to stabilise such volatility through the execution of a bilateral currency swap agreement with the U.S. Federal Reserve for the provision of US$60 billion in exchange for Won-denominated treasury bonds in March 2020 and the establishment of bond and stock market stabilisation funds with the participation of Korean banks, 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 the Issuer's investments in joint ventures and associates.

As a result of deteriorating conditions in 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.

Financial Support from the Government

The Government has historically provided and continues to provide the NACF, of which the Issuer is an indirect wholly-owned subsidiary, with significant direct and indirect financial and other support (including interest payment support for policy loans, guarantees for borrowings and tax benefits) to enable the NACF Group, including the Issuer, to carry out the Government's agricultural and livestock policies. See "*Business – History*" and "*Business – Ownership and Control*." A substantial portion of such Government support indirectly flows to the Issuer, including Won 1.55 trillion in capital contributions from NH Financial Group that the Issuer has received since its inception on 2 March 2012. For example, most recently, the Issuer received a Won 200 billion capital contribution from NH Financial Group in June 2018.

At the time of the Reorganisation on 2 March 2012, the Government initially agreed to provide Won 5 trillion to the NACF over five years to be used as the capital of its operating subsidiaries in the form of (i) a Won 1 trillion in-kind capital contribution (in securities held by the Government, such as shares in a public enterprise) in exchange for preferred shares of NH Financial Group and (ii) payment of interest of up to 5.0% per annum for five years up to Won 4 trillion in principal amount of debt securities issued by the NACF and/or the Issuer. In each of January 2013 and December 2016, with the approval of the National Assembly, the Government agreed to an additional payment of interest of up to 5.0% per annum for five years on up to Won 0.5 trillion in principal amount of debt securities issued by the NACF and/or the Issuer in lieu of Won 0.5 trillion of the Won 1 trillion in-kind capital contribution. Based on such plan, the Issuer issued bonds in the aggregate principal amount of Won 4 trillion in February 2012, Won 0.5 trillion in June 2013 and Won 0.5 trillion in August 2017, and as of 31 March 2020, the Issuer had effectively received a subsidy in the amount of Won 889 billion in interest payments under such bonds.

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 its assets, the availability and cost of funding and the financial condition of its 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.

	As of 31 December		As of 31 March
	2018	**2019**	**2020**
KOSPI	2,041.04	2,197.67	1,754.64
Won/U.S.$ exchange rates[(1)]	₩ 1,118.1	₩ 1,157.8	₩ 1,222.6
Corporate bond rates per annum[(2)]	2.6%	2.0%	1.9%
Treasury bond rates per annum[(3)]	1.8%	1.4%	1.1%

Notes:

(1) Represents the Market Average Exchange Rate in effect on such dates.

(2) Measured by the yield on three-year Korean corporate bonds rated as A+ by Korean credit rating agencies.

(3) Measured by the yield on three-year treasury bonds issued by the Ministry of Economy and Finance of Korea.

Changes in Accounting Policies

In accordance with the application of K-IFRS 1115 beginning on 1 January 2018, the Issuer deducts commission expenses relating to credit cards from interest income or commission income so that such income is presented net of the associated commission expenses because such expenses are regarded as consideration paid to customers. While such deductions of commission expenses relating to credit cards from interest income or commission income are reflected in the financial statements for the year ended 31 December 2018 included for comparative purposes in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular, the Issuer's audited consolidated financial statements for the year ended 31 December 2018 included in the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included elsewhere in this Offering Circular were not restated to reflect such deductions. For details relating to such deductions and the application of K-IFRS 1115, see Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

K-IFRS 1116 *Leases*, which is effective for annual periods beginning on or after 1 January 2019, introduces a single lessee accounting model generally requiring a lessee to recognise assets and liabilities for leases. Under K-IFRS 1116, which replaces K-IFRS 1017 *Leases*, a lessee is required to recognise a right-of-use asset representing the lessee's right to use the underlying leased asset and a lease liability representing the lessee's obligation to make lease payments. The Issuer has applied K-IFRS 1116 in its audited consolidated financial statements as of and for the year ended 31 December 2019 and its unaudited consolidated financial statements as of and for the three months ended 31 March 2020. As permitted by the transition rules of K-IFRS 1116, the Issuer's comparative consolidated financial statements as of and for the year ended 31 December 2018, as well as the Issuer's comparative consolidated financial statements as of and for the three months ended 31 March 2019, have not been restated to retroactively apply K-IFRS 1116.

For further information regarding these and other changes to the Issuer's accounting policies and their effect on its consolidated financial statements, see Note 2.2 of the notes to the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 and the notes to the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019, included elsewhere in this Offering Circular.

Critical Accounting Policies

The Issuer's financial statements are prepared in accordance with K-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 and 3 of the notes to the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 and the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019, included elsewhere in this Offering Circular, for a summary 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 inherently uncertain matters, and because of the possibility that future events affecting these estimates may differ significantly from management's current judgment.

Results of Operations

Comparison of Three Months Ended 31 March 2020 to Three Months Ended 31 March 2019

The following table shows the principal components of the Issuer's results of operations for the periods indicated.

	For the three months ended 31 March		Percentage changes
	2019	2020	
	(in billions of Won, except percentages)		
Net interest income	₩ 1,267	₩ 1,301	2.7%
Net commission income	176	188	6.8
Net gain (loss) on financial instruments	55	(35)	N/M[1]
Net other operating expenses	(101)	(103)	2.0
Transfer in allowances for expected credit losses	(76)	(51)	(32.9)
General and administrative expenses	(743)	(776)	4.4
Operating income	577	525	(9.0)
Net gain (loss) on valuation of equity method investments	6	(2)	N/M
Net other expenses	(79)	(78)	(1.3)
Income before income tax expense	505	445	(11.9)
Income tax expense	(138)	(129)	(6.5)
Net income	₩ 366	₩ 316	(13.7)

Note:

(1) N/M means not meaningful.

Net Interest Income

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

	For the three months ended 31 March		Percentage changes
	2019	2020	
	(in billions of Won, except percentages)		
Interest income:			
Deposits	₩ 15	₩ 8	(46.7)%
Financial assets at FVTPL	33	27	(18.2)
Financial assets at FVTOCI	115	110	(4.3)
Securities at amortised cost	52	71	36.5
Loans and other receivables at amortised cost	1,967	1,881	(4.4)
Others	3	1	(66.7)
Total interest income	2,184	2,098	(3.9)
Interest expenses:			
Deposits due to customers	(756)	(651)	(13.9)
Debentures	(109)	(100)	(8.3)
Borrowings	(34)	(30)	(11.8)
Others	(18)	(16)	(11.1)
Total interest expenses	(917)	(797)	(13.1)
Net interest income	₩ 1,267	₩ 1,301	2.7%

Interest Income

Interest income decreased 3.9% from Won 2,184 billion in the first three months of 2019 to Won 2,098 billion in the first three months of 2020, primarily due to a 4.4% decrease in interest income on loans and other receivables at amortised cost from Won 1,967 billion in the first three months of 2019 to Won 1,881 billion in the first three months of 2020. On a separate basis, the average yield on interest-earning assets decreased by 30 basis points from 3.22% in the first three months of 2019 to 2.92% in the first three months of 2020, reflecting a decrease in the general level of interest rates in Korea in the first three months of 2020 compared to the first three months of 2019, while the average balance of interest-earning assets increased 5.2% from Won 270,557 billion in the first three months of 2019 to Won 284,623 billion in the first three months of 2020, principally due to the growth in the Issuer's loan and securities portfolios.

The decrease in interest income on loans and other receivables at amortised cost was largely due to decreases in interest income on public loans (which primarily consist of loans to local governments, public enterprises and non-profit institutions, such as educational institutions), other loans (which include, among others, loans purchased under resale, domestic import usance, bills purchased in foreign currency and call loans) and corporate loans. More specifically:

- Interest income on public loans, on a separate basis, decreased 54.7% from Won 64 billion in the first three months of 2019 to Won 29 billion in the first three months of 2020. Such decrease was the result of a 47.3% decrease in the average balance of such loans, on a separate basis, from Won 8,627 billion in the first three months of 2019 to Won 4,550 billion in the first three months of 2020, which was enhanced by a 41 basis point decrease in the average yield on such loans, on a separate basis, from 2.99% in the first three months of 2019 to 2.58% in the first three months of 2020. The decrease in the average balance of public loans was primarily attributable to a decrease in loans to local governments, public enterprises and non-profit institutions reflecting increased repayments of such loans, including loans to educational institutions, by the Government resulting from an increase in tax collected. The decrease in the average yield on public loans reflected the repayment of such loans with higher interest rates.

- Interest income on other loans, on a separate basis, decreased 25.4% from Won 126 billion in the first three months of 2019 to Won 94 billion in the first three months of 2020. Such decrease was the result of a 29.0% decrease in the average balance of such loans, on a separate basis, from Won 13,210 billion in the first three months of 2019 to Won 9,374 billion in the first three months of 2020, which was partially offset by a 15 basis point increase in the average yield on such loans, on a separate basis, from 3.87% in the first three months of 2019 to 4.02% in the first three months of 2020. The decrease in the average balance of other loans was primarily due to a decrease in loans with lower interest rates in this category, such as Won-denominated loans purchased under resale and call loans, as a result of a temporary increase of such loans in the first three months of 2019 primarily attributable to an increase in the Issuer's funds from the increased repayments of public loans during such period as discussed above. The increase in the average yield on other loans was primarily due to the decrease in the average balance of Won-denominated loans purchased under resale and call loans, which bear lower average yields as discussed above.

- Interest income on corporate loans, on a separate basis, decreased 3.2% from Won 697 billion in the first three months of 2019 to Won 675 billion in the first three months of 2020. Such decrease was the result of a 33 basis point decrease in the average yield on such loans, on a separate basis, from 3.15% in the first three months of 2019 to 2.82% in the first three months of 2020, which was partially offset by a 7.2% increase in the average balance of such loans, on a separate basis, from Won 89,687 billion in the first three months of 2019 to Won 96,102 billion in the first three months of 2020. The decrease in the average yield on corporate loans reflected the decrease in the general level of interest rates in Korea in the first three months of 2020 compared to the first three months of 2019. The increase in the average balance of corporate loans was primarily due to an increase in the demand for such loans due to Korean companies' needs for increased liquidity in light of the COVID-19 outbreak.

Overall, on a separate basis, the average yield on loans decreased by 31 basis points from 3.58% in the first three months of 2019 to 3.27% in the first three months of 2020, while the average volume of loans increased 3.6% from Won 222,244 billion in the first three months of 2019 to Won 230,251 billion in the first three months of 2020.

Interest Expenses

Interest expenses decreased 13.1% from Won 917 billion in the first three months of 2019 to Won 797 billion in the first three months of 2020, primarily due to a 13.9% decrease in interest expenses on deposits from Won 756 billion in the first three months of 2019 to Won 651 billion in the first three months of 2020, which was further enhanced by an 8.3% decrease in interest expenses on debentures from Won 109 billion in the first three months of 2019 to Won 100 billion in the first three months of 2020. On a separate basis, the average cost of interest-bearing liabilities decreased by 24 basis points from 1.37% in the first three months of 2019 to 1.13% in the first three months of 2020, while the average balance of interest-bearing liabilities increased by 5.0% from Won 265,192 billion in the first three months of 2019 to Won 278,575 billion in the first three months of 2020.

The decrease in interest expenses on deposits resulted mainly from a decrease in interest expense on savings deposits. Interest expense on savings deposits, on a separate basis, decreased 16.4% from Won 679 billion in the first three months of 2019 to Won 567 billion in the first three months of 2020. Such decrease was the result of a 26 basis point decrease in the average cost on such deposits, on a separate basis, from 1.46% in the first three months of 2019 to 1.20% in the first three months of 2020, which was partially offset by a 0.8% increase in the average balance of savings deposits, on a separate basis, from Won 188,712 billion in the first three months of 2019 to Won 190,269 billion in the first three months of 2020. The decrease in the average cost of savings deposits was mainly due to the decrease in the general level of interest rates in Korea in the first three months of 2020 compared to the first three months of 2019. The increase in the average balance of savings deposits was attributable mainly to an increasing customer preference for safe assets in light of the uncertainty in financial markets in the first three months of 2020.

Overall, on a separate basis, the average cost of deposits decreased by 24 basis points from 1.31% in the first three months of 2019 to 1.07% in the first three months of 2020, and the average volume of deposits increased 4.8% from Won 228,301 billion in the first three months of 2019 to Won 239,281 billion in the first three months of 2020.

The decrease in interest expenses on debentures was primarily due to a decrease in the average cost of debentures, which was partially offset by an increase in the average balance of debentures. On a separate basis, the average cost of debentures decreased by 28 basis points from 2.68% in the first three months of 2019 to 2.40% in the first three months of 2020, while the average balance of debentures increased by 1.5% from Won 16,492 billion in the first three months of 2019 to Won 16,742 billion in the first three months of 2020. The decrease in the average cost of debentures was mainly due to the decrease in the general level of interest rates in Korea in the first three months of 2020 compared to the first three months of 2019. The increase in the average balance of debentures was mainly attributable to the Issuer's increased use of debentures to meet its funding needs.

Net Interest Margin

On a separate basis, net interest margin, which is net interest income as a percentage of average interest-earning assets, decreased by 7 basis points from 1.88% in the first three months of 2019 to 1.81% in the first three months of 2020, as a 5.2% increase in the average balance of interest-earning assets, on separate basis, from Won 270,557 billion in the first three months of 2019 to Won 284,623 billion in the first three months of 2020 outpaced a 2.3% increase in net interest income, on a separate basis, from Won 1,254 billion in the first three months of 2019 to Won 1,283 billion in the first three months of 2020. On a separate basis, the decrease in interest income was outpaced by the decrease in interest expense, resulting in the increase in net interest income. The decrease in net interest margin was driven mainly by a decrease in the Issuer's net interest spread from 1.85% in the first three months of 2019 to 1.79% in the first three months of 2020. The decrease in the Issuer's net interest spread reflected a larger decrease in the average yield on interest-earning assets between the two periods compared to the decrease in the average cost of interest-bearing liabilities, as interest rates on interest-bearing liabilities adjusted later than those on interest-earning assets in the context of a lower interest rate environment in the first three months of 2020. See "*Risk Factors – General Risks Relating to the Issuer – An increase in interest rates would 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.*"

Net Commission Income

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

	For the three months ended 31 March		Percentage changes
	2019	**2020**	
	(in billions of Won, except percentages)		
Commission income	₩ 273	₩ 288	5.5%
Commission expenses	(97)	(99)	2.1
Net commission income	₩ 176	₩ 188	6.8%

The Issuer's net commission income increased 6.8% from Won 176 billion in the first three months of 2019 to Won 188 billion in the first three months of 2020, as a 5.5% increase in commission income from Won 273 billion in the first three months of 2019 to Won 288 billion in the first three months of 2020 was slightly offset by a 2.1% increase in commission expenses from Won 97 billion in the first three months of 2019 to Won 99 billion in the first three months of 2020.

The increase in commission income resulted mainly from a 66.7% increase in commission income from asset management services from Won 15 billion in the first three months of 2019 to Won 25 billion in the first three months of 2020, primarily due to an expansion in the Issuer's asset management business.

The increase in commission expenses resulted mainly from a 50.0% increase in commission expenses from loans and credits from Won 6 billion in the first three months of 2019 to Won 9 billion in the first three months of 2020, primarily due to an increase in the Issuer's loan and credit portfolio.

Net Gain (Loss) on Financial Instruments

The following table shows, for the periods indicated, the components of the Issuer's net gain (loss) on financial instruments.

	For the three months ended 31 March		Percentage changes
	2019	2020	
	(in billions of Won, except percentages)		
Net gain (loss) on financial instruments at FVTPL	₩ 46	₩ (80)	N/M[1]
Net gain on financial assets at FVTOCI	9	44	388.9%
Net gain on disposal of financial assets at amortised cost	0	1	N/A[2]
Net gain (loss) on financial instruments	₩ 55	₩ (35)	N/M

Notes:

(1) N/M means not meaningful.

(2) N/A means not applicable.

The Issuer's net gain (loss) on financial instruments changed from a net gain of Won 55 billion in the first three months of 2019 to a net loss of Won 35 billion in the first three months of 2020, primarily due to a change in net gain (loss) on financial instruments at FVTPL from a net gain of Won 46 billion in the first three months of 2019 to a net loss of Won 80 billion in the first three months of 2020, which was partially offset by a 388.9% increase in net gain on financial assets at FVTOCI from Won 9 billion in the first three months of 2019 to Won 44 billion in the first three months of 2020.

The change in net gain (loss) on financial instruments at FVTPL resulted mainly from a change in net gain (loss) on financial assets at FVTPL from a net gain of Won 80 billion in the first three months of 2019 to a net loss of Won 23 billion in the first three months of 2020, which was primarily attributable to a change in net gain (loss) on the disposal of such assets from a net gain of Won 22 billion in the first three months of 2019 to a net loss of Won 33 billion in the first three months of 2020 and a change in net gain (loss) on the valuation of such assets from a net gain of Won 32 billion in the first three months of 2019 to a net loss of Won 10 billion in the first three months of 2020. Both the change in net gain (loss) on the disposal of such assets and the change in net gain (loss) on the valuation of such assets were primarily due to a general decrease in stock prices in the first three months of 2020 resulting from uncertainties in the global financial markets due to the COVID-19 pandemic.

The increase in net gain on financial assets at FVTOCI resulted from a 500.0% increase in gains on the disposals of financial assets at FVTOCI from Won 7 billion in the first three months of 2019 to Won 42 billion in the first three months of 2020. Such increase in gains on the disposals of such assets was primarily due to the decrease in the policy rate set by the Bank of Korea in the first three months of 2020 compared to the first three months of 2019, which led to an increase in value of such assets.

Net Other Operating Expenses

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

	For the three months ended 31 March				Percentage changes
	2019		2020		
	(in billions of Won, except percentages)				
Other operating income	₩	336	₩	759	125.9%
Other operating expenses		(437)		(861)	97.0
Net other operating expenses	₩	(101)	₩	(103)	2.0%

Net other operating expenses increased 2.0% from Won 101 billion in the first three months of 2019 to Won 103 billion in the first three months of 2020, as a 97.0% increase in other operating expenses from Won 437 billion in the first three months of 2019 to Won 861 billion in the first three months of 2020 was mostly offset by a 125.9% increase in other operating income from Won 336 billion in the first three months of 2019 to Won 759 billion in the first three months of 2020.

Other operating income includes principally gains on valuation of hedging instruments, gains on valuation of hedged items, gains from changes in foreign exchange rates, transfers from other provisions and miscellaneous other operating income. The increase in other operating income was mainly attributable to a 142.7% increase in gains from changes in foreign exchange rates from Won 274 billion in the first three months of 2019 to Won 665 billion in the first three months of 2020. This increase, which was principally due to the overall depreciation of the Won in the first three months of 2020 compared to the first three months of 2019, was largely offset by a 165.9% increase in loss from changes in foreign exchange rates from Won 223 billion in the first three months of 2019 to Won 593 billion in the first three months of 2020, which is recorded as part of other operating expenses. On a net basis, net gain on changes in foreign exchange rates increased 41.2% from Won 51 billion in first three months of 2019 to Won 72 billion in the first three months of 2020.

Other operating expenses include principally loss on valuation of hedging instruments, loss on valuation of hedged items, loss from changes in foreign exchange rate, fund contributions, transfers to other provisions and miscellaneous other operating expenses. The increase in other operating expenses was mainly attributable to a 165.9% increase in loss from changes in foreign exchange rates from Won 223 billion in the first three months of 2019 to Won 593 billion in the first three months of 2020, which mainly reflected the overall depreciation of the Won in the first three months of 2020 compared to the first three months of 2019. This increase was more than offset by an increase in gains from changes in foreign exchange rates, which is recorded as part of other operating income as discussed above.

Transfers in Allowances for Expected Credit Losses

Transfers in allowances for expected credit losses decreased 32.9% from Won 76 billion in the first three months of 2019 to Won 51 billion in the first three months of 2020, primarily due to a decrease in such transfers for loans and receivables at amortised cost, which was partially offset by a change in such transfers for acceptances and guarantees from a reversal to a transfer.

The Issuer's transfers in allowances for expected credit losses for loans and receivables at amortised cost decreased 56.9% from Won 123 billion in the first three months of 2019 to Won 53 billion in the first three months of 2020, primarily due to improvement in the overall credit quality of such loans and receivables.

The Issuer's transfers for acceptances and guarantees changed from a reversal of Won 39 billion in the first three months of 2019 to a transfer of Won 5 billion in the first three months of 2020, mainly due to changes in the levels of exposure to shipbuilding companies in the form of refund guarantees by the Issuer at the relevant times.

General and Administrative Expenses

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

	For the three months ended 31 March		Percentage changes
	2019	**2020**	
	(in billions of Won, except percentages)		
Employee benefits	₩ (524)	₩ (537)	2.5%
Depreciation and amortisation expenses	(99)	(109)	10.1
Other selling and administrative expenses	(120)	(130)	8.3
Total general and administrative expenses	₩ (743)	₩ (776)	4.4%

General and administrative expenses increased 4.4% from Won 743 billion in the first three months of 2019 to Won 776 billion in the first three months of 2020. Such increase was due to a 2.5% increase in employee benefits from Won 524 billion in the first three months of 2019 to Won 537 billion in the first three months of 2020, a 10.1% increase in depreciation and amortisation expenses from Won 99 billion in the first three months of 2019 to Won 109 billion in the first three months of 2020 and an 8.3% increase in other selling and administrative expenses from Won 120 billion in the first three months of 2019 to Won 130 billion in the first three months of 2020.

The increase in employee benefits resulted primarily from increases in salary and fringe benefits as well as retirement expenses, which were primarily attributable to an increase in the number of the Issuer's employees. The increase in depreciation and amortisation expenses was mainly due to increased depreciation of buildings, office equipment and increased amortisation of intangible assets, while the increase in other selling and administrative expenses was principally due to increases in expenses from service contracts and supplies.

Operating Income

Due to the factors described above, the Issuer's operating income decreased 9.0% from Won 577 billion in the first three months of 2019 to Won 525 billion in the first three months of 2020.

Net Other Expenses

Net other expenses decreased 1.3% from Won 79 billion in the first three months of 2019 to Won 78 billion in the first three months of 2020, as a 22.2% increase in other income from Won 9 billion in the first three months of 2019 to Won 11 billion in the first three months of 2020 was partially offset by a 1.1.% increase in other expenses from Won 88 billion in the first three months of 2019 to Won 89 billion in the first three months of 2020.

Other income includes principally gains on disposal of assets, rent income, gains on disposal of investments in affiliates and miscellaneous income. Other income increased primarily due to increases in gain on disposal of assets and miscellaneous income.

Other expenses include principally loss on disposal of assets, impairment loss of assets, expenses related to collecting receivables, agricultural support project expenses, expenses on restoration, loss on disposal of investments in affiliates and miscellaneous expenses. Other expenses increased primarily due to increases in loss on disposal of assets and agricultural support project expenses.

Income Before Income Tax Expense

Due to the factors described above, the Issuer's income before income tax expense decreased 11.9% from Won 505 billion in the first three months of 2019 to Won 445 billion in the first three months of 2020.

Income Tax Expense

Income tax expense decreased 6.5% from Won 138 billion in the first three months of 2019 to Won 129 billion in the first three months of 2020, primarily as a result of the decrease in the Issuer's taxable income. The Issuer's effective tax rate was 27.4% in the first three months of 2019 and 28.9% in the first three months of 2020.

Net Income

Due to the factors described above, the Issuer's net income for the period decreased 13.7% from Won 366 billion in the first three months of 2019 to Won 316 billion in the first three months of 2020.

Comparison of 2019 to 2018

The following table shows the principal components of the Issuer's results of operations for the years indicated.

	For the year ended 31 December		Percentage changes
	2018[1]	2019	
	(in billions of Won, except percentages)		
Net interest income	₩ 5,199	₩ 5,166	(0.6)%
Net commission income	546	685	25.5
Net gain (loss) on financial instruments	174	(192)	N/M[2]
Net other operating expenses	(418)	(69)	(83.5)
Transfer in allowances for expected credit losses	(585)	(189)	(67.7)
General and administrative expenses	(2,932)	(2,981)	1.7
Operating income	1,984	2,421	22.0
Net gain on valuation of equity method investments	8	5	(37.5)
Net other expenses	(328)	(328)	0.0
Income before income tax expense	1,664	2,098	26.1
Income tax expense	(441)	(580)	31.5
Net income	₩ 1,223	₩ 1,517	24.0

Notes:

(1) Net interest income and net commission income do not reflect certain adjustments in connection with K-IFRS 1115 that are reflected in the information for 2019. See Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

(2) N/M means not meaningful.

Net Interest Income

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

	For the year ended 31 December		Percentage changes
	2018[(1)]	2019	
	(in billions of Won, except percentages)		
Interest income:			
Deposits	₩ 55	₩ 78	41.8%
Financial assets at FVTPL	127	124	(2.4)
Financial assets at FVTOCI	399	509	27.6
Securities at amortised cost	203	217	6.9
Loans and other receivables at amortised cost	7,574	7,915	4.5
Others	10	19	90.0
Total interest income	8,368	8,862	5.9
Interest expenses:			
Deposits due to customers	(2,550)	(3,096)	21.4
Debentures	(428)	(414)	(3.3)
Borrowings	(139)	(125)	(10.1)
Others	(52)	(61)	15.1
Total interest expenses	(3,169)	(3,696)	16.6
Net interest income	₩ 5,199	₩ 5,166	(0.6)%

Note:

(1) Does not reflect certain adjustments in connection with K-IFRS 1115 that are reflected in the information for 2019. See Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

Interest Income

Interest income increased 5.9% from Won 8,368 billion in 2018 to Won 8,862 billion in 2019, primarily due to a 4.5% increase in interest on loans and other receivables at amortised cost from Won 7,574 billion in 2018 to Won 7,915 billion in 2019, which was enhanced by a 27.6% increase in interest on financial assets at FVTOCI from Won 399 billion in 2018 to Won 509 billion in 2019. On a separate basis, the average balance of interest-earning assets increased 6.9% from Won 261,893 billion in 2018 to Won 279,886 billion in 2019, and the average yield on interest-earning assets decreased by 3 basis points from 3.15% in 2018 to 3.12% in 2019.

The increase in interest income on loans and other receivables at amortised cost was largely due to an increase in interest income on retail loans, which was enhanced by an increase in interest income on corporate loans. Such increases were partially offset by a decrease in interest income on public loans. More specifically:

- Interest income on retail loans, on a separate basis, increased 11.7% from Won 3,264 billion in 2018 to Won 3,645 billion in 2019. Such increase was primarily the result of a 10.1% increase in the average balance of such loans, on a separate basis, from Won 98,363 billion in 2018 to Won 108,289 billion in 2019, which was enhanced by a 5 basis point increase in the average yield on such loans, on a separate basis, from 3.32% in 2018 to 3.37% in 2019. The increase in the average balance of retail loans was primarily due to an increase in mortgage, home-equity and other residential loans, reflecting a rising demand for such loans primarily due to increased demand for residential property in certain areas and low interest rates, accompanied by an increase in the prices of such property. The increase in the average yield on retail loans mainly reflected an overall increase in the general level of interest rates in Korea in 2019 compared to 2018.

- Interest income on corporate loans, on a separate basis, increased 4.8% from Won 2,658 billion in 2018 to Won 2,785 billion in 2019. Such increase was the result of a 5.5% increase in the average balance of such loans, on a separate basis, from Won 86,468 billion in 2018 to Won 91,219 billion in 2019, which was partially offset by a 2 basis point decrease in the average yield on such loans, on a separate basis, from 3.07% in 2018 to 3.05% in 2019. The increase in the average balance of corporate loans was primarily attributable to strategic measures taken by the Issuer, such as offering preferred interest rates and reinforcing its sales force, specifically targeting its corporate customers. The decrease in the average yield on corporate loans was mainly due to a decrease in the general level of interest rates in Korea commencing in the second half of 2019, which was reflected in such loans earlier than other types of loans.

- Interest income on public loans, on a separate basis, decreased 41.5% from Won 310 billion in 2018 to Won 182 billion in 2019. Such decrease was the result of a 43.7% decrease in the average balance of such loans, on a separate basis, from Won 11,007 billion in 2018 to Won 6,196 billion in 2019, which was partially offset by an 11 basis point increase in the average yield on such loans, on a separate basis, from 2.82% in 2018 to 2.93% in 2019. The decrease in the average balance of public loans was primarily due to a decrease in loans to local governments, public enterprises and non-profit institutions, including educational institutions, reflecting increased repayments of such loans, including loans to educational institutions, by the Government resulting from an increase in tax collected. The increase in the average yield on public loans mainly reflected the overall increase in the general level of interest rates in Korea in 2019 compared to 2018.

Overall, on a separate basis, the average volume of loans increased 5.9% from Won 214,080 billion in 2018 to Won 226,609 billion in 2019, while the average yield on loans decreased by 4 basis points from 3.53% in 2018 to 3.49% in 2019.

The increase in interest income on financial assets at FVTOCI was primarily driven by an increase in the average balance of such assets. Interest income on financial assets at FVTOCI, on a separate basis, increased 27.6% from Won 399 billion in 2018 to Won 509 billion in 2019. Such increase was primarily the result of a 24.0% increase in the average balance of such securities, on a separate basis, from Won 20,253 billion in 2018 to Won 25,116 billion in 2019, which was enhanced by a 6 basis point increase in the average yield on such securities from 1.97% in 2018 to 2.03% in 2019. The increase in the average balance of such securities was primarily due to an increase in the amount of debt securities that the Issuer held as financial assets at FVTOCI as a result of its preference for lower-risk assets to strengthen its liquidity management and efforts to increase interest income from such assets. The increase in the average yield on such securities resulted mainly from the overall increase in the general level of interest rates in Korea in 2019 compared to 2018.

Interest Expenses

Interest expenses increased 16.6% from Won 3,169 billion in 2018 to Won 3,696 billion in 2019, due to a 21.4% increase in interest expenses on deposits from Won 2,550 billion in 2018 to Won 3,096 billion in 2019, which was slightly offset by a 3.3% decrease in debentures from Won 428 billion in 2018 to Won 414 billion in 2019 and a 10.1% decrease in borrowings from Won 139 billion in 2018 to Won 125 billion in 2019. On a separate basis, the average cost of interest-bearing liabilities increased by 11 basis points from 1.21% in 2018 to 1.32% in 2019, and the average balance of interest-bearing liabilities increased 7.1% from Won 256,535 billion in 2018 to Won 274,752 billion in 2019.

The increase in interest expenses on deposits was largely due to an increase in interest expense on savings deposits. Interest expense on savings deposits, on a separate basis, increased 21.5% from Won 2,292 billion in 2018 to Won 2,785 billion in 2019. Such increase was the result of a 13 basis point increase in the average cost on such deposits, on a separate basis, from 1.28% in 2018 to 1.41% in 2019 and a 9.9% increase in the average balance of such deposits, on a separate basis, from Won 179,624 billion in 2018 to Won 197,446 billion in 2019. The increase in the average cost of savings deposits was mainly due to the overall increase in the general level of interest rates in Korea in 2019 compared to 2018. The increase in the average balance of savings deposits was attributable mainly to increasing customer preference for such deposits compared to other investment means in a light of the continuing uncertainty in financial markets in 2019.

Overall, on a separate basis, the average cost of deposits increased by 12 basis points from 1.15% in 2018 to 1.27% in 2019, and the average volume of deposits increased 9.6% from Won 217,773 billion in 2018 to Won 238,768 billion in 2019.

The decrease in interest expenses on debentures was due to a decrease in the average balance of debentures, which was partially offset by an increase in the average cost of debentures. On a separate basis, the average volume of debentures decreased 7.5% from Won 16,825 billion in 2018 to Won 15,567 billion in 2019, and the average cost of debentures increased by 11 basis points from 2.54% in 2018 to 2.65% in 2019. The decrease in the average balance of debentures was mainly attributable to the Issuer's decreased use of debentures to meet its funding needs due to the increase in deposits as discussed above. The increase in the average cost of debentures was mainly due to the overall increase in the general level of interest rates in Korea in 2019 compared to 2018.

The decrease in interest expenses on borrowings was mainly due to a decrease in the average cost of borrowings, which was enhanced by a decrease in the average balance of borrowings. On a separate basis, the average cost of borrowings decreased by 7 basis points from 1.09% in 2018 to 1.02% in 2019, and the average volume of borrowings decreased 2.1% from Won 11,736 billion in 2018 to Won 11,493 billion in 2019. The decrease in the average cost of borrowings was mainly due to the decrease in the general level of interest rates in Korea commencing in the second half of 2019, which was reflected in borrowings earlier than other types of products. The decrease in the average balance of borrowings was mainly attributable to the Issuer's decreased use of borrowings to meet its funding needs due to the increase in deposits discussed above.

Net Interest Margin

On a separate basis, net interest margin decreased by 13 basis points from 1.96% in 2018 to 1.83% in 2019, as a 6.9% increase in the average balance of interest-earning assets from Won 261,893 billion in 2018 to Won 279,886 billion in 2019 was enhanced by a 0.2% decrease in net interest income from Won 5,140 billion in 2018 to Won 5,131 billion in 2019. On a separate basis, mainly due to the adjustments made in 2019 in connection with K-IFRS 1115, with respect to which similar adjustments were not made in 2018, the increase in interest income was outpaced by the increase in interest expense, resulting in the decrease in net interest income. The decrease in net interest margin was driven mainly by a decrease in the Issuer's net interest spread from 1.94% in 2018 to 1.80% in 2019. The decrease in the Issuer's net interest spread reflected an increase in the average cost of interest-bearing liabilities between the two periods compared to a decrease in the average yield on interest-earning assets, as interest rates on interest-bearing liabilities adjusted later than those on interest-earning assets in the context of a lower interest rate environment in the second half of 2019. See "*Risk Factors – General Risks Relating to the Issuer – An increase in interest rates would 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*."

Net Commission Income

The following table shows, for the years indicated, the components of the Issuer's net commission income.

	For the year ended 31 December		Percentage changes
	2018[1]	**2019**	
	(in billions of Won, except percentages)		
Commission income	₩ 1,112	₩ 1,120	0.7%
Commission expenses	(566)	(435)	(23.1)
Net commission income	₩ 546	₩ 685	25.5%

Note:

(1) Does not reflect certain adjustments in connection with K-IFRS 1115 that are reflected in the information for 2019. See Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

The Issuer's net commission income increased 25.5% from Won 546 billion in 2018 to Won 685 billion in 2019, as a 23.1% decrease in commission expenses from Won 566 billion in 2018 to Won 435 billion in 2019 was further enhanced by a 0.7% increase in commission income from Won 1,112 billion in 2018 to Won 1,120 billion in 2019.

The increase in commission income resulted mainly from an 18.8% increase in commission income from trust services from Won 133 billion in 2018 to Won 158 billion in 2019, which was primarily attributable to an increase in the average balance of trust funds. Such increase was partially offset by a 6.2% decrease in commission from credit cards from Won 357 billion in 2018 to Won 335 billion in 2019, mainly as a result of certain adjustments made in connection with K-IFRS 1115 in 2019, as described above.

The decrease in commission expenses resulted mainly from a 30.1% decrease in commission expenses from credit cards from Won 458 billion in 2018 to Won 320 billion in 2019, which was partially offset by a 24.0% increase in commission expenses from loans and credits from Won 25 billion in 2018 to Won 31 billion in 2019. The decrease in commission expenses from credit cards was primarily due to certain adjustments made in connection with K-IFRS 1115, pursuant to which certain expenses relating to credit cards that were regarded as consideration paid to customers were deducted from interest income or commission income in 2019 so that such income is presented net of the associated commission expenses. If such adjustments were also made to the 2018 figures, interest income and commission income would have been reduced by Won 113 billion and Won 15 billion, respectively, and commission expenses would have been reduced by Won 128 billion. See Note 41 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

Net Gain (Loss) on Financial Instruments

The following table shows, for the years indicated, the components of the Issuer's net gain (loss) on financial instruments.

	For the year ended 31 December		Percentage changes
	2018	2019	
	(in billions of Won, except percentages)		
Net gain (loss) on financial instruments at FVTPL	₩ 192	₩ (184)	N/M[1]
Net gain (loss) on financial assets at FVTOCI	(0)	22	N/A[2]
Net loss on disposal of financial assets at amortised cost	(18)	(30)	66.7
Net gain (loss) on financial instruments	₩ 174	₩ (192)	N/M

Notes:

(1) N/M means not meaningful.

(2) N/A means not applicable.

The Issuer's net gain (loss) on financial instruments changed from a net gain of Won 174 billion in 2018 to a net loss of Won 192 billion in 2019, primarily due to a change in net gain (loss) on financial instruments at FVTPL from a net gain of Won 192 billion in 2018 to a net loss of Won 184 billion in 2019.

The change in net gain (loss) on financial instruments at FVTPL resulted mainly from a 381.8% increase in net loss on trading derivatives from Won 99 billion in 2018 to Won 477 billion in 2019, which was primarily the result of a significant increase in net loss on the disposal of such derivatives. Such increase was primarily attributable to a combination of the volatility of the exchange rate of the Korean Won against major foreign currencies, particularly the U.S. dollar, and the mix of the Issuer's positions for trading derivatives.

Net Other Operating Expenses

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

	For the year ended 31 December		Percentage changes
	2018	2019	
	(in billions of Won, except percentages)		
Other operating income	₩ 822	₩ 1,244	51.3%
Other operating expenses	(1,240)	(1,313)	6.0
Net other operating expenses	₩ (418)	₩ (69)	(83.5)%

The Issuer's net other operating expenses decreased 83.5% from Won 418 billion in 2018 to Won 69 billion in 2019, as a 51.3% increase in other operating income from Won 822 billion in 2018 to Won 1,244 billion in 2019 was partially offset by a 6.0% increase in other operating expenses from Won 1,240 billion in 2018 to Won 1,313 billion in 2019.

The increase in other operating income was mainly attributable to a 46.1% increase in gains from changes in foreign exchange rates from Won 681 billion in 2018 to Won 995 billion in 2019. This increase, which was principally due to the overall depreciation of the Won in 2019 compared to 2018, was enhanced by a 12.3% decrease in loss from changes in foreign exchange rates from Won 519 billion in 2018 to Won 455 billion in 2019, which is recorded as part of other operating expenses. On a net basis, net gain on changes in foreign exchange rates increased 233.3% from Won 162 billion in 2018 to Won 540 billion in 2019.

The increase in other operating expenses were mainly attributable to an 8.9% increase in fund contributions from Won 494 billion in 2018 to Won 538 billion in 2019, a 253.3% increase in loss on valuation of hedged items from Won 15 billion in 2018 to Won 53 billion in 2019, a 16.0% increase in miscellaneous other operating expenses from Won 188 billion in 2018 to Won 218 billion in 2019 and a 184.6% increase in transfers to other provisions from Won 13 billion in 2018 to Won 37 billion in 2019. Such increases were partially offset by a 12.3% decrease in loss from changes in foreign exchange rates from Won 519 billion in 2018 to Won 455 billion in 2019, which mainly reflected the overall depreciation of the Won in 2019 compared to 2018, and was enhanced by an increase in gains from changes in foreign exchange rates, which is recorded as part of other operating income as discussed above.

Transfers in Allowances for Expected Credit Losses

Transfers in allowances for expected credit losses decreased 67.7% from Won 585 billion in 2018 to Won 189 billion in 2019, primarily due to a 52.5% decrease in such transfers for loans and receivables at amortised cost from Won 554 billion in 2018 to Won 263 billion in 2019, which was mainly attributable to improvement in the overall credit quality of such loans and receivables.

General and Administrative Expenses

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

	For the year ended 31 December		Percentage changes
	2018	2019	
	(in billions of Won, except percentages)		
Employee benefits	₩ (1,985)	₩ (1,970)	(0.8)%
Depreciation and amortisation expenses	(296)	(403)	36.1
Other selling and administrative expenses	(651)	(608)	(6.6)
Total general and administrative expenses	₩ (2,932)	₩ (2,981)	1.7%

General and administrative expenses increased 1.7% from Won 2,932 billion in 2018 to Won 2,981 billion in 2019. Such increase was due to a 36.1% increase in depreciation and amortisation expenses from Won 296 billion in 2018 to Won 403 billion in 2019, which was partially offset by a 6.6% decrease in other selling and administrative expenses from Won 651 billion in 2018 to Won 608 billion in 2019 and a 0.8% decrease in employee benefits from Won 1,985 billion in 2018 to Won 1,970 billion in 2019.

The increase in depreciation and amortisation expenses was principally due to the Issuer's adoption of K-IFRS 1116, which resulted in an increase in lease amortisation expenses that was offset in part by a decrease in rent expenses. For additional information on K-IFRS 1116 and the impact of its application to the Issuer's consolidated financial statements, see Note 2.2 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included elsewhere in this Offering Circular.

The decrease in other selling and administrative expenses was due to a 71.9% decrease in rental expenses from Won 121 billion in 2018 to Won 34 billion in 2019, which was partially offset by a 13.9% increase in service contract expenses from Won 137 billion in 2018 to Won 156 billion in 2019. The decrease in rental expenses was principally due to the Issuer's adoption of K-IFRS 1116, as discussed above.

The decrease in employee benefits resulted primarily from a 35.1% decrease in termination benefits from Won 77 billion in 2018 to Won 50 billion in 2019 and a 1.3% decrease in salary benefits from Won 1,279 billion in 2018 to Won 1,262 billion in 2019, which were offset in part by an 8.7% increase in fringe benefits from Won 427 billion in 2018 to Won 464 billion in 2019.

Operating Income

Due to the factors described above, the Issuer's operating income increased 22.0% from Won 1,984 billion in 2018 to Won 2,421 billion in 2019.

Net Other Expenses

Net other expenses remained stable at Won 328 billion in 2018 and 2019, as a 6.1% increase in other income from Won 49 billion in 2018 to Won 52 billion in 2019 was offset by a 0.8% increase in other expenses from Won 378 billion in 2018 to Won 381 billion in 2019.

Income Before Income Tax Expense

Due to the factors described above, the Issuer's income before income tax expense increased 26.1% from Won 1,664 billion in 2018 to Won 2,098 billion in 2019.

Income Tax Expense

Income tax expense increased 31.5% from Won 441 billion in 2018 to Won 580 billion in 2019, primarily as a result of the increase in the Issuer's taxable income. The Issuer's effective tax rate was 26.5% in 2018 and 27.7% in 2019.

Net Income

Due to the factors described above, the Issuer's net income for the year increased 24.0% from Won 1,223 billion in 2018 to Won 1,517 billion in 2019.

Financial Condition

Assets

The following table sets out the principal components of the Issuer's assets on a consolidated basis as of the dates indicated.

	As of 31 December		As of 31 March	Percentage changes	
	2018	**2019**	**2020**	**31 December 2018/ 31 December 2019**	**31 December 2019/31 March 2020**
	(in billions of Won)			*(percentage)*	
Cash and due from banks	₩ 6,195	₩ 5,946	₩ 4,554	(4.0)%	(23.4)%
Financial assets at FVTPL	10,152	9,524	10,480	(6.2)	10.0
Derivative assets	465	536	1,132	15.3	111.2
Financial assets at FVTOCI	20,073	21,931	27,224	9.3	24.1
Securities at amortised cost	9,336	12,442	15,374	33.3	23.6
Loans at amortised cost	232,595	241,224	246,821	3.7	2.3
Investments in associates	98	103	99	5.1	(3.9)
Tangible assets	2,676	2,827	2,802	5.6	(0.9)
Investment properties	581	590	584	1.5	(1.0)
Intangible assets	397	438	452	10.3	3.2
Deferred income tax assets	579	514	477	(11.2)	(7.2)
Other assets	103	112	94	8.7	(16.1)
Non-current assets classified as held for sale	0	0	0	N/A[1]	N/A
Total assets	₩ 283,250	₩ 296,184	₩ 310,094	4.6%	4.7%

Note:

(1) N/A means not applicable.

Comparison as of 31 March 2020 and 31 December 2019

Total assets increased 4.7% from Won 296,184 billion as of 31 December 2019 to Won 310,094 billion as of 31 March 2020, principally due to increases in loans at amortised cost and financial assets at FVTOCI, which was further enhanced by an increase in securities at amortised cost.

Loans at amortised cost increased 2.3% from Won 241,224 billion as of 31 December 2019 to Won 246,821 billion as of 31 March 2020, primarily due to a 2.1% increase in loans in Korean Won from Won 210,442 billion as of 31 December 2019 to Won 214,942 billion as of 31 March 2020, which was enhanced by a 43.4% increase in receivables from Won 3,120 billion as of 31 December 2019 to Won 4,474 billion as of 31 March 2020. The increase in loans in Korean Won was primarily attributable to a 3.7% increase in corporate loans from Won 93,457 billion as of 31 December 2019 to Won 96,871 billion as of 31 March 2020, which was enhanced by a 1.5% increase in household loans from Won 112,690 billion as of 31 December 2019 to Won 114,375 billion as of 31 March 2020.

Financial assets at FVTOCI increased 24.1% from Won 21,931 billion as of 31 December 2019 to Won 27,224 billion as of 31 March 2020, primarily due to a 25.0% increase in debt securities from Won 21,518 billion as of 31 December 2019 to Won 26,894 billion as of 31 March 2020, which in turn was mainly caused by a 14.9% increase in financial bonds from Won 13,846 billion as of 31 December 2019 to Won 15,913 billion as of 31 March 2020 and a 54.2% increase in government bonds from Won 3,557 billion as of 31 December 2019 to Won 5,484 billion as of 31 March 2020.

Securities at amortised cost increased 23.6% from Won 12,442 billion as of 31 December 2019 to Won 15,374 billion as of 31 March 2020, primarily due a 40.4% increase in government bonds from Won 4,973 billion as of 31 December 2019 to Won 6,983 billion as of 31 March 2020.

Comparison as of 31 December 2019 and 31 December 2018

Total assets increased 4.6% from Won 283,250 billion as of 31 December 2018 to Won 296,184 billion as of 31 December 2019, principally due to an increase in loans at amortised cost, which was further enhanced by increases in securities at amortised cost and financial assets at FVTOCI.

Loans at amortised cost increased 3.7% from Won 232,595 billion as of 31 December 2018 to Won 241,224 billion as of 31 December 2019, primarily due to a 5.4% increase in loans in Korean Won from Won 199,626 billion as of 31 December 2018 to Won 210,442 billion as of 31 December 2019, which was partially offset by a 37.8% decrease in receivables from Won 5,017 billion as of 31 December 2018 to Won 3,120 billion as of 31 December 2019. The increase in loans in Korean Won was primarily attributable to a 9.2% increase in household loans from Won 103,174 billion as of 31 December 2018 to Won 112,690 billion as of 31 December 2019 and a 6.7% increase in corporate loans from Won 87,561 billion as of 31 December 2018 to Won 93,457 billion as of 31 December 2019.

Securities at amortised cost increased 33.3% from Won 9,336 billion as of 31 December 2018 to Won 12,442 billion as of 31 December 2019, primarily due to a 56.3% increase in government bonds from Won 3,181 billion as of 31 December 2018 to Won 4,973 billion as of 31 December 2019 and a 116.1% increase in financial bonds from Won 1,420 billion as of 31 December 2018 to Won 3,069 billion as of 31 December 2019.

Financial assets at FVTCOI increased 9.3% from Won 20,073 billion as of 31 December 2018 to Won 21,931 billion as of 31 December 2019, primarily due to a 9.2% increase in debt securities from Won 19,697 billion as of 31 December 2018 to Won 21,518 billion as of 31 December 2019, which in turn was mainly caused by a 6.4% increase in financial bonds from Won 13,015 billion as of 31 December 2018 to Won 13,846 billion as of 31 December 2019 and a 54.5% increase in corporate bonds from Won 1,400 billion as of 31 December 2018 to Won 2,163 billion as of 31 December 2019.

For more information on the Issuer's assets, see "*Assets and Liabilities*."

Liabilities and Equity

The following table sets out the principal components of the Issuer's liabilities and equity on a consolidated basis as of the dates indicated.

	As of 31 December		As of 31 March	Percentage changes	
	2018	2019	2020	31 December 2018/ 31 December 2019	31 December 2019/ 31 March 2020
	(in billions of Won)			*(percentage)*	
Liabilities:					
Deposits	₩ 224,230	₩ 236,384	₩ 247,414	5.4%	4.7%
Financial liabilities at FVTPL	13	13	13	0.0	0.0
Derivative liabilities	522	511	1,102	(2.1)	115.7
Borrowings	11,283	11,172	12,805	(1.0)	14.6
Debentures	16,828	15,819	17,280	(6.0)	9.2
Provisions	463	361	374	(22.0)	3.6
Current income tax liabilities	161	277	336	72.0	21.3
Net defined benefit liabilities	375	470	623	25.3	32.6
Other liabilities	13,440	14,312	13,766	6.5	(3.8)
Share capital repayable on demand	0	0	0	N/A[1]	N/A
Total liabilities	267,315	279,319	293,713	4.5	5.2
Equity:					
Capital stock	2,162	2,162	2,162	0.0	0.0
Other paid-in capital	9,848	9,848	9,848	0.0	0.0
Retained earnings	4,573	5,574	5,089	21.9	(8.7)
Other components of equity	(648)	(719)	(718)	11.0	(0.1)
Total equity	15,935	16,865	16,381	5.8	(2.9)
Total liabilities and equity	₩ 283,250	₩ 296,184	₩ 310,094	4.6%	4.7%

Note:

(1) N/A means not applicable.

Comparison as of 31 March 2020 and 31 December 2019

The Issuer's total liabilities increased 5.2% from Won 279,319 billion as of 31 December 2019 to Won 293,713 billion as of 31 March 2020, primarily due to an increase in deposits, which was further enhanced by increases in borrowings and debentures. Deposits increased 4.7% from Won 236,384 billion as of 31 December 2019 to Won 247,414 billion as of 31 March 2020, primarily due to a 3.9% increase in time deposits from Won 196,015 billion as of 31 December 2019 to Won 203,571 billion as of 31 March 2020, which was enhanced by a 6.4% increase in demand deposits from Won 38,849 billion as of 31 December 2019 to Won 41,322 billion as of 31 March 2020 and a 65.9% increase in certificates of deposit from Won 1,520 billion as of 31 December 2019 to Won 2,521 billion as of 31 March 2020. Borrowings increased 14.6% from Won 11,172 billion as of 31 December 2019 to Won 12,805 billion as of 31 March 2020, primarily due to a significant increase in call money. Debentures increased 9.2% from Won 15,819 billion as of 31 December 2019 to Won 17,280 billion as of 31 March 2020, primarily due to an increase in general and subordinated agricultural financial bonds denominated in Korean Won.

The Issuer's total equity decreased 2.9% from Won 16,865 billion as of 31 December 2019 to Won 16,381 billion as of 31 March 2020, due to an 8.7% decrease in retained earnings from Won 5,574 billion as of 31 December 2019 to Won 5,089 billion as of 31 March 2020, which in turn was mainly the result of a decrease in unappropriated retained earnings resulting from the payment of dividends for the fiscal year 2019. Such decrease was partially offset by increases in regulatory reserve for bad debts and legal reserve.

Comparison as of 31 December 2019 and 31 December 2018

The Issuer's total liabilities increased 4.5% from Won 267,315 billion as of 31 December 2018 to Won 279,319 billion as of 31 December 2019, primarily due to an increase in deposits. Deposits increased 5.4% from Won 224,230 billion as of 31 December 2018 to Won 236,384 billion as of 31 December 2019, primarily due to a 3.0% increase in time deposits from Won 190,372 billion as of 31 December 2018 to Won 196,015 billion as of 31 December 2019 and a 16.9% increase in demand deposits from Won 33,224 billion as of 31 December 2018 to Won 38,849 billion as of 31 December 2019.

The Issuer's total equity increased 5.8% from Won 15,935 billion as of 31 December 2018 to Won 16,865 billion as of 31 December 2019, primarily due to a 21.9% increase in retained earnings from Won 4,573 billion as of 31 December 2018 to Won 5,574 billion as of 31 December 2019, which in turn was mainly attributable to an increase in unappropriated retained earnings, enhanced by increases in the legal reserve and regulatory reserve for bad debts.

Liquidity

The Issuer's primary source of funding has historically been, and continues to be, customer deposits, particularly savings deposits. Deposits amounted to Won 224,230 billion as of 31 December 2018, Won 236,384 billion as of 31 December 2019 and Won 247,414 billion as of 31 March 2020, which represented 88.9%, 89.8% and 89.2% of the Issuer's total funding (consisting of deposits, borrowings and debentures), respectively. The Issuer benefits from having a substantial majority of local governments and other public entities deposit their treasury accounts at the Issuer, for which the Issuer typically pays lower rates of interest compared to the market interest rates it pays to non-governmental depositors. See "*Business–Relationship with the Government and Government Support–Government Supervision*." As of 31 March 2020, the treasury deposits of local governments and other public entities with the Issuer amounted to Won 66,624 billion, which represented 26.9% of the Issuer's total deposits.

The Issuer also obtains funding through borrowings and issuance of debentures. Borrowings amounted to Won 11,283 billion as of 31 December 2018, Won 11,172 billion as of 31 December 2019 and Won 12,805 billion as of 31 March 2020, representing 4.5%, 4.2% and 4.6%, respectively, of the Issuer's total funding. Debentures amounted to Won 16,828 billion as of 31 December 2018, Won 15,819 billion as of 31 December 2019 and Won 17,280 billion as of 31 March 2020, representing 6.7%, 6.0% and 6.2%, respectively, of the Issuer's total funding. From time to time, the Issuer issues other securities, such as subordinated debt and hybrid securities, in order to further improve the Issuer's liquidity, and the Issuer will continue to explore other capital raising opportunities subject to prevailing market and regulatory conditions. For example, the Issuer issued subordinated debt of Won 320 billion in 2020.

In addition, the Issuer from time to time receives capital contributions from its sole shareholder, NH Financial Group, which has been instrumental to improving the Issuer's capital adequacy. For example, the Issuer received capital injections from NH Financial Group of Won 450 billion, Won 500 billion, Won 400 billion and Won 200 billion in March 2013, September 2013, March 2015 and June 2018, respectively.

The Issuer's liquidity risks arise from withdrawals of deposits and maturities of its borrowings and debentures, as well as the Issuer's need to fund its lending, trading and investment activities and manage its trading positions. The Issuer believes it has a stable level of deposits, including the treasury deposits of local governments, which tend to remain with the Issuer notwithstanding fluctuations in market conditions. See "*Business–Relationship with the Government and Government Support–Government Supervision*."

The Issuer's goal in managing its liquidity is to be able to meet all of its liability repayments on time, even under adverse conditions, and fund all of its investment opportunities. For a discussion of how the Issuer manages its liquidity risk, see "*Risk Management–Liquidity Risk Management*."

The FSC requires each bank in Korea to maintain specific Won and foreign currency liquidity ratios. Such regulations require the Issuer to keep the ratios of liquid assets to liquid liabilities above certain minimum levels. For a description of these requirements, see "*Supervision and Regulation–Liquidity*."

Contractual Cash Obligations

The following table sets forth the Issuer's contractual cash obligations as of 31 March 2020.

	As of 31 March 2020 Payments due by period[1]						
	Less than 1 month	**1-3 months**	**3-6 months**	**6-12 months**	**1-5 years**	**More than 5 years**	**Total**
	(in billions of Won)						
Deposits	₩ 122,273	₩ 32,596	₩ 36,313	₩ 48,640	₩ 7,980	₩ 2,037	₩ 249,839
Borrowings	4,182	983	683	1,162	4,509	1,470	12,989
Debentures	25	2,138	1,290	2,155	10,857	1,847	18,312
Total	₩ 126,480	₩ 35,717	₩ 38,286	₩ 51,958	₩ 23,347	₩ 5,355	₩ 281,140

Note:

(1) Reflects all estimated contractual interest payments due on the Issuer's interest-bearing deposits, borrowings and debt securities issued, and the estimated contractual interest payments on borrowings and debt securities that were on a floating rate basis as of 31 March 2020 were computed as if the interest rate used on the last applicable date (for example, the interest payment date for such floating rate loans immediately preceding the determination date) were the interest rate applicable throughout the remainder of the term.

Commitments, Guarantees and Off-Balance Sheet Obligations

The Issuer has various commitments that are not reflected on its consolidated statements of financial position, which primarily consist of acceptances and guarantees, bills endorsed with recourse, insurance guarantees, credit lines for asset-backed securities ("**ABS**") and commitments on purchase of ABS. Guarantees and acceptances include credit derivatives and letters of credit.

The following table sets forth the Issuer's off-balance sheet commitments as of the dates indicated.

	As of 31 December		As of 31 March
	2018	**2019**	**2020**
	(in billions of Won)		
Confirmed acceptance and guarantees	₩ 2,767	₩ 2,987	₩ 2,799
Local currency	370	373	343
Foreign currency	2,397	2,614	2,457
Acceptances	134	136	97
Guarantees in acceptance of imported goods	15	39	49
Others	2,248	2,439	2,311
Unconfirmed acceptance and guarantees:	2,310	2,055	2,511
Issuance of local letter of credit	231	165	231
Issuance of import letter of credit	1,318	1,383	1,495
Other	761	507	785
Endorsed notes in foreign currencies	19	37	42
ABS credit lines	1,828	1,711	1,940
Commitments on purchase of ABS	0	876	1,112

Capital Adequacy

The Issuer is subject to capital adequacy requirements of the FSC. The requirements applicable commencing in December 2013 pursuant to the 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 Tier I common equity capital, total Tier I capital and total Tier I and Tier II capital to risk-weighted assets. See "*Supervision and Regulation–Capital Adequacy and Allowances*."

If a bank fails to maintain its capital adequacy ratios, the Korean regulatory authorities may impose penalties on such bank ranging from a warning to suspension no revocation of its license. See "*Risk Factors–General Risks Relating to the Issuer's Business–The Issuer may be required to raise additional capital if its capital adequacy ratios deteriorate or the applicable capital requirements change in the future, but the Issuer may not be able to do so on favourable terms or at all*."

The following table sets forth a summary of the Issuer's capital and capital adequacy ratios as of the dates indicated.

	As of 31 December		As of 31 March
	2018	**2019**	**2020**
	(in billions of Won, except percentages)		
Tier I capital	₩ 13,917	₩ 14,598	₩ 14,853
Tier I common equity capital	13,637	14,388	14,713
Tier II capital	3,051	2,929	3,038
Total core and supplementary capital	16,968	17,527	17,891
Risk-weighted assets	109,178	115,368	120,859
Credit risk	97,997	103,579	106,532
Market risk	2,288	2,770	2,904
Operational risk	8,450	9,019	9,047
Total Tier I and Tier II capital adequacy ratio	15.54%	15.19%	14.80%
Tier I capital adequacy ratio	12.75%	12.65%	12.29%
Tier I common equity capital adequacy ratio	12.49%	12.47%	12.17%
Tier II capital adequacy ratio	2.79%	2.54%	2.51%

BUSINESS

History

The Issuer was incorporated on 2 March 2012 by transferring the NACF's credit and banking business (excluding its mutual credit business) to the Issuer as a result of the Reorganisation (as defined below). The Issuer is a wholly-owned subsidiary of NH Financial Group, which is wholly-owned by the NACF.

The NACF

The NACF was established under the National Agricultural Cooperatives Federation Act (the "**NACF Act**"), which was passed on 29 July 1961. The NACF was incorporated on 15 August 1961 to act as an umbrella organisation for agricultural cooperatives and provide financing for the development of the agricultural industry in Korea.

The NACF Act was enacted to improve the economic, social and cultural status of farmers through autonomous cooperatives, enhance the standard of living of farmers by strengthening the competitiveness of the agricultural industry and contribute to the balanced development of the Korean economy. Under the NACF Act, the NACF's purpose is to promote the mutual interests of its member cooperatives and their sound development. Specifically, the NACF acts as the central bank for, as well as a regulator of, its member cooperatives, and is responsible for monitoring the financial health of all agricultural cooperatives in Korea. Member cooperatives engage in the mutual credit business, which involves receiving deposits from farmers and the general public and using such deposits to offer loans to farmers and agriculture-related businesses, as well as marketing, supplying, processing, and other businesses related to, agricultural products and services.

The Reorganisation

On 29 March 2011, the NACF Act was amended (the "**NACF Act Amendment**") to restructure the NACF's then organisational structure for the purposes of enhancing the specialisation, core strengths and accountability of each business segment of the NACF and thereby increasing the NACF's overall enterprise value. On 2 February 2012, the board of directors of the NACF approved the reorganisation plan (the "**Reorganisation Plan**") in accordance with the NACF Act Amendment, which included (i) splitting off its credit and banking business into the Issuer, its life insurance business into NongHyup Life Insurance Co., Ltd. ("**NH Life Insurance**") and its property insurance business into NongHyup Property & Casualty Insurance Co., Ltd. ("**NH Property & Casualty Insurance**"), and (ii) forming a financial holding company, NH Financial Group, to hold and invest in subsidiaries engaged in the financial business and forming a holding company, NongHyup Agribusiness Group Inc. ("**NH Agribusiness Group**"), to hold and invest in subsidiaries engaged in the agricultural and livestock businesses (collectively, the "**Reorganisation**"). The Reorganisation took effect on 2 March 2012.

The Reorganisation was completed in two steps in accordance with the NACF Act Amendment and the Korean Commercial Code. For the first step of the Reorganisation, the NACF formed the Issuer, NH Life Insurance and NH Property & Casualty Insurance and transferred its credit and banking business (excluding its mutual credit business) to the Issuer, its life insurance business to NH Life Insurance and its property insurance business to NH Property & Casualty Insurance (the "**Phase I Split-off**"). For the second step of the Reorganisation, the NACF formed NH Financial Group and NH Agribusiness Group and transferred its financial businesses to NH Financial Group and its agricultural and livestock businesses to NH Agribusiness Group (the "**Phase II Split-off**"). Upon completion of the Phase I Split-off, the NACF owned all the shares of the Issuer, NH Life Insurance and NH Property & Casualty Insurance, and upon completion of the Phase II Split-off, all the shares of the Issuer, NH Life Insurance and NH Property & Casualty Insurance owned by the NACF were transferred to NH Financial Group, and the NACF owned all the shares of NH Financial Group and NH Agribusiness Group.

In June 2014, NH Financial Group acquired three subsidiaries of Woori Finance Holdings, Woori Investment & Securities, Co., Ltd., Woori Aviva Life Insurance Co., Ltd. and Woori FG Savings Bank. In December 2014, Woori Investment & Securities Co., Ltd. and NH NongHyup Securities Co., Ltd. merged to become NH Investment & Securities Co., Ltd. In December 2014, NH Financial Group sold Woori Aviva Life to DGB Financial Group. Woori FG Savings Bank was renamed as NH Savings Bank.

Ownership and Control

The Issuer is wholly-owned by NH Financial Group, which is in turn wholly-owned by the NACF.

The NACF is wholly-owned by its member cooperatives, which, as of 31 March 2020, comprised 1,118 regional and commodity cooperatives, representing nearly all of the farmers in Korea. Regional cooperatives consist of agricultural cooperatives that engage in raising certain crops, such as rice, and livestock cooperatives that engage in raising cattle. Commodity cooperatives consist of agricultural cooperatives that specialise in certain products, such as vegetables, fruits and ginseng, and livestock cooperatives that engage in raising livestock other than cattle. Pursuant to the NACF Act and the NACF's articles of incorporation, each member cooperative must own at least 1,000 shares (Won 10,000 par value per share) in the NACF, and the ownership by each member cooperative is restricted to less than 10%. Each member cooperative has voting rights of one to three votes with respect to matters affecting the NACF, regardless of the actual number of shares held by it, in accordance with the NACF Act and the NACF's articles of incorporation.

Relationship with the Government and Government Support

Government Supervision

The NACF's relationship with the Government is based on the following express provisions of the Constitution of Korea and the NACF Act:

- in order to foster the self-help organisation of farmers, the Government assures their autonomy of activity and development (Article 123, Clause 5 of the Constitution of Korea);

- the Government and public organisations in Korea are required to positively cooperate in the businesses of the NACF and its member cooperatives. In this case, the Government or the relevant public organisation may subsidise or furnish necessary expenses (Article 9, Clause 2 of the NACF Act);

- the business operations of the NACF and its member cooperatives are exempted from levies other than taxes imposed by the Government or local authorities (Article 8 of the NACF Act); and

- the Government and the NACF may provide funds within each of their respective budgets for the promotion of amalgamation of the regional agricultural cooperatives when it is deemed necessary (Article 76 of the NACF Act).

The NACF Group has a close relationship with the Government as it assists the Government in forming and implementing agricultural and livestock policies. The NACF presents agricultural and livestock policies to the Government for approval, and once approved, the NACF Group executes such policies. The Issuer is responsible for extending a significant portion of Government policy loans to farmers and keepers of livestock. The Issuer believes that the Government regards the Issuer as essential to the effective implementation of agricultural and livestock policies and vital to Korea's national security and self-sufficiency.

The Issuer is required to present its annual financial results to the Governor of the FSS to ensure compliance with applicable corporate governance standards.

The Issuer has the authority to issue debentures in an aggregate amount of up to five times its total capital, with or without an express, unconditional and irrevocable guarantee of the Government. Any such guarantee is subject to the approval of the National Assembly, which is the chief legislative body of Korea. The Issuer has not had the need to receive, and has not received, any Government guarantees up to the date of this Offering Circular. The Issuer also maintains close ties with local governmental bodies as it works with 181 local government districts, which represent approximately 70.0% of the total number of districts in Korea. A substantial majority of such local governments maintain treasury accounts with the Issuer due to advantages including convenience offered by its extensive branch network in Korea, and the Issuer typically pays interest rates on these accounts that are lower than market rates.

Financial Support from the Government

The Government has historically provided and continues to provide the NACF, of which the Issuer is an indirect wholly-owned subsidiary, with significant direct and indirect financial and other support (including interest payment support for policy loans, guarantees for borrowings and tax benefits) to enable the NACF Group, including the Issuer, to carry out the Government's agricultural and livestock policies. A substantial portion of such Government support indirectly flows to the Issuer, including Won 1.55 trillion in capital contributions from NH Financial Group that the Issuer has received since its inception on 2 March 2012.

At the time of the Reorganisation on 2 March 2012, the Government initially agreed to provide Won 5 trillion to the NACF over five years to be used as the capital of its operating subsidiaries in the form of (i) a Won 1 trillion in-kind capital contribution (in securities held by the Government, such as shares in a public enterprise) in exchange for preferred shares of NH Financial Group and (ii) payment of interest of up to 5.0% per annum for five years up to Won 4 trillion in principal amount of debt securities issued by the NACF and/or the Issuer. In each of January 2013 and December 2016, with the approval of the National Assembly, the Government agreed to an additional payment of interest of up to 5.0% per annum for five years on up to Won 0.5 trillion in principal amount of debt securities issued by the NACF and/or the Issuer in lieu of Won 0.5 trillion of the Won 1 trillion in-kind capital contribution. Based on such plan, the Issuer issued bonds in the aggregate principal amount of Won 4 trillion in February 2012, Won 0.5 trillion in June 2013 and Won 0.5 trillion in August 2017, and as of 31 March 2020, the Issuer had effectively received a subsidy in the amount of Won 889 billion in interest payments under such bonds.

Business Activities

The Issuer's principal business activities involve providing specialised agricultural and commercial credit and banking services to customers primarily in Korea. The Issuer is a nationwide commercial bank operating under the Banking Act of Korea (the "**Banking Act**") and a specialised bank for agricultural and rural finance operations under the NACF Act.

The Issuer's headquarters are located at 120, Tongil-ro, Jung-gu, Seoul 04517, Korea. Its registration number with the Companies Registry of Korea is 110111-4809385.

As of 31 March 2020, the total assets, loans and deposits of the Issuer were Won 310,094 billion, Won 246,821 billion and Won 247,414 billion, respectively. In 2019, the Issuer's operating income and net income amounted to Won 2,421 billion and Won 1,517 billion, respectively, and for the three months ended 31 March 2020, the Issuer's operating income and net income amounted to Won 525 billion and Won 316 billion, respectively.

As of 31 March 2020, the Issuer's capital adequacy ratio, as reported to the FSS and determined in accordance with FSC requirements in effect as of that date which has been formulated in light of Bank for International Settlement ("**BIS**") standards, was 14.8%. See "*Supervision and Regulation–Capital Adequacy and Allowances.*"

Branch Network and Other Distribution Channels

Branch Network

The Issuer has an extensive branch network throughout Korea. As of 31 March 2020, the Issuer's banking network consisted of 1,135 branches operated by the Issuer and 4,786 branches operated by member cooperatives of the NACF, which are linked through an online system that enables the Issuer's customers to access their accounts with the Issuer. The Issuer's extensive branch network allows it to provide banking services to a wide variety of customers throughout Korea, including commercial, agricultural and retail customers in rural locations where other Korean banks have limited branch coverage. The Issuer has branch offices in many central Government offices, local government districts, national universities and the National Assembly.

The Issuer also has two overseas branches, in New York, United States and Hanoi, Vietnam, two subsidiaries, in Myanmar and Cambodia and three representative offices, in Ho Chi Minh, Vietnam, Beijing, China and New Delhi, India. The overseas branches are primarily engaged in trade financing and local currency funding for Korean companies and Korean nationals in the overseas markets, as well as providing foreign exchange services in conjunction with the Issuer's headquarters, while the overseas subsidiaries are mainly engaged in local microfinancing business and aim to focus on Southeast Asia's agricultural finance market.

The following table sets forth the number of the Issuer's domestic branches by region:

Region	**Number of branches(1)**
Seoul	168
Busan	61
Daegu	43
Incheon	42
Gwangju	30
Daejeon	30
Ulsan	27
Sejong	19
Jeju	22
Gyeonggi	217
Gangwon	62
Chungbuk	51
Chungnam	65
Jeonbuk	52
Jeonnam	67
Gyeongbuk	80
Gyeongnam	99
Total	1,135

Note:

(1) Excludes representative offices.

Electronic Banking

In order to maximise access to its products and services, the Issuer has established an extensive network of ATMs and cash dispensers, which are located in branches and other locations. As of 31 March 2020, the Issuer operated 5,829 ATMs throughout Korea.

In order to reduce operating costs, increase customer convenience and offer around-the-clock services, the Issuer operates a variety of electronic financial services, including internet, mobile and phone banking. The Issuer's electronic banking system provides services such as fund transfers, balance and transaction enquiries, bill payments, processing of loan applications and foreign exchange transactions. As of 31 March 2020, the number of subscribers to the Issuer's internet, mobile and phone banking services were approximately 16.3 million, 12.1 million and 4.1 million, respectively. Most of the Issuer's electronic banking transactions do not generate fee income as many of such transactions are free of charge. In order to address the increasing number of online transactions and the competition from Internet-only banks such as K bank and Kakao Bank, the Issuer released a new mobile platform called "All One Bank" in August 2016. Utilising online authentication technology, All One Bank allows users to create new accounts, apply for loans and transfer money to foreign accounts as well as apply for other products and services offered by other subsidiaries of NH Financial Group.

Deposit-Taking Activities

As of 31 March 2020, the Issuer had approximately 24.4 million deposit customers, consisting of approximately 23.8 million retail customers and approximately 0.6 million corporate customers. As of 31 March 2020, on a separate basis, deposits made by the Issuer's retail customers, corporate customers and other customers amounted to Won 80,513 billion, Won 96,963 billion and Won 66,624 billion, which constituted 33.0%, 39.7% and 27.3%, respectively, of the balance of its total deposits. Other customers consist of local governments and other government-related organisations.

The Issuer offers various deposit products, which target different customer segments with different needs and characteristics. The Issuer offers a range of interest rates on its deposit products depending on the rate of return on its interest-earning assets, average funding costs and interest rates offered by other nationwide commercial banks. Deposit products offered by the Issuer principally include the following:

- *Demand deposits*, which either do not accrue interest or accrue interest at a lower rate than time deposits. The customer may deposit and withdraw funds at any time and, if the deposits are interest-bearing, they accrue interest at a fixed or variable rate depending on the period and/or amount of deposit.

- *Time deposits*, which generally require a customer to maintain a deposit for a fixed term during which interest accrues at a fixed or variable rate based on certain financial indices. If a withdrawal is made prior to the end of the fixed term, the customer will be paid a lower interest rate than that originally offered. The term of time deposits typically ranges from one month to three years. Time deposits offered by the Issuer generally take the form of savings deposits and instalment deposits. Savings deposits, which constitute the substantial majority of the Issuer's time deposits, allow the customer to deposit and withdraw funds at any time and accrue interest at variable rates, while instalment deposits generally require the customer to make periodic deposits of a fixed amount over a fixed term during which interest accrues at a fixed rate. If a withdrawal is made from an instalment deposit prior to the end of the fixed term, the customer will be paid a lower interest rate than that originally offered. The term of instalment deposits typically ranges from one year to three years.

- *Certificates of deposit*, whose interest rates are determined based on the length of deposit and prevailing market interest rates. Certificates of deposit are sold at a discount to their face values, with the face amount payable at maturity. Certificates of deposit have a term of at least 30 days and require a minimum deposit of Won 10 million.

- *Other deposits*, which include deposits in foreign currencies.

The Monetary Policy Committee of the Bank of Korea (the "**MPC**") imposes a reserve requirement on Won currency deposits of commercial banks generally based on the type of deposit instrument. The minimum reserve requirement ratio is 7.0%. See *"Supervision and Regulation–Liquidity."* Ongoing regulatory reforms have removed all controls on lending rates and deposit rates (except for the prohibition on interest payments on current account deposits).

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 Won 50 million per depositor per bank. See *"Supervision and Regulation–Deposit Insurance System."*

Retail Banking Services

Retail banking services offered by the Issuer include mortgage, small business and consumer lending as well as demand, savings and fixed deposit-taking and checking account, electronic banking, ATM, bill paying, payroll, check-cashing, currency exchange and wire fund transfer services. The Issuer believes that providing efficient retail banking services is important in terms of both maintaining its public profile and as a source of fee-based income.

The Issuer offers various retail loan products, which target various segments of the population with features tailored to each segment's financial profile and other characteristics, including each customer's employment status, age, loan purpose, collateral requirements and the length of time a borrower has been its customer.

The Issuer's retail loans, substantially all of which are denominated in Korean Won, principally consist of the following:

- *Mortgage and home equity loans*, which mostly comprise mortgage loans to finance home purchases and are generally secured by the home being purchased; and

- *Other retail loans*, which are loans (other than mortgage and home equity loans) made to retail customers and the terms of which vary based primarily upon the characteristics of the borrower and which may be unsecured or secured or guaranteed by deposits or by a third party.

For mortgage and home equity loans, the Issuer's policy is to lend up to 70% of the appraisal value of the collateral (except in areas of high speculation designated by the Government where it generally limits lending to 40% or less of the appraised value of collateral), after taking into account the value of any lien or other security interest that ranks senior to the Issuer's security interest (other than petty claims), if the borrower's debt-to-income ratio does not exceed 100%. See "*Supervision and Regulation–Regulations Relating to Retail Household Loans*." As of 31 March 2020, on a separate basis, the Issuer's average loan-to-value ratio of mortgage and home equity loans was 43.0%. Contrary to prevailing practice in many other countries, a portion of the Issuer's mortgage and home equity loans are unsecured, as it is common practice in Korea for construction companies to require buyers of new homes (particularly apartments under construction) to make instalment payments of the purchase price well in advance of the title transfer of the home being purchased. In connection with this practice, the Issuer provides advance loans, on an unsecured basis for the time being, to retail borrowers where the use of proceeds is restricted to financing the purchases of such home. A significant portion of such loans are guaranteed by third parties, which may include the construction company receiving the instalment payment, until construction of the home is completed. Once construction is completed and the title to such home is transferred to the borrower, which may take several years, the loan becomes secured by the new home purchased by such borrower.

The following table sets forth the Issuer's retail loan portfolio (before allowance for expected credit losses), on a separate basis, as of the dates indicated.

	As of 31 December				As of 31 March	
	2018		2019		2020	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	(in billions of Won, except percentages)					
Mortgage and home equity[1]	₩ 65,839	60.5%	₩ 74,025	62.3%	₩ 75,482	62.8%
Other	43,026	39.5	44,807	37.7	44,784	37.2
Total retail loans	₩ 108,865	100.0%	₩ 118,832	100.0%	₩ 120,266	100.0%

Note:

(1) It is common practice in Korea for construction companies to require buyers of new homes (particularly apartments under construction) to make instalment payments of the purchase price well in advance of the title transfer of the home being purchased. In connection with this common practice, the Issuer provides advance loans, on an unsecured basis for the time being, to retail borrowers where the use of proceeds is restricted to financing the purchases of such home. A significant portion of these loans are guaranteed by third parties, which may include the construction company receiving the instalment payment, until construction of the home is completed. Once construction is completed and the title to such home is transferred to the borrower, which may take several years, the loan becomes secured by the new home purchased by such borrower.

Pricing

The interest rates on the Issuer's mortgage and home equity loans are generally based on periodic floating rates (which are based on base rates determined for three-month, six-month or twelve-month periods derived using the Issuer's rate determination 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 on, among other things, the type of collateral, the loan-to-value ratio, the credit score of the borrower and the estimated loss on the security. The Issuer may also 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 the loan is extended. If a loan is terminated prior to its maturity, the borrower is obligated to pay the Issuer an early termination fee in addition to the accrued interest.

The interest rates on the Issuer's other retail loans (including overdraft loans) are determined on the same basis as 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. Prior to providing or extending collective housing loans, the Issuer reviews the probability of the sale of the housing unit, 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 will also receive a guarantee from the Housing Finance Credit Guarantee Fund. The interest rates on the Issuer's collective housing loans are based on periodic floating rates, which in turn are based on base rates determined for three-month, six-month or twelve-month periods derived using the Issuer's rate determination system.

Corporate Banking Services

The Issuer provides corporate banking services to SMEs and large corporations (including *chaebol*-affiliated corporations and Government-controlled companies) in Korea. The Issuer's corporate banking operations mainly consist of lending to and taking deposits from its corporate customers. The Issuer also provides ancillary services on a fee basis, such as cross-border inter-account and intra-company transfers.

The following table sets forth the Issuer's corporate loan portfolio (before allowance for expected credit losses), on a separate basis, as of the dates indicated.

	As of 31 December				As of 31 March	
	2018		2019		2020	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	(in billions of Won, except percentages)					
SME loans[(1)]	₩ 79,284	75.9%	₩ 84,737	80.2%	₩ 87,173	80.6%
Large corporate loans	14,059	13.5	14,570	13.8	15,592	14.4
Other[(2)]	11,147	10.7	6,347	6.0	5,455	5.0
Total corporate loans	₩ 104,490	100.0%	₩ 105,654	100.0%	₩ 108,220	100.0%

Notes:

(1) Represents the principal amount of loans extended to corporations meeting the definition of a small- to medium-sized enterprise under the Framework Act on Small and Medium-sized Enterprises of Korea and related regulations. Certain loans to sole proprietorships are included under retail lending.

(2) Includes loans extended to governmental entities and public interest organisations, among others.

Corporate loans that the Issuer provides consist principally of the following:

- *working capital loans*, which are loans used for general working capital purposes, typically with a maturity of one year or less, including discounted notes and trade finance loans; and

- *facilities loans*, which are loans to finance the purchase of materials, equipment and facilities, typically with a maturity of three years or more.

SME Banking

The Issuer uses the term "SME" as defined in the Framework Act on Small and Medium Enterprises of Korea and related regulations. Under the Framework Act on Small and Medium Enterprises of Korea and related regulations, in order to qualify as an SME, (i) the enterprise's total assets at the end of the immediately preceding fiscal year must be less than Won 500 billion, (ii) the enterprise must meet the average or annual sales revenue standards prescribed by the Enforcement Decree of the Framework Act on Small and Medium Enterprises that are applicable to the enterprise's primary business, and (iii) the enterprise must meet the standards of management independence from ownership as prescribed by the Enforcement Decree of the Framework Act on Small and Medium Enterprises. However, pursuant to an amendment to the Framework Act on Small and Medium Enterprises, which became effective in June 2020, an enterprise that qualifies as an SME pursuant to the above definition shall no longer be considered an SME 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. Furthermore, certified social enterprises (as defined in the Social Enterprise Promotion Act of Korea), cooperatives, federations of cooperatives, social cooperatives and federations of social cooperatives (as defined in the Framework Act on Cooperatives), as well as cooperatives, federations and national federations (as defined in the Consumer Cooperatives Act) that satisfy the requirements prescribed by the Framework Act on Small and Medium Enterprises, may also qualify as SMEs. The SME segment of the corporate banking market has grown significantly in recent years, including as a result of Government measures to encourage lending to these enterprises. As of 31 March 2020, the Issuer's SME loans amounted to Won 87,173 billion, which represented 80.6% of total corporate loans, on a separate basis.

The Issuer provides both working capital loans and facilities loans to its SME customers. Loans to SMEs may be secured by property or deposits or may be unsecured. The Issuer generally evaluates creditworthiness and collateral for the Issuer's SME loans in the same way as it does for large corporate loans.

Large Corporate Banking

The Issuer's large corporate customers primarily consist of member companies of *chaebols*, financial institutions and Government-controlled companies. As of 31 March 2020, large corporate loans of the Issuer amounted to Won 15,592 billion, which represented 14.4% of the Issuer's total corporate loans, on a separate basis.

The Issuer provides both working capital loans and facilities loans to its large corporate customers. When evaluating the extension of working capital loans and facilities loans, the Issuer may take personal guarantees and credit guarantee letters from other financial institutions and use time and savings deposits that the borrower has with the Issuer as collateral.

Pricing

The Issuer generally establishes the pricing for its corporate loan products based 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, the value and type of collateral and any affiliate or third-party guarantee.

Agriculture Policy Loans

A principal part of the Issuer's business is to extend agricultural policy loans which may be funded by the Issuer or the Government. The Issuer generally offers policy loans to farmers at concessionary interest rates set below market rates. A policy loan that the Issuer offers to farmers may be funded by either the Government or the Issuer. If a policy loan is funded by the Issuer, the Government pays the Issuer the difference between the market rates and the concessionary interest rates offered by the Issuer. The difference between the market rates and the concessionary interest rates ranged from 0.2% to 3.4% in 2019 and the first three months of 2020. As of 31 December 2018, 31 December 2019 and 31 March 2020, policy loans provided by the Issuer amounted to Won 19,419 billion, Won 19,606 billion and Won 19,677 billion, in the aggregate, respectively, representing 9.7%, 9.3% and 9.1% of the Issuer's total Won-denominated loans as of such dates, respectively. Of such amounts, as of 31 December 2018, 31 December 2019 and 31 March 2020, policy loans funded by the Government amounted to Won 2,991 billion, Won 2,734 billion and Won 2,661 billion, respectively, while policy loans funded by the Issuer amounted to Won 16,428 billion, Won 16,872 billion and Won 17,016 billion, respectively. Repayment of a large portion of policy loans is guaranteed by the Agricultural Credit Guarantee Fund, which is mostly funded by the Government.

Credit Card Business

The Issuer offers credit card products and services mainly to consumers and corporate customers in Korea. As of 31 March 2020, the Issuer's credit card business had approximately 8.3 million credit card users. The total value of credit card transactions amounted to Won 57,368 billion in 2018, Won 62,192 billion in 2019, and Won 14,667 billion in the three months ended 31 March 2020. Revenue from credit card business principally consists of annual membership fees paid by cardholders, transaction fees paid by merchants, cardholder purchase fees, cash advance fees and interest charges on deferred and late payments. Interest and commission income from the Issuer's credit card business amounted to Won 1,151 billion in 2018, Won 1,035 billion in 2019, and Won 245 billion in the three months ended 31 March 2020. The Issuer offers a diverse range of credit card products under various brands.

The following table sets forth certain data relating to the Issuer's credit card operations (which does not include the Issuer's off-balance sheet securitised receivables portfolios), on separate basis, as of and for the periods indicated.

	As of and for the year ended 31 December		As of and for the three months ended 31 March	
	2018	2019	2019	2020
	(in billions of Won, except percentages)			
Outstanding balances[1]:				
General purchase	₩ 2,896	₩ 3,111	₩ 2,592	₩ 2,592
Instalment purchase	1,653	1,812	1,603	1,678
Cash advance	523	493	494	460
Card loan	1,986	2,145	2,045	2,277
Total	₩ 7,058	₩ 7,561	₩ 6,734	₩ 7,007
Credit card interest and fees:				
General purchase fees	₩ 496	₩ 456	₩ 111	₩ 98
Instalment purchase fees	156	178	41	44
Cash advance fees	72	65	17	14
Card loan interest	248	278	66	74
Other fees	179	58	44	15
Total	₩ 1,151	₩ 1,035	₩ 279	₩ 245
Delinquent balances[2]	₩ 68	₩ 65	₩ 68	₩ 67
Delinquency ratios[3]	1.0%	0.9%	1.0%	1.0%
From 1 month to 3 months	0.5	0.3	0.5	0.4
From 3 months to 6 months	0.4	0.3	0.4	0.4
From 6 months to 12 months	0.1	0.2	0.1	0.2
Over 12 months	0.0	0.0	0.0	0.0
Non-performing loan ratio[4]	0.5%	0.5%	0.5%	0.6%
Write-offs (gross)	184	168	37	40
Recoveries	28	37	9	11
Net write-offs	156	131	28	29
Gross write-off ratio[5]	2.6%	2.2%	0.5%	0.5%
Net write-off ratio[6]	2.2%	0.5%	0.1%	0.1%

Notes:

(1) Includes credit card loans, the interest on which is classified as fee income of the bank accounts.

(2) Represents balances that are overdue for more than one month.

(3) Equals the total delinquency balances divided by total credit card balances.

(4) Represents the ratio of balances that are more than three months overdue to total outstanding balances as of the end of the relevant period (excluding confirmed acceptances and guarantees).

(5) Represents the ratio of gross write-offs to average outstanding balances for the period.

(6) Represents the ratio of net write-offs to average outstanding balances for the period.

Each cardholder is allocated an aggregate credit limit in respect of all cards issued under its account each month. The Issuer advises each cardholder of the credit limit relating to the cards in its monthly billing statement. Credit limits in respect of card loans are established separately. The Issuer monitors all cardholders and accounts and may reduce the credit limit or cancel the cardholder's existing card based on current economic conditions, receipt of new negative credit data from third party sources or the cardholder's score under the credit risk management systems used to monitor the cardholder's behaviour, even if the cardholder continues to make timely payments in respect of its cards. The Issuer considers an account delinquent if the payment due is not received on the first monthly payment date on which such payment was due, and late fees are immediately applied. Late fee charges and computation of the delinquency period are based on each outstanding unpaid transaction or instalment, as applicable.

Unlike in the United States and many other countries, where most credit cards are revolving cards that allow outstanding balances to be rolled over from month to month so long as a required minimum percentage is repaid, cardholders in Korea are generally required to pay for their non-instalment purchases as well as cash advances within approximately 15 to 60 days of purchase or advance, depending on their payment cycle. In the case of instalment purchases, payments on outstanding balances must be made or in equal monthly instalments over a fixed term from three months to 24 months. Cardholders may prepay instalment purchases at any time without penalty. Payment for cash advances must be made on a lump-sum basis. Payments for card loans must be made on an equal principal instalment basis over a fixed term from three months up to a maximum of 36 months. A cardholder's overdue balance is generally written off by the Issuer after six months.

Capital Markets Activities

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 securitisation transactions and makes call loans.

Securities Investment and Trading

The Issuer invests in and trades securities for its own account in order to maintain adequate sources of liquidity and to generate interest and dividend income and capital gains. As of 31 March 2020, the Issuer's investment portfolio, which consists primarily of securities at amortised cost and financial assets at FVTOCI, and the Issuer's trading portfolio, which consists of financial assets at FVTPL (excluding deposits, derivative assets and loans), had a combined total book value of Won 53,078 billion, which represented 17.1% of the Issuer's total assets.

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.

Derivatives Trading

The Issuer offers derivative products and engages in derivatives trading, including:

- Won interest rate swaps, relating to Won interest rate risks;
- cross-currency swaps, relating to foreign exchange risks, largely for Won against U.S. dollars;
- foreign exchange forwards, swaps and options, relating to foreign exchange risks; and
- equity options on the KOSPI index.

The Issuer's derivatives operations focus on addressing the needs of the Issuer's corporate clients to hedge their risk exposure and hedging the Issuer's risk exposure resulting from such client contracts. The Issuer also engages in derivative trading activities to hedge the interest rate and foreign currency risk exposure that arises 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. The Issuer's outstanding derivatives commitments in terms of notional amount were Won 74,768 billion as of 31 March 2020.

Investment Banking

The Issuer has selectively focused on expanding its investment banking activities in order to increase its fee income and diversify its revenue base. 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; and
- structured finance and venture financing.

In 2019, the Issuer generated investment banking revenue of Won 200 billion, which consisted of Won 69 billion of interest income and Won 131 billion of non-interest income, on a separate basis. In the three months ended 31 March 2020, the Issuer generated investment banking revenue of Won 38 billion, which consisted of Won 18 billion of interest income and Won 20 billion of non-interest income, on a separate basis.

Trust Account Management Business

Trust funds managed by the Issuer consist primarily of money trusts. In Korea, a money trust is a discretionary trust which (except in the case of specified money trusts) gives the trustee broad discretion in investing the assets of the trust. Trust account customers of the Issuer are typically individuals seeking higher rates of return than those offered by bank account deposits. Because there are fewer regulatory restrictions on trust accounts than on bank account deposits, including no deposit reserve requirements, the Issuer has historically offered higher rates of return on trust account products than on bank account deposits. Trust account products, however, generally require higher minimum deposit amounts and longer deposit periods compared to comparable bank account deposit products. Similar to those of the bank accounts, assets of trust accounts are invested primarily in debt securities and loans, except that a greater percentage of the assets of trust accounts are invested in debt securities compared to those of the bank accounts, mainly because trust accounts generally require more liquid assets due to their more limited funding sources compared to bank accounts.

Except for specified money trusts and certain other trust accounts, the Issuer has investment discretion (subject to applicable law) over all money trusts, which are pooled and managed jointly for each type of trust account. Specified money trusts, which are generally managed individually and on a performance basis, are established on behalf of customers, typically corporations, which provide specific directions to the Issuer with respect to the investment of trust assets. As of 31 March 2020, on a separate basis, specified performance-based money trust accounts amounted to Won 14,264 billion, representing 47.4% of the money trusts managed by the Issuer, while discretionary trust accounts amounted to Won 15,809 billion, representing 52.6% of the money trusts managed by the Issuer.

The Issuer receives fees for its trust account management services that are generally based on a percentage, ranging between 0.1% and 1.0%, of the net asset value of the assets under management. Income from trust account management services is reflected in the Issuer's bank accounts as trust management fees and commissions.

Under Korean law, the assets of the Issuer's trust accounts are required to be segregated from other assets of the Issuer and are not available to satisfy the claims of depositors or other creditors of the Issuer. Trust accounts are regulated by the Trust Act and the Financial Investment Services and Capital Markets Act (the "**FSCMA**"), and most nationwide commercial banks offer similar trust account products. Under the FSCMA, a bank with a trust business license is permitted to offer both specified money trust account products and unspecified money trust account products.

As of 31 March 2020, the Issuer had total trust assets of Won 42,096 billion and, among such trust assets, securities investments amounted to Won 8,638 billion, all of which were associated with variable rate trust accounts (also known as performance-based trust accounts). Variable rate trust accounts are trust accounts for which the return on the trust account is not guaranteed, but the principal of the trust account, in limited instances as described below, may be guaranteed. The Issuer is permitted to guarantee the principal of three types of variable rate trust account products: old age pension trusts, pension trusts and retirement trusts. The Issuer receives a fixed fee for such accounts principally based on the amount of assets under management of such accounts. None of the Issuer's trust accounts guarantees a fixed rate of interest. As of 31 March 2020, securities investments amounting to Won 3,061 billion were associated with principal or interest guaranteed variable trust accounts on a separate basis. Such securities investments primarily consist of bonds issued by financial institutions, corporate bonds, Government-related bonds and other securities, primarily commercial paper. As of 31 March 2020, debt securities of Won 3,243 billion accounted for 7.7% of the Issuer's total trust assets and equity securities of Won 5,395 billion accounted for 12.8% of the Issuer's total trust assets, each on a separate basis.

Loans made by trust accounts are similar in type to those made by the Issuer from its bank accounts, except that trust account loans are made only in Won. As of 31 March 2020, substantially all of the loans from the trust accounts were collateralised or guaranteed.

The Issuer may receive commissions upon the termination of trust accounts prior to the end of their maturity. Currently, banks are required by the FSC to (i) provide special reserves by deducting the required amounts from trust fees for accounts whose principal or interest is guaranteed by the bank account and (ii) appraise the fair value of the assets that cannot be marked to market. Such provisions reduce the return to customers and the Issuer's trust fees. If the income from a money trust for which the Issuer provides a guarantee is less than the amount of the payments it has guaranteed, the Issuer must pay the amount of the shortfall with funds from special reserves maintained in its trust accounts, followed by basic fees from that money trust and funds from its banking operations. The Issuer nets any payments it makes as a result of these shortfalls against any gains it receives from other money trusts. No material payments of any such shortfall amounts were made in 2019.

Competition

The Issuer competes with other financial institutions in Korea, including principally nationwide Korean commercial banks. In addition, the Issuer faces competition from other market participants, including regional banks, development banks, specialised banks and branches of foreign banks operating in Korea. The Issuer also competes for customer funds with other types of financial service institutions, including savings institutions (such as mutual savings and finance companies and credit unions and credit cooperatives), investment institutions (such as merchant banking corporations) and life insurance companies.

Competition in the Korean financial market has been and is likely to remain intense. In particular, in the area of the Issuer's core banking operations, most Korean banks have been focusing on retail customers and SMEs in recent years, although they have begun to increase their exposure to large corporate borrowers, and have been focusing on developing fee income businesses, including bancassurance and investment products, as increasingly important sources of revenue. In the area of credit cards, Korean banks and credit card companies have in the past engaged in aggressive marketing activities and made significant investments, contributing to some extent to lower profitability and asset quality problems previously experienced with respect to credit card receivables.

In addition, the following general regulatory reforms in the Korean financial industry have increased competition among banks and other 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.

- In March 2016, the FSC introduced an individual savings account scheme in Korea, which enables individuals to efficiently manage a wide range of retail investment vehicles, including cash deposits, investment funds and securities investment products, from a single integrated account with one financial institution and offers tax benefits on investment returns. Since the scheme backed by the Government allows only one individual savings account per person, financial institutions have been competing to retain existing customers and attract new customers since the launch of the individual savings account scheme. Over 30 financial institutions, including banks, securities companies and insurance companies, have registered with the FSC to sell their individual savings account products.

- In April 2019, the FSC approved and is currently conducting test procedures for a financial regulatory sandbox, a framework set up to allow financial service providers to test new business models in a less regulated environment, as part of its efforts to work closely with the fintech sector and provide support to facilitate its development.

- In December 2019, the FSC launched an "open banking" system, which allows customers to view banking account information, regardless of institution, through a single mobile application. Such integrated system is expected to allow fintech firms to share payment networks with banks, thereby lowering transaction fees and encouraging the development of new payment services.

The Issuer expects such measures to intensify competition among financial institutions in Korea.

Furthermore, the introduction of Internet-only banks in Korea is expected to increase competition in the Korean banking industry. Internet-only banks generally operate without branches and conduct most of their operations through electronic means, which enable them to minimise 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, a mobile-only bank, 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, 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, the subsequent merger of Hana Bank into Korea Exchange Bank in 2015, KB Financial Group's acquisition of Hyundai Securities Co., Ltd. in 2016 and the subsequent merger of Hyundai Securities with and into KB Investment & Securities Co., Ltd. in 2016. In 2016, Mirae Asset Securities Co., Ltd. acquired a 43% interest in KDB Daewoo Securities Co., Ltd., which subsequently merged with and into Mirae Asset Securities to create Mirae Asset Daewoo Securities Co., Ltd., the largest securities company in Korea in terms of capital. In 2014, pursuant to the implementation of the Government's privatisation plan with respect to Woori Finance Holdings Co., Ltd. and its former subsidiaries, Woori Financial, Woori Asset Management and Woori F&I were acquired by KB Financial Group, Kiwoom Securities and Daishin Securities, respectively, and Woori Investment & Securities, Woori Aviva Life Insurance and Woori FG Savings Bank were acquired by NH Financial Group. In addition, in October 2014, the KDIC's ownership interest in Kwangju Bank and Kyongnam Bank were acquired by JB Financial Group and BS Financial Group, respectively. Furthermore, Orange Life Insurance, Ltd. (formerly known as ING Life Insurance Korea, Ltd.) became a wholly-owned subsidiary of Shinhan Financial Group following the acquisition of equity interests by Shinhan Financial Group in February 2019 and January 2020.

The Issuer expects that consolidation in the Korean financial industry will continue. Other financial institutions may seek to acquire or merge with other entities, and 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 does, may seek to compete with the Issuer in providing financial products and services either by themselves or in partnership with existing Korean financial institutions. See "*Risk Factors–Risks Relating to Competition–Competition in the Korean financial industry is intense, and the Issuer may lose market share and experience declining margins as a result.*"

Information Technology

The Issuer's mainframe-based IT system is designed to ensure the continuity of services notwithstanding a failure of the host data centre due to a natural disaster or other accident by utilising backup systems in its disaster recovery data centres. In addition, through the implementation of a "multi-central processing unit system," the system is designed and operated to process transactions without material interruption in the event of a central processing unit failure.

The integrity of the Issuer's IT systems, and their ability to withstand potential catastrophic events (such as natural calamities and internal system failures), is crucial to its continuing operations. The Issuer currently tests its disaster recovery systems on a quarterly basis.

The Issuer believes that continuous improvement of its IT system is critical to supporting its operations management and providing high-quality customer service. Accordingly, the Issuer has upgraded and improved its system by taking the following initiatives:

- developing its next generation IT system which includes the reconstruction of its IT system for its core banking system and internet banking system; and

- strengthening its security system by periodically consulting with security experts, centralising control and management of the security system, researching and developing a public key encryption system and improving its firewall and virus prevention system.

The Issuer intends to continue to upgrade its IT infrastructure and security system, and in March 2014, the Issuer created a new position of Chief Information Security Officer to enhance its overall management of the security system. In January 2017, the Issuer completed the separation of its IT system, which was previously operated together with the mutual credit division of the NACF, and such system is currently in stable operation.

Properties

The Issuer's registered office and corporate headquarters are located at 120, Tongil-ro, Jung-gu, Seoul, Korea.

As of 31 March 2020, the Issuer's banking network consisted of 1,135 branches operated by the Issuer, 34.6% of which were located in sites owned by it, while the remaining branches were located on leased properties.

Certain of the properties of the Issuer are subject to security interests and encumbrances in favour of third parties, arising in the ordinary course of its and their businesses. However, the Issuer does not consider these security interests and encumbrances to be material to its business.

As of 31 March 2020, the net book value of all properties owned by the Issuer was Won 3,241 billion.

Legal Proceedings

The Issuer is subject to various legal proceedings and regulatory actions in the normal course of its business. As of 31 March 2020, the Issuer was a defendant in 136 cases with related claims amounting to Won 52 billion in the aggregate and as of 31 March 2020, the Issuer was named as a plaintiff in 135 cases with related aggregate claims amounting to Won 59 billion. The Issuer is unable to estimate with reasonable certainty the outcome of any of these lawsuits. The Issuer accrued a litigation-related liability of Won 25 billion in other liabilities.

In February 2020, the Seoul Southern District Prosecutors' Office commenced an investigation into the management of trade finance funds by Lime Asset Management Co. which may have resulted in significant losses to certain customers who purchased such products from banks and securities companies in Korea, including the Issuer. Such trade finance funds of Lime Asset Management Co. had investments in certain funds managed by International Investment Group, which had its license revoked by the Securities and Exchange Commission in November 2018 for concealing losses and selling fraudulent loan assets, triggering suspension of the redemption of such trade finance funds. An investigation into the sellers of such trade finance funds, including the Issuer, is expected to take place during the second half of 2020. While the Issuer intends to fully cooperate with any relevant investigations by government authorities, it is not possible to predict the final outcome of such investigations at this time. There can be no assurance that such investigations (as well as any private claims by customers, to which the Issuer may become subject) will not result in an unfavorable outcome, including the imposition of monetary damages, fines and other penalties against the Issuer, which, if significant, may adversely affect the Issuer's results of operations, cash flows and reputation.

In January 2017, the Issuer entered into a written agreement with the Federal Reserve Bank of New York to submit a plan to enhance its compliance with the Bank Secrecy Act and anti-money laundering regulations, among others. The written agreement was due to findings by the Federal Reserve Bank of New York and the New York State Department of Financial Services ("**NYDFS**") of deficiencies relating to risk management and compliance with applicable federal and state laws, rules and regulations relating to anti-money laundering compliance, including the Bank Secrecy Act, among others. In December 2017, the Issuer paid a civil penalty of US$11 million to the NYDFS in relation to such deficiencies. In addition, the NYDFS conducts annual reviews of the adequacy of the Issuer's compliance with the Bank Secrecy Act and anti-money laundering regulations, among others, and the Issuer is currently in compliance with its plan submitted in accordance with its written agreement with the Federal Reserve Bank of New York and other requests made by the NYDFS in connection with its findings above.

ASSETS AND LIABILITIES

The tables below and accompanying discussions provide selected financial highlights regarding the Issuer's assets and liabilities presented on a consolidated basis unless otherwise indicated. The following information should be read together with the Issuer's audited and unaudited consolidated financial statements included elsewhere in this Offering Circular as well as "*Management's Discussion and Analysis of Financial Condition and Results of Operations.*"

Loan Portfolio

As of 31 March 2020, the Issuer's loans and receivables amounted to Won 247,724 billion, which accounted for 79.9% of the Issuer's total assets. As of the same date, 88.7% of the Issuer's total loans were denominated in Won and 0.9% of the Issuer's total loans were denominated in foreign currencies (including offshore loans). Guarantees are not categorised as loans unless and until the Issuer has made a payment on behalf of a customer in relation to the guarantee.

The following table sets forth a summary of the Issuer's loans by type as of the dates indicated. Except where specified otherwise, all loan amounts stated below are before deduction for allowances for expected credit losses.

	As of 31 December		As of 31 March
	2018	2019	2020
	(*in billions of Won*)		
Loans in Won:			
Retail	₩ 103,174	₩ 112,691	₩ 114,375
Corporate	87,561	93,457	96,871
Public(1)	9,335	4,588	4,005
Integrated(2)	664	551	529
Sub-total(3)	₩ 200,734	₩ 211,287	₩ 215,780
Loans in foreign currencies:			
General	₩ 1,485	₩ 1,408	₩ 1,656
Offshore	108	392	488
Sub-total(3)	₩ 1,593	₩ 1,800	₩ 2,144
Others:			
Credit card receivables	7,058	7,561	7,007
Bills purchased	887	751	590
Foreign exchange purchased	1,291	1,817	1,453
Private placement bond	30	18	18
Payment for acceptances and guarantees	11	8	11
Domestic import usance	1,979	1,840	2,089
Others	15,369	13,944	14,153
Receivables	5,023	3,125	4,479
Sub-total(3)	₩ 31,648	₩ 29,064	₩ 29,800
Total	₩ 233,975	₩ 242,151	₩ 247,724

Notes:

(1) Primarily consists of loans to local governments, public enterprises and non-profit institutions, such as educational institutions.

(2) Consists of various policy loans offered to farmers in furtherance of the Government's agricultural policy.

(3) Excludes deferred loan origination fees and loan origination costs.

Loan Concentrations

Under the Banking Act, the Issuer's aggregate credit exposures to single individuals, juridical persons or business groups that exceed 10.0% of the sum of its Tier I and Tier II capital (less any capital deductions) when totaled, must not exceed five times the sum of the Issuer's Tier I and Tier II capital (less any capital deductions), subject to certain exceptions. In addition, subject to certain exceptions, the Issuer is not permitted to extend credit (including loans, guarantees, purchases of securities (only in the nature of a credit) and such other transactions that directly or indirectly create credit risk) in excess of 20.0% of the sum of its Tier I and Tier II capital (less any capital deductions) to any single individual or juridical person, and the Issuer may not grant credit in excess of 25.0% of the sum of its Tier I and Tier II capital (less any capital deductions) to any single group of companies that belong to the same conglomerate as defined in the Monopoly Regulations and Fair Trade Act.

10 Largest Exposures by Borrower

As of 31 March 2020, on a separate basis, the Issuer's exposures to its 10 largest borrowers or issuers totaled ₩10,477 billion and accounted for 5.0% of its total exposures. The following table sets forth, on a separate basis, the Issuer's total exposures (including trust accounts) to those borrowers or issuers as of such date.

	Loans(1)	Securities(2)	Total exposure(1)	Total credit ratio(1)(3)
		(in billions of Won)		
National Agricultural Cooperative Federation	₩ 2,400	₩ –	₩ 2,400	1.1%
NH Agribusiness Group	1,410	–	1,410	0.7
Korea Electric Power Corporation	631	446	1,077	0.5
Samsung Electronics Co., Ltd.	1,039	20	1,059	0.5
Shinhan Bank	178	743	921	0.4
LG Display Co., Ltd.	760	30	790	0.4
NongHyup Feed Inc.	762	–	762	0.4
Shinhan Card Co., Ltd.	326	431	757	0.4
Woori Bank	122	542	664	0.3
Kia Motors Corporation	637	–	637	0.3

Notes:

(1) Classification is based on the FSC's asset classification criteria and includes payment guarantees and unused credit lines.

(2) Represents equity securities and debt securities.

(3) Represents total exposure to the relevant borrower as a percentage of the Issuer's total exposure.

10 Largest Exposures to Chaebols

As of 31 March 2020, on a separate basis, the Issuer's exposures to the 30 largest chaebols totaled Won 15,080 billion and accounted for 7.2% of its total exposures. The following table sets forth, on a separate basis, the Issuer's total exposures to the 10 *chaebols* to which the Issuer has the largest exposure as of such date.

	Loans(1)	Securities(2)	Total exposure(1)	Total credit ratio(1)(3)
		(in billions of Won)		
Samsung	₩ 1,652	₩ 270	₩ 1,922	0.9%
SK	1,179	595	1,774	0.8
Hyundai Motors	1,463	284	1,747	0.8
LG	906	248	1,154	0.5
Hyundai Heavy Industries	982	40	1,022	0.5
Hanhwa	802	51	853	0.4
Lotte	528	171	699	0.3
GS	445	172	617	0.3
POSCO	535	53	588	0.3
Daewoo Shipbuilding & Marine Engineering	468	–	468	0.2

Notes:

(1) Classification is based on the FSC's asset classification criteria and includes payment guarantees and unused credit lines.

(2) Represents equity securities and debt securities.

(3) Represents total exposure to the relevant borrower as a percentage of the Issuer's total exposure.

Loan Concentration by Industry

The following table sets forth, on a separate basis, the aggregate balance of the Issuer's loan portfolio by industry concentration and as a percentage of its total lending.

	As of 31 December				As of 31 March	
	2018		2019		2020	
	Amount	%	Amount	%	Amount	%
	(in billions of Won, except percentages)					
Manufacturing	₩ 21,992	9.6%	₩ 23,096	9.7%	₩ 23,490	9.7%
Construction	3,681	1.6	4,022	1.7	4,139	1.7
Retail and wholesale	14,639	6.4	15,622	6.6	16,347	6.7
Financing and insurance	3,183	1.4	3,016	1.2	3,329	1.4
Member cooperatives	17,984	7.9	19,195	8.1	18,985	7.8
Others(1)	167,197	73.1	173,396	72.7	176,223	72.7
Total(2)(3)	₩ 228,676	100.0%	₩ 238,347	100.0%	₩ 242,513	100.0%

Notes:

(1) Include loans to households and public institutions and others.

(2) Includes policy loans.

(3) Excludes deferred loan origination fees and loan origination costs.

Loan Analysis

Maturity Analysis

The following table sets forth, on a separate basis, the scheduled maturities (time remaining until maturity) of the Issuer's loan portfolio (excluding delinquent loans) as of 31 March 2020.

	Less than 1 year	Over 1 year but not more than 5 years	Over 5 years	Total
	(in billions of Won)			
Loans in Won	₩ 120,091	₩ 46,494	₩ 54,371	₩ 220,956
Loans in foreign currencies	2,265	943	336	3,544
Others	1,465	–	–	1,465
Total	₩ 123,821	₩ 47,437	₩ 54,707	₩ 225,965

The concentration of loans with maturities of one year or less is intended to reduce the Issuer's credit risk by allowing the Issuer to reevaluate the creditworthiness of the borrower on a more frequent basis. Historically, a significant portion of the Issuer's loans with maturities of one year is renewed annually.

Loan Interest Rates

The following table sets forth, on a separate basis, the total amount of Won-denominated loans (excluding trust accounts) due after one year that have fixed interest rates and floating interest rates as of 31 March 2020.

	As of 31 March 2020
	(in billions of Won)
Fixed rate loans(1)	₩ 27,810
Floating rate loans(2)	44,976
Others	28,228
Total	₩ 101,014

Notes:

(1) Fixed rate loans are loans for which the interest rate is fixed for the entire term.

(2) Floating rate loans are loans for which the interest rate is not fixed for the entire term.

Value of Collateral to Loan

As of 31 March 2020, on a separate basis, 69.7% of the Issuer's total loans were loans secured by collateral or guarantees, the aggregate value of which exceeded the aggregate principal amount of such secured loans. The type of collateral or credit support provided includes real estate, personal property, marketable securities, deposits and payment guarantees from other banks or institutions, with real estate constituting the largest proportion.

Loans are considered to be made on a guaranteed basis if the relevant loan is guaranteed by a bank (other than merchant banks), Government-related fund or privately capitalised fund that the Issuer considers to have a low credit risk. Loans with cross guarantees by affiliates, officers or shareholders of the borrower or guarantees by merchant banks are not considered to be made on a guaranteed basis.

The following table shows, on a separate basis, loans by collateral type (including guarantees by third parties) as of the dates indicated.

	As of 31 December		As of 31 March
	2018	**2019**	**2020**
		(in billions of Won)	
Secured loans:			
Real estate and property	₩ 102,526	₩ 110,280	₩ 111,894
Securities	3,574	3,169	3,097
Payment guarantees	32,106	38,503	40,884
Others	3,642	3,317	3,406
Subtotal	141,848	155,269	159,281
Unsecured loans	71,507	69,217	69,205
Total	₩ 213,355	₩ 224,486	₩ 228,486

Depending on the type and the risk of the collateral or guarantee, loans are disbursed up to a maximum proportion of the appraised value of the collateral or guarantees. For loans secured by real estate, stocks/bonds, or guarantees, the Issuer's general policy is to lend up to 30% to 70% (subject to mortgage lending regulations by the Government), 60% to 90% or 100%, respectively, of the appraisal value of the collateral. For loans secured by all other assets, loans are disbursed up to 40% to 60% of the appraisal value of the collateral. The value of the collateral is reassessed at the time of a loss of the collateral or a significant drop in its value. The value of collateral is also reassessed from time to time by independent appraisers depending on market conditions, when the underlying loan is reclassified into a new category under the loan classifications or when the Issuer makes loan loss provisions for such loan. When the Issuer determines that repayment of the loan is in doubt, it generally requires additional security or the prepayment of a considerable portion of the loan to the extent that such actions are feasible.

Asset Quality of Loans

Loan Classifications

The FSC generally requires Korean financial institutions to analyse and classify their assets by quality into one of five categories for reporting purposes. In making these classifications, banks take into account a number of factors, including the financial position, profitability and transaction history of the borrower, and the value of any collateral or guarantee taken as security for the extension of credit. This classification method, and the related provisioning policy, is intended to fully reflect the borrower's capacity to repay.

The following is a summary of the asset classification criteria that the Issuer applies for corporate and retail loans, based on the asset classification guidelines of the FSC. Credit card receivables are subject to classification based on the number of days past due, as required by the FSC. The Issuer also applies different criteria for other types of credits such as loans to the Government or to Government-related or controlled entities, certain bills of exchange and certain receivables.

Normal . . . . Credits extended to customers that, based on the Issuer's consideration of their business and operations, financial condition and future cash flows, do not raise concerns regarding their ability to repay the credits.

Precautionary . . . . Credits extended to customers that

- based on the Issuer's consideration of their business, financial condition and future cash flows, show potential risks with respect to their ability to repay the credits in the future, although showing no immediate default risk; or

- are in arrears for one month or more but less than three months.

Substandard . . . . Either:

- credits 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

- 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. . . . . Credits exceeding the amount that the Issuer expects to collect of total credits to customers that:

- 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

- have been in arrears for three months or more but less than twelve months.

Estimated Loss . . . . Credits exceeding the amount that the Issuer expects to collect of total credits to customers that:

- based on the Issuer's consideration of their business, financial position and future cash flows, are judged to have to be accounted as a loss as the inability to repay became certain due to serious deterioration in their ability to repay;

- have been in arrears for 12 months or more; or

- have incurred serious risks of default in repayment due to the occurrence of, among other things, final refusal to pay their debt instruments, liquidation or bankruptcy proceedings or closure of their business.

Credit classified as "substandard," "doubtful" or "estimated loss" is generally considered to be "non- performing" credits. The FSC allows banks some degree of discretion in the specific application of these guidelines. In classifying Bank's credits into the five asset quality categories, the Issuer applies both historical criteria and forward-looking criteria (in the case of corporate borrowers), in accordance with the FSC guidelines.

The Issuer considers loans to be impaired if: (i) the loan is classified as "substandard" or below according to the FSC's asset classification guidelines, (ii) the loan is over 30 days past due or (iii) the corporate borrower has received a warning from the Korea Federation of Banks indicating that it has exhibited difficulties in making timely payments of principal and interest.

The following table below sets forth, as of the dates indicated and on a separate basis, a summary of the Issuer's loan portfolio (excluding trust accounts) in principal amounts.

	As of 31 December		As of 31 March
	2018	2019	2020
Normal	₩ 210,340	₩ 222,107	₩ 226,090
Precautionary	1,200	1,141	1,159
Non-performing loans:[1]			
Substandard	902	711	669
Doubtful	715	385	415
Estimated loss	198	142	153
Subtotal	1,815	1,238	1,237
Total[2]	₩ 213,355	₩ 224,486	₩ 228,486

Notes:

(1) Excluding confirmed acceptances and guarantees.

(2) Calculated on a present value basis.

Loan Loss Provisioning Policy

The Issuer establishes an allowance for expected credit losses with respect to loans to absorb such losses. Under K-IFRS 1109, the Issuer establishes an allowance for expected credit losses with respect to its loans based on expected credit losses by assessing changes in expected credit losses and recognising such changes as impairment loss (or reversal of impairment loss) in profit or loss. The allowance for expected credit losses required to be established with respect to a loan is the amount of the 12-month expected credit loss (where there has been no significant risk in credit risk after initial recognition of the loan) or the lifetime expected credit loss (where there has been a significant increase in credit risk after initial recognition of the loan or where the loan is credit-impaired). If additions or changes to the allowance for expected credit losses for loans are required, then such additions or changes are included in impairment losses on financial instruments and treated as charges against current income. Loan exposures that the Issuer deems to be uncollectible, including actual loan losses, net of recoveries of previously written-off amounts, are charged directly against the allowance for expected credit losses for loans.

If the Issuer's allowance for expected credit losses are deemed insufficient for regulatory purposes, the Issuer is required to compensate for the difference by recording a regulatory reserve for bad debts, which is segregated within the Issuer's retained earnings. The level of regulatory reserve for bad debts required to be recorded is equal to the amount by which the Issuer's allowance for expected credit losses under K-IFRS is less than the greater of (x) the amount of expected loss calculated using the internal ratings-based approach under Basel II and as approved by the FSS and (y) the required amount of credit loss reserve calculated based on the guidelines prescribed by the FSC. The following table sets forth the FSC's guidelines applicable to banking institutions for the minimum percentages of the outstanding principal amount of the relevant loans or balances that the reserve must cover:

Loan classifications	**Corporate**[(1)]	**Consumer**	**Credit card receivables**[(2)]	**Credit card loans**[(3)]
Normal	0.85% or above	1% or above	1.1% or above	2.5% or above
Precautionary	7% or above	10% or above	40% or above	50% or above
Substandard	20% or above	20% or above	60% or above	65% or above
Doubtful	50% or above	55% or above	75% or above	75% or above
Estimated loss	100%	100%	100%	100%

Notes:

(1) Subject to certain exceptions pursuant to the Banking Industry Supervision Regulations of Korea.

(2) Applicable for credit card receivables for general purchases of products or services.

(3) Applicable for cash advances, card loans and revolving loan receivables.

Analysis of Allowance for Expected Loan Losses

The Issuer's allowances for expected loan losses (including receivables) compared to total loans as of the dates indicated were as follows:

	Total loans	**Allowance for expected loan losses**	**Percentage**
	(in billions of Won)		
31 December 2018	₩ 233,975	₩ 1,642	0.7%
31 December 2019	242,151	1,236	0.5
31 March 2020	247,725	1,224	0.5

The following table summarises the changes in allowances for expected loan losses (including receivables) for each period indicated.

	For the year ended 31 December		**For the three months ended 31 March**
	2018	**2019**	**2020**
		(in billions of Won)	
Allowance at beginning of the period	₩ 1,642	₩ 1,642	₩ 1,236
Provision for allowance for losses on credit	554	263	53
Write-offs	(819)	(802)	(115)
Recovery of write-offs	341	254	64
Disposals	(19)	(47)	(9)
Other changes	(57)	(74)	(5)
Allowance at end of the period	₩ 1,642	₩ 1,236	₩ 1,224

Note:

(1) Based on period-end non-performing loans for each of the periods indicated.

Loan Aging Schedule

The following table sets forth, on a separate basis, the Issuer's loan aging schedule (excluding accrued interest) as of the dates indicated.

	Normal		More than 1 Month		Total	
	Amount	%	Amount past due	%	Amount	%
As of 31 December 2018	₩ 212,384	99.5%	₩ 971	0.5%	₩ 213,355	100.0%
As of 31 December 2019	223,580	99.6	906	0.4	224,486	100.0
As of 31 March 2020	227,603	99.6	883	0.4	228,486	100.0

Non-Performing Loans

Non-performing loans are loans which are past due by 90 days or more. These loans are generally classified as "substandard," "doubtful" or "estimated loss" based on the FSC's asset classification criteria.

The following table sets forth, on a separate basis, the Issuer's total loans and total non-performing loans (excluding confirmed acceptances and guarantees) by loan type as of the dates indicated.

	As of 31 December				As of 31 March	
	2018		2019		2020	
	Total loans	Non-performing loans	Total loans	Non-performing loans	Total loans	Non-performing loans
	(in billions of Won)					
Won	₩ 200,490	₩ 1,398	₩ 211,057	₩ 990	₩ 215,580	₩ 985
Corporate	87,569	1,267	93,470	798	96,885	780
Retail	102,922	123	112,447	189	114,161	196
Public and others	9,999	8	5,140	3	4,534	9
Foreign currencies	3,559	289	3,619	163	4,214	159
Others	9,306	128	9,810	85	8,692	93
Total	₩ 213,355	₩ 1,815	₩ 224,486	₩ 1,238	₩ 228,486	₩ 1,237

On a separate basis, the Issuer's total non-performing loans (including confirmed acceptances and guarantees) was Won 1,918 billion as of 31 December 2018, Won 1,310 billion as of 31 December 2019 and Won 1,313 billion as of 31 March 2020.

The following table sets forth, on a separate basis, the Issuer's total non-performing loans (including confirmed acceptances and guarantees) according to the industry sector in which the borrower operates as of the dates indicated.

	As of 31 December		As of 31 March
	2018	2019	2020
	(in billions of Won)		
Manufacturing	₩ 568	₩ 315	₩ 311
Real estate and rental	407	311	305
Transportation and warehouse	308	147	154
Retail and wholesale	63	63	67
Service and others	404	230	223
Total	₩ 1,750	₩ 1,066	₩ 1,060

10 Largest Non-Performing Credits

The following table sets forth, on a separate basis, certain information regarding the 10 largest non-performing credits of the Issuer as of 31 March 2020.

Borrower	Industry	Gross principal outstanding
		(in billions of Won)
Borrower 1	Real estate development	₩ 91
Borrower 2	Shipping	76
Borrower 3	Shipbuilding	70
Borrower 4	Real estate development	68
Borrower 5	Shipbuilding	40
Borrower 6	Real estate development	37
Borrower 7	Shipping	33
Borrower 8	Real estate development	25
Borrower 9	Real estate development	24
Borrower 10	Real estate development	23
Total		₩ 487

Non-Performing Loan Strategy

The Issuer's credit rating systems are designed to prevent new loans from being extended to high-risk borrowers as determined by their 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 its loan officers, who then closely monitor such loans.

Notwithstanding the above, when 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 demanding payment or stating that it will take legal action, and prepare for legal action. At the same time, the Issuer initiates 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 write-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 loans subject to normalisation efforts based on the cash flow situation of the borrower.

Once the details of a non-performing loan are identified, the Issuer makes efforts to recover amounts owed to it. While the overall process is overseen by the Credit Management Department, actual recovery efforts on non-performing loans are handled by its regional non-performing loan management teams. Methods for resolving non-performing loans include the following:

- for loans in arrears for more than three months but less than six months and loans to companies in bankruptcy:

  – non-performing loans are transferred from the operating branch to the Issuer's regional non-performing loan management centres;

  – a demand note is dispatched by mail if payment is two months past due;

  – calls and visits are made by the Issuer's regional non-performing loan management staff 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 Banks' database of non-performing loans;

- preparing to commence judicial procedures, including foreclosure and auction of the collateral; and

- preparing to commence collection proceedings for credit card loans.

• for loans in arrears for more than six months but less than one year and loans in arrears for over three months after bankruptcy to companies in bankruptcy:

  - commencing foreclosure and auction proceedings for mortgage loans other than individual housing loans; and

  - preparing to commence collection proceedings for unsecured loans other than credit card loans.

• for loans in arrears for over one year:

  - commencing foreclosure and auction proceedings for individual housing loans;

  - in the case of unsecured loans, the loans are treated as expected credit losses; and

  - preparing to collect written-off loans, except for loans where the cost of collection exceeds the possible recovery or where the statute of limitations for collection has expired.

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 such loans to transfer them to its Credit Management Department or to one of its regional credit management centres.

From time to time, the Issuer may undertake measures to reduce the level of the Issuer's non-performing loans, which include:

• selling such non-performing loans to third parties, including UAMCO; and

• entering into asset securitisation transactions with special purpose companies with respect to such non-performing loans.

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, seek 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 30 June 2018. In September 2018, the National Assembly of Korea adopted a new Corporate Restructuring Promotion Act, which became effective on 16 October 2018 and is scheduled to expire on 15 October 2023.

Under the new Corporate Restructuring Promotion Act, creditors of a financially troubled borrower may participate in a creditors' committee, which is authorised to prohibit such creditors from exercising their rights against the borrower, commence workout procedures and approve or make revisions to a reorganisation 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 requires 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 were excluded by a resolution of the committee at its initial meeting and those who exercised their right to request that their claims be purchased. Creditors that voted against commencement of workout, approval or revision of the reorganisation 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 voted in favour 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.

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. That restructuring plan is subject to court approval.

A portion of the Issuer's loans to corporate customers are currently in workout, restructuring or rehabilitation. As of 31 March 2020, Won 239 billion, or 0.1%, of the Issuer's total loans were to corporate customers in workout, restructuring or rehabilitation. As of the same date, the Issuer's allowances for expected credit losses on these loan exposures amounted to Won 106 billion, or 44.4% of these loans. Upon approval of a workout, restructuring or rehabilitation 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 assessing its loans to and collateral from that borrower for purposes of establishing the Issuer's allowances for expected credit losses.

The following table sets forth certain information regarding the Issuer's 10 largest credits, which were or had previously been subject to workout, restructuring or rehabilitation as of 31 March 2020.

Borrower	Industry	Total outstanding credits	Allowance for expected credit losses
		(in billions of Won)	
Borrower 1	Construction	₩ 66	₩ 5
Borrower 2	Real estate development	20	6
Borrower 3	Construction	10	10
Borrower 4	Shipbuilding	9	7
Borrower 5	Agriculture	9	2
Borrower 6	Manufacturing	8	3
Borrower 7	Manufacturing	7	5
Borrower 8	Manufacturing	7	6
Borrower 9	Real estate development	5	5
Borrower 10	Retail and wholesale	5	3
Total		₩ 146	₩ 52

Loan Write-Offs

The credit approval process the Issuer has implemented includes assessing credit risk before extending loans and monitoring outstanding loans, in order to minimise loans that must be written off. To the extent write-offs are required, the Issuer follows write-off policies aimed at maximising accounting transparency, minimising any waste of resources in managing loans that have a low probability of being collected and reducing its non-performing loan ratio.

Loans To Be Written Off

The Issuer writes off loans that are deemed to be uncollectible by virtue of their falling under any of the following categories:

- loans for which collection is not foreseeable due to insolvency, bankruptcy, compulsory execution, disorganisation, 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; or
- the portion of loans classified as "estimated loss," net of any recovery from collateral, which is deemed to be uncollectible.

Procedure for Write-off Approval

An application for the Issuer's loans to be written off is submitted by the relevant branch of department to the Loan Management Department. The Loan Management Department refers the application to the Audit Department for their review to ensure compliance with the Issuer's internal procedure for write-offs. The Loan Management Department, after reviewing the application to confirm that it meets the relevant requirements, seeks approval from the FSS for the write-offs, which is typically granted. Once the Issuer receives approval from the FSS (except for household loans with estimated losses of Won 10 million or less, for which write-offs are deemed to be automatically approved by the FSS), loans are written off upon approval by the General Manager of the Loan Management Department.

Treatment of Loans Written Off

Once loans are written off, the Issuer classifies them as written-off loans. The Issuer continues collection efforts in respect of these loans through third-party collection agencies. The General Manager of the Loan Management Department must report the amounts of loans permanently written off or recovered during each reporting period to the FSS.

Treatment of Collateral

In the case of loans collateralised by real estate, the Issuer's general policy is to petition a court to foreclose and sell the collateral through a court-supervised auction when the Issuer determines that such loan cannot be recovered through normal collection channels. If a debtor still fails to repay and the court grants its approval for foreclosure, the Issuer will sell the collateral and recover the principal amount and interest accrued up to the amount of the proceeds from such sale, net of expenses incurred for the sale.

Securities Investment Portfolio

Investment Policy and Types of Securities Investment

In making securities investments, the Issuer's principal objectives are to maintain the stability and diversification of the Issuer's assets and match the maturity of its funding and investments. The securities portfolio of the Issuer is primarily managed by the Trading Office of the Issuer's Treasury Department.

The Issuer's investments in debt securities include primarily Government bonds and debentures as well as corporate bonds (other than merchant banks), Government-related funds or privately-capitalised funds that the Issuer considers to have a low credit risk. A significant portion of investments in debt securities have a current maturity of three years or less.

The Issuer's investments in equity securities involve using external broker analysis as well as internal assessments of the issuer's capital, dividend pay-out and price/earnings ratios, the stock's technical history (volumes traded and current price), the issuer's business prospects, industry demand and supply characteristics and the overall political and economic environment.

The Issuer's securities investments are subject to various regulations, including limitations prescribed under the Banking Act. Under these regulations, a bank must limit its investments in equity securities and bonds with a maturity in excess of three years (other than monetary stabilisation bonds issued by the BOK and Government bonds) to 100% of the sum of its total Tier I and Tier II capital amount (less any capital deductions). A bank is also generally prohibited from acquiring more than 15% of the shares with voting rights issued by any other corporation, subject to certain exceptions. Pursuant to the Banking Act, a bank and its trust accounts are prohibited from acquiring the shares of a major shareholder (for the definition of "major shareholder," see "*Supervision and Regulation–Financial Exposure to any Individual Customer and 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 forth in "*Supervision and Regulation–Liquidity" and "Supervision and Regulation–Restrictions on Shareholdings in Other Companies*."

Under applicable Korean law, funds from the credit and banking accounts of the Issuer cannot be used to cover losses in the trust accounts of the Issuer. Commercial paper, privately-placed corporate bonds and guaranteed notes are not subject to the above valuation method. Instead, they are classified as loans and are subject to the corresponding loan loss provisioning.

The Issuer's investments in securities denominated in foreign currencies are subject to certain limits and restrictions specified in the Issuer's guidelines relating to country exposure, a single issuer and type of security exposure, and total investments by a branch.

As of 31 March 2020, total investment in securities amounted to Won 53,059 billion, representing 17.1% of the Issuer's total assets.

Fair Value and Book Value

The following table sets forth the fair value and book value of the securities in the Issuer's portfolio as of the dates indicated.

	As of 31 December				As of 31 March 2020	
	2018		2019		2020	
Classification	**Fair value**	**Book value**	**Fair value**	**Book value**	**Fair value**	**Book value**
			(in billions of Won)			
Financial assets at FVTPL:						
Equity securities	₩ 123	₩ 123	₩ 173	₩ 173	₩ 100	₩ 100
Debt securities:						
Government and public bonds	1,353	1,353	1,399	1,399	2,223	2,223
Financial bonds	3,697	3,697	3,239	3,239	3,132	3,132
Corporate bonds	461	461	449	449	429	429
Public corporation bonds	436	436	343	343	340	340
Others	29	29	65	65	45	45
Subtotal	5,976	5,976	5,495	5,495	6,169	6,169
Other securities	4,024	4,024	3,836	3,836	4,191	4,191
Total financial assets at FVTPL	₩ 10,123	₩ 10,123	₩ 9,504	₩ 9,504	₩ 10,460	₩ 10,460

Classification	As of 31 December				As of 31 March 2020	
	2018		2019		2020	
	Fair value	Book value	Fair value	Book value	Fair value	Book value
			(in billions of Won)			
Financial assets at FVTOCI:						
Equity securities	₩ 376	₩ 376	₩ 413	₩ 413	₩ 331	₩ 331
Debt securities:						
Government and public bonds	3,330	3,330	3,557	3,557	5,484	5,484
Financial bonds	13,015	13,015	13,846	13,846	15,913	15,913
Corporate bonds	1,400	1,400	2,163	2,163	2,875	2,875
Public corporation bonds	1,281	1,281	1,265	1,265	1,777	1,777
Foreign currency	671	671	687	687	844	844
Subtotal	19,697	19,697	21,518	21,518	26,893	26,893
Total financial assets at FVTOCI	₩ 20,073	₩ 20,073	₩ 21,931	₩ 21,931	₩ 27,224	₩ 27,224
Securities at amortised cost:						
Debt securities:						
Government and public bonds	₩ 3,233	₩ 3,181	₩ 5,054	₩ 4,973	₩ 7,095	₩ 6,983
Financial bonds	1,429	1,420	3,089	3,069	3,323	3,292
Corporate bonds	4,024	4,026	3,971	3,950	4,713	4,680
Public corporation bonds	715	710	458	450	429	420
Foreign currency	–	–	–	–	–	–
Total securities at amortised cost	9,401	9,337	12,572	12,442	15,560	15,375
Total	₩ 39,597	₩ 39,533	₩ 44,007	₩ 43,877	₩ 53,244	₩ 53,059

Maturity Analysis

The following table sets forth, on a separate basis, an analysis of the residual maturity profile of the Issuer's debt securities as of 31 March 2020.

	As of 31 March 2020			
	Within 1 year	Over 1 but within 5 years	Over 5 but within 10 years	Over 10 years
		(in billions of Won)		
Financial assets at FVTPL:				
Government and public bond	₩ 1,079	₩ 197	₩ 10	₩ 15
Financial bonds	–	–	–	–
Corporate bonds	–	–	–	–
Public corporation bonds	–	–	–	–
Subtotal	₩ 1,079	₩ 197	₩ 10	₩ 15
Financial assets at FVTOCI:				
Government and public bonds	₩ 1,499	₩ 3,734	₩ 251	₩ –
Financial bonds	5,624	10,290	–	–
Corporate bonds	496	2,378	–	–
Public corporation bonds	403	1,364	10	–
Foreign currency	324	481	39	–
Subtotal	₩ 8,346	₩ 18,247	₩ 300	₩ –
Securities at amortised cost:				
Government and public bonds	₩ 1,825	₩ 5,158	₩ 0	₩ –
Financial bonds	270	3,022	–	–
Corporate bonds	629	3,440	571	40
Public corporation nbonds	80	340	–	–
Subtotal	₩ 2,804	₩ 11,960	₩ 571	₩ 40
Total	₩ 12,229	₩ 30,404	₩ 881	₩ 55

Risk Concentration

As of 31 March 2020, the Issuer held the following securities of individual issuers where the aggregate book value of those securities exceeded 10% of the Issuer's equity at such date. As of the same date, the Issuer's equity was Won 16,381 billion.

	As of 31 March 2020	
	Book value	**Percentage (%)**
	(in billions of Won)	
Name of issuer:		
Government	₩ 13,768	84.0%
Bank of Korea	8,728	53.3
Korea Housing Finance Corp.	5,755	35.1
Korea Development Bank	5,089	31.1
Industrial Bank of Korea	2,167	13.2
Total	₩ 35,507	216.7%

The Korea Housing Finance Corporation is owned by the Government and the Bank of Korea, and the Korea Development Bank is owned by the Government. The Bank of Korea and the Industrial Bank of Korea are controlled by the Government.

Funding

The Issuer's sources of funding consist mainly of deposits and borrowings. Deposits, made by individuals, corporates, local governments and others, include demand deposits, time and savings deposits, mutual instalments and certificates of deposit. The Issuer's other sources of funding consist of borrowings from Government-related entities such as the Ministry of Agriculture, Food and Rural Affairs and local governments. While the Issuer is able to issue debentures guaranteed by the Government ("**Agricultural Bonds**"), historically it has not significantly relied on this source of funding.

For its funding denominated in foreign currencies, the Issuer is required to report to the MOEF its borrowings in excess of US$50 million with maturities over one year. As of 31 March 2020, the Issuer's borrowings denominated in foreign currencies amounted to Won 2,937 billion.

Deposits

As of 31 March 2020, 96.0% of the Issuer's deposits had current maturities of one year or less or were payable on demand. Although the majority of the Issuer's deposits are short-term, the majority of its depositors generally roll over their deposits at maturity, providing the Issuer with a stable source of funding. See "*Risk Factors–General Risks Relating to the Issuer's Business–The Issuer's funding is highly dependent on short-term deposits, which dependence may adversely affect the its operations*." The Issuer generally sets the rate of interest which it pays on deposits according to market conditions.

The following table sets forth the principal sources of the Issuer's funding (based on daily average balances) and the average annual interest rate paid for the periods indicated.

	For the year ended 31 December				For the three months ended 31 March	
	2018		2019		2020	
	Average Amount	**Average Rate**	**Average Amount**	**Average Rate**	**Average Amount**	**Average Rate**
	(in billions of Won, except percentages)					
Deposits:						
Demand deposits	₩ 31,443	0.33%	₩ 33,201	0.29%	₩ 38,278	0.31%
Savings deposits	179,624	1.28	197,446	1.41	190,269	1.20
Certificates of deposit	475	1.68	580	1.89	2,362	1.60
Deposits in foreign currencies	3,119	1.23	3,582	1.68	3,682	1.17
Other deposits	3,112	1.72	3,959	1.98	4,690	1.94
Total	₩ 217,773	1.15%	₩ 238,768	1.27%	₩ 239,281	1.07%

For a description of the Issuer's deposit products, see "*Business – Business Activities – Deposit-Taking Activities*."

Maturities of Certificates of Deposit and Other Time Deposits

The following table summarises the Issuer's certificates of deposits and other time deposits by maturity as of 31 March 2020.

	Won	Foreign currencies	Total
		(in billions of Won)	
Certificates of deposit:			
Due in 3 months or less	₩ 1,708	₩ 61	₩ 1,769
Due between 3 months and 6 months	4	–	4
Due between 6 months and 1 year	702	43	745
Due after 1 year	3	–	3
Sub-total	₩ 2,417	₩ 104	₩ 2,521
Other time deposits:			
Due in 3 months or less	₩ 49,973	₩ 1,020	₩ 50,994
Due between 3 months and 6 months	35,528	261	35,789
Due between 6 months and 1 year	46,575	498	47,073
Due between 1 year and 5 years	6,679	46	6,726
Due after 5 years	10	–	11
Sub-total	₩ 138,765	₩ 1,826	₩ 140,591
Total	₩ 141,182	₩ 1,930	₩ 143,112

Borrowing Liabilities

The following table set forth, on a separate basis, the aggregate amount of contractual maturities of the Issuer's borrowing liabilities, which consist of debentures and borrowings, by maturity as of 31 March 2020.

	Won	Foreign currencies	Total
		(in billions of Won)	
Debentures:			
Due in 3 months or less	₩ 2,070	₩ –	₩ 2,070
Due between 3 months and 6 months	810	366	1,176
Due between 6 months and 1 year	1,880	118	1,998
Due after 1 year	10,130	1,834	11,964
Sub-total	₩ 14,890	₩ 2,318	₩ 17,208
Borrowings[(1)]**:**			
Due in 3 months or less	₩ 1,186	₩ 92	₩ 1,278
Due between 3 months and 6 months	158	341	499
Due between 6 months and 1 year	677	371	1,048
Due between 1 year and 5 years	4,338	226	4,564
Due after 5 years	1,660	–	1,660
Sub-total	₩ 8,019	₩ 1,030	₩ 9,049
Total	₩ 22,909	₩ 3,348	₩ 26,257

Note:

(1) Borrowings in foreign currencies include borrowings from the Government and foreign banks and off-shore borrowings but exclude all other borrowings in foreign currencies.

RISK MANAGEMENT

The Issuer's goal in risk management is to control and effectively manage the risk of all of its departments in their general management activities, promote the stability and soundness of its management and ensure sustainable growth of the Issuer. The Issuer ensures that it understands, measures and monitors the various risks that arise from its business activities, and it adheres strictly to the policies and procedures which are established to address these risks.

Risk Management Units

Risk Management Committee: The Risk Management Committee is a committee under the Board of Directors and is composed of three members including the President. The Risk Management Committee is the Issuer's highest decision-making body regarding its risk management and makes determinations on all issues relating to the Issuer's comprehensive risk management. In order to ensure the Issuer's stable financial condition, this committee monitors the Issuer's overall risk exposure and its compliance with pre-established risk policies and risk limits. In addition, this committee reviews risk and control strategies and policies, evaluates whether risks are at adequate levels, reviews risk-based capital allocations and monitors internal control issues. This committee holds regular meetings each quarter.

Risk Management Council: The Risk Management Council consists of the head of the Risk Management Department and the division heads of the Issuer. The Risk Management Council forms more specific risk management practices based on the risk policies established by the Risk Management Committee, analyses risks and establishes risk management measures, sets risk limit allowances by risk type and determines and revises risk measurement standards and methods. This council convenes at least once a month as well as on an ad-hoc basis.

Risk Management Working Party Meetings: Risk Management Working Party Meetings take place among the team leaders of the relevant departments who evaluate and review specific issues relating to risk management. Meetings are held on a monthly basis as well as on an ad-hoc basis.

Risk Management Department: The Risk Management Department consists of the Risk Policy Team, the Market Risk Team, the Operational Risk Team and the Credit Risk Management Office. Each team and office assists the Risk Management Committee and the Risk Management Council in performing tasks relating to measuring, monitoring, controlling and reporting risks as well as establishing risk management strategies. The Chief Risk Officer oversees the Risk Management Department and all risk-related issues of the Issuer.

The business of the Issuer is primarily exposed to counterparty credit risk, market risk, liquidity risk, interest rate risk, foreign exchange risk and operational risk. The measures put into place by the Issuer to monitor such risks across all significant areas are set forth below.

Credit Risk Management

Credit risk is the risk of expected and unexpected losses in the event of default of a borrower or a counterparty. Credit risk management aims to improve asset quality and generate stable profits while reducing risk through a diversified and balanced loan portfolio. 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 then sets a credit limit for each borrower or counterparty.

The Issuer assesses and manages credit exposures for all types of products, including loans, guarantees, investment securities and derivative products. The current level of credit risk is determined by "expected" and "unexpected" loss levels. The Issuer calculates expected loss levels based on the probability of default, the potential loss resulting from such default and the exposure of such potential default, and uses the measured expected loss to determine interest rates and provision levels relating to new or renewed credits. Unexpected loss levels, which incorporate possible fluctuations in expected loss levels, are calculated using the advanced internal ratings-based method proposed by the Basel Committee for internal control purposes and a risk-weighted method approved by the FSS for use with respect to external regulations.

The Issuer believes it has appropriate risk management procedures in place for approving and monitoring the quality of its credit portfolio.

Credit Evaluation

Each of the Issuer's borrowers is assigned a credit rating, which is based on a comprehensive internal credit evaluation system that considers a variety of criteria. For retail borrowers, the credit rating takes into account the borrower's biographical details, past dealings with the Issuer and external credit rating information, among others. For corporate borrowers, the credit rating takes into account financial indicators as well as non-financial indicators such as industry risk, operational risk and management risk, among others. The credit rating, once assigned, serves as the fundamental reference for the Issuer's credit risk management, and is used in a wide range of credit risk management processes, including credit approval, credit limit management, loan pricing and computation of allowance for expected credit losses. The Issuer has separate credit evaluation systems for retail customers and corporate customers, which are further segmented and refined to meet Basel II requirements. Such requirements have not changed under Basel III.

The Issuer's retail loan credit scoring system comprises an applicant scoring system model and a behaviour scoring system model. The applicant scoring system model evaluates the applicant's financial and non-financial information to determine the appropriate amount and pricing for the loan as well as its preliminary terms and conditions. The behaviour scoring system model automatically evaluates a borrower's payment history on a monthly basis to revise the borrower's credit rating and appropriately amend the loan's terms and conditions, including an extension of loan maturity.

The Issuer's corporate credit evaluation system assigns credit risk ratings to corporate borrowers by measuring and analysing various quantitative and qualitative risk factors. After a preliminary credit rating is generated based on the borrower's probability of default and past ratings, the rating is adjusted by reflecting the borrower's ownership structure, corporate history, outlook, contingent liabilities, credit history and other special considerations to produce a final credit rating.

The Issuer uses a number of corporate risk assessment models to analyse the credit risk of corporate loans. The Issuer classifies corporate borrowers into seven categories: general corporate, financial institutions, public institutions, non-profit organisations, special financings, securitisations and foreign borrowers. Certain categories are further divided into 26 sub-categories, with a separate corporate risk assessment model used to analyse the risk of corporate loans under each category or, if applicable, sub-category.

Under each of the Issuer's corporate risk assessment models, borrowers are classified into 10 risk categories, with certain risk categories being further divided into two or three sub-categories, based on the financial and business risk of the borrower and the relevant borrower's ability to repay debt.

The table below sets forth a brief description of borrowers under each of the 10 categories.

Risk categories	Description of borrowers under each risk categories
1.	Very large corporate borrower with high level of competitiveness in the market in which it operates and strong capability to repay its debt.
2.	Large corporate borrower with excellent management skills, financial stability and cash flow and ability to repay its debt.

Risk categories	Description of borrowers under each risk categories
3.	Large corporate borrower with strong ability to repay its debt but may be adversely affected by foreseeable economic conditions.
4.	Corporate borrower that is able to recover from a general slowdown in its industry but may be adversely affected by economic conditions.
5.	Corporate borrower with low potential to default on its debt in the near future but its ability to repay debt may be adversely affected if economic conditions deteriorate.
6.	Corporate borrower with current ability to repay its debt but with potential to default on its debt if economic and/or market conditions deteriorate.
7.	Corporate borrower that does not have an immediate risk of default due to its management, financial status or future cash flow, but with a potential weakness that may weaken its ability to repay its debt and increase the risk of default if its management does not address and correct such weakness.
8.	Corporate borrower that has a weakness that will adversely affect its ability to repay debt due to its management, financial status or future cash flow, which may result in losses to the Issuer if such weakness is not corrected.
9.	Corporate borrower with a very high probability of default due to its management, financial status or future cash flow. Corporate borrower that has outstanding loans overdue by 90 days or more.
10	Corporate borrower that does not have the capability to repay its debt, and the Issuer would have to write off the loans to such borrower; corporate borrower that has outstanding loans overdue by one year or more; corporate borrower that has a serious risk of default due to bankruptcy, wind up or liquidation.

Loan Approvals

Applications for the Issuer's corporate and retail loans are made through the Issuer's branches. Such applications are initially reviewed and approved based on the Issuer's credit rating system, which includes a corporate rating system for corporate loans and a credit scoring system for retail loans at the branch level. In general, approval decisions on retail loan applications are made at the branch level.

Corporate loan applications are assigned to one of four committees, depending on the amount of the loan, market conditions of the applicant's industry, the applicant's credit rating and collateral, if applicable. The four committees which approve or deny corporate loan applications are as follows, in the order of significance of the loans it evaluates:

- the Credit Review Committee, which consists of five examiners;
- the Loan Consultation Committee, which consists of five examiners;

- the Loan Review Committee, which consists of the heads of departments including the Credit Analysis Department, the Risk Management Department and the Loan Planning Department; and

- the Loan Examination Committee, which consists of the heads of divisions including the Fund Management Division, the Marketing and Sales Division and the Corporate Marketing Division.

At each of these four committees, a corporate loan application is reviewed for approval according to criteria including the lawfulness of the loan application, feasibility of the loan, default risk and contribution to the Issuer's profit. Loan applications are approved with the consent of two-thirds or more of the present committee members, provided that a quorum of two-thirds of the committee members is present.

Monitoring Credit Risk

The Issuer has implemented measures including the following to monitor and control credit risk:

- *Credit ratings review*. The Issuer reviews borrowers' credit ratings upon application to assess indications of insolvency.

- *Credit review management*. The Issuer reviews the adequacy of newly-issued loans.

- *Early warning system*. The Issuer continues to collect and analyse available data on corporate borrowers to preemptively detect signs of insolvency and implement prevention measures. Companies that are indicated to require "monitoring" or "caution" according to early warning system levels are classified as early warning companies, receive periodic credit reviews and are tagged as companies of interest.

- *Periodic reviews of corporate credit risk:* Pursuant to the Corporate Restructuring Promotion Act, the Issuer regularly assesses whether a company should be classified as showing signs of insolvency and if so, also assesses the possibility of its recovery. If a company is assessed to show such signs of insolvency, corporate rehabilitation processes begin.

Credit Remediation

The recognition of potential problem loans generally begins when an interest or principal payment is late. The Issuer produces weekly reports containing arrear information from its headquarters and branches and notifies the relevant borrowers of late payments based upon such reports.

The Issuer also monitors information provided on a real-time basis by a computer network system operated by the Korean Federation of Banks, which includes borrowers who have declared bankruptcy and borrowers who have received warnings of arrears exceeding three months and six months, respectively, from any Korean bank. The Issuer also monitors weekly reports containing similar information from other financial institutions through a shared computer network system. Any borrower that receives a warning from any bank generally will have its banking services terminated by all banks. The Issuer also monitors information provided by Korean credit information companies in order to take appropriate remedial actions.

The Loan Management Department at the Issuer's headquarters is responsible for managing non-performing credits transferred to it by other business units of the Issuer. Each branch periodically sells problematic and non-performing credits at estimated market values to the Loan Management Department. The Issuer believes that centralising the remediation and resolution of non-performing credits will enable it to implement uniform policies for non-performing credit resolution and result in a system that pools its institutional knowledge to create a more specialised work force. Collectively, the

Issuer believes that these factors will lead to increased rates of recovery with respect to non-performing credits while increasing operational efficiency by allowing each branch to focus on its core business without expending resources to manage non-performing credits.

Market Risk Management

The Issuer manages its market risks by setting limits, such as investment limits, position limits and risk approval limits, on a Value at Risk ("**VaR**") basis and monitoring strict compliance with these limits and stop- loss rules through its Risk Management Committee and Asset and Liability Management Committee. Under the Issuer's risk management structure, each of its operational departments:

- establishes and monitors compliance with risk limits and stop-loss rules;
- reports to the Risk Management Committee regarding the holding of trading assets, the current status of market risks and compliance with risk limits;
- reviews the volatility of the marketable securities portfolio in connection with each market risk factor; and
- measures net positions and VaRs of trading activities resulting from each market risk factor on a daily basis.

The principal market risks arising from the Issuer's trading activities can be subdivided into interest rate risk, equity risk and foreign exchange risk:

- Interest rate risk is the principal risk to which the Issuer's trading activities are exposed. This risk arises primarily from the Issuer's debt securities. The Issuer sets different exposure limits for interest rate risks arising from its trading and non-trading debt portfolios.
- Equity risk arises from price fluctuations in equity securities and derivatives.
- Foreign exchange risk arises from foreign currency-denominated assets and liabilities in both its trading and non-trading accounts, as well as financial derivatives involving foreign currencies.

The following table shows the daily VaRs, as of the dates indicated, at a 99.9% confidence level for a one-day holding period, of the Issuer's interest rate risk, equity risk and foreign exchange risk relating to its trading activities on a separate basis.

	As of 31 December		As of 31 March
	2018	2019	2020
		(in billions of Won)	
Interest rate risk	₩ 6.8	₩ 10.8	₩ 21.9
Equity risk	4.2	4.0	2.5
Foreign exchange risk	0.2	0.8	1.6
Less: diversification	4.4	4.9	3.1
VaR for overall trading activities	6.9	10.8	23.0

In addition to daily VaR calculations, the Issuer conducts the following tests to measure its exposure to market risks:

Back Testing. The Issuer conducts back testing on a daily basis to validate the adequacy of its market risk model. Back testing compares both the actual and hypothetical profit and loss with VaR calculations and analyses any results that fall outside a predetermined confidence interval.

Stress testing. In addition to VaR analysis, which assumes normal market situations, the Issuer uses stress testing to assess its market risk exposure to abnormal market fluctuations. Such testing is an important way to supplement VaR analysis, as VaR is a statistical expression of possible loss under a given confidence level and holding period. VaR does not cover potential loss that arises when the market moves in a manner contrary to the Issuer's normal expectations.

Liquidity Risk Management

Liquidity risk is the risk of insolvency or loss due to a disparity between the inflow and outflow of funds as a result of, among other reasons, maturity mismatch, including having to obtain funds at a high price or to dispose of securities at an unfavourable price due to a lack of available funds. The Issuer manages its liquidity in order to satisfy its financial liabilities arising from withdrawals of deposits, redemption of matured debentures and repayment of borrowed funds. The Issuer also requires sufficient liquidity to fund loans, extend other credit and invest in securities. The Issuer's liquidity management goal is to meet all of its liability repayments on time and fund all of its investment opportunities even under adverse conditions.

The Issuer maintains significant cash balances for each of its business segments to maintain sufficient liquidity. In addition to cash balances, the Issuer maintains large portfolios of investment and trading securities. The Issuer may also issue Agricultural Bonds to maintain liquidity at sufficient levels.

The FSC uses the liquidity coverage ratio, defined as the ratio of highly liquid assets to total net cash outflows over a 30-day period, as the principal liquidity risk management measure and currently requires Korean banks, including the Issuer, to:

- maintain a liquidity coverage ratio of not less than 100% (temporarily reduced to 85% until September 2020);
- maintain a foreign currency liquidity coverage ratio of not less than 80% (temporarily reduced to 70% until September 2020); and
- submit monthly reports with respect to the maintenance of these ratios.

The following tables show the liquidity status and limits for the total accounts and foreign currency accounts of the Issuer, as of the dates indicated, on a separate basis, in accordance with the FSC's regulations:

		As of 31 March 2020
		30 days or less
		(in billions of Won, except percentages)
Total accounts:		
Highly liquid assets (A)	₩	45,821
Total net cash outflows over the next 30 calendar days (B)		37,882
Liquidity coverage ratio (A/B)		121.0%
Limit		100.0%

		As of 31 March 2020
		30 days or less
		(in millions of US$, except percentages)
Foreign currency accounts:		
Highly liquid assets (A)	$	826
Total net cash outflows over the next 30 calendar days (B)		662
Liquidity coverage ratio (A/B)		124.8%
Limit		80.0%

In addition to liquidity risk management under normal market situations, the Issuer has contingency plans to effectively cope with a possible liquidity crisis. A liquidity crisis may arise if the Issuer is not able to effectively manage the situations with its normal liquidity management measures due to, among other reasons, inability to access its normal sources of funds or large withdrawals of its deposits as a result of various external or internal factors, including a collapse in the financial markets or a sudden deterioration of the Issuer's credit. The Issuer's contingency plans consist of the following:

- closely monitoring market movements of the Issuer's assets and liabilities and generating daily reports to its management;
- drawing down up to the credit limits of the Issuer's existing credit lines, as necessary;
- setting up back-up overdraft facilities;
- disposing of the Issuer's securities investments and any overseas funds; and
- calling for early redemption of the Issuer's loan assets.

Interest Rate Risk Management

A key component of the Issuer's risk management policy is the management of its interest rate sensitivity. The imbalance in the maturities of the Issuer's interest rate sensitive assets and liabilities, and the gap resulting from such imbalance may cause its net interest income to be affected by changes in the prevailing level of interest rates. Accordingly, the Issuer performs various gap analyses in respect of such imbalance every month and estimates the future impact on its net interest income from changes in market rates of interest. In addition, the Issuer adjusts the maturities of its assets and liabilities based on their respective sensitivities to interest rate changes in order to manage interest rate risk.

Interest Rate Gap Analysis. Interest rate gap analysis measures the expected changes to the Issuer's net interest revenues by calculating the difference in the amounts of its interest-earning assets and interest-bearing liabilities at each maturity and interest resetting date. The Issuer performs interest rate gap analysis for both its Won and foreign currency-denominated assets on a monthly basis. For interest rate gap analysis, the Issuer uses or assumes the following maturities for different assets and liabilities:

- With respect to the maturities and re-pricing dates of its assets, the Issuer assumes that the maturity of its prime rate-linked loans is the same as that of its fixed-rate loans. The Issuer's equity securities are excluded from its interest-earning assets.
- With respect to the maturities and re-pricing dates of its liabilities, the Issuer assumes that its money market deposit accounts and "non-core" demand deposits under FSC guidelines have maturities of one month or less for both Won-denominated accounts and foreign currency-denominated accounts.
- With respect to its "core" demand deposits under FSC guidelines, the Issuer assumes that such deposits have maturities of eight different intervals ranging from one month to five years.

The following tables show the Issuer's interest rate gaps as of 31 March 2020 for (i) Won-denominated non-trading bank accounts, including derivatives entered into for hedging purposes, and (ii) foreign currency-denominated non-trading bank accounts, including derivatives entered into for hedging purposes.

	Total	Within 3 months	Within 6 months	Within 1 year	Within 3 years	Over 3 years
			(in billions of Won)			
Won-denominated:						
Assets:						
Interest-earning assets	₩ 276,976	₩ 82,767	₩ 136,442	₩ 197,096	₩ 252,132	₩ 24,844
Fixed rates	142,909	26,840	47,931	87,569	132,697	10,212
Floating rates	134,067	55,927	88,510	109,526	119,435	14,632
Liabilities:						
Interest- bearing liabilities	₩ 267,344	₩ 103,755	₩ 150,924	₩ 212,869	₩ 243,347	₩ 23,997
Fixed liabilities	118,819	49,336	59,476	71,383	95,498	23,322
Floating liabilities	148,525	54,419	91,449	141,486	147,849	676
Sensitive gap	9,632	(20,988)	6,505	(1,291)	24,559	846
Cumulative gap	9,632	(20,988)	(14,482)	(15,774)	8,785	9,632
% of total assets	3.48%	(7.58)%	(5.23)%	(5.69)%	3.17%	3.48%

	Total	Within 3 months	Within 6 months	Within 1 year	Within 3 years	Over 3 years
			(in millions of US$)			
Foreign currency-denominated:						
Interest-earning assets	$ 9,069	$ 5,684	$ 6,895	$ 7,048	$ 8,388	$ 681
Interest- bearing liabilities	10,470	4,099	7,091	8,025	9,604	866
Sensitive gap	(1,400)	1,585	(1,781)	(781)	(239)	(185)
Cumulative gap	(1,400)	1,585	(196)	(977)	(1,216)	(1,400)
% of total assets	(15.44)%	17.48%	(2.16)%	10.77%	(13.41)%	(15.44)%

Duration Gap Analysis. The Issuer also performs duration gap analysis to measure and manage its interest rate risk. Duration gap analysis is more of a long-term risk indicator than interest rate gap analysis, as interest rate gap analysis focuses only on accounting income and not on the market value of the assets and liabilities. The Issuer emphasises 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 income changes. For duration gap analysis, the Issuer uses or assumes the same maturities for different assets and liabilities that it uses or assumes for its interest rate gap analysis.

The following table shows duration gaps of the Issuer when the interest rate increases by one percentage point as of the specified dates.

	Asset Duration	Liability Duration	Duration Gap
		(in years)	
30 June 2018	0.86	0.92	(0.07)
31 December 2018	0.87	0.90	(0.03)
30 June 2019	0.95	0.86	0.09
31 December 2019	1.02	0.91	0.10
31 March 2020	1.06	0.89	0.17

The Issuer also monitors its exposure to interest rate changes by measuring its VaR with respect to interest rate fluctuations. The Issuer primarily adjusts the maturity of its rate-sensitive assets and liabilities and the terms of its financial products in order to manage its Won interest rate risk.

The Issuer sets interest rate risk limits using the historical simulation method, which compares actual historical price, volatility and yield changes with their current positions to generate hypothetical portfolios and calculate a distribution of position and portfolio market value changes. The following table summarises the Issuer's interest rate risk on a separate basis, taking into account asset and liability durations for the specified periods as of 31 March 2020.

	As of 31 March 2020					
	Total	**Within 3 months**	**Within 6 months**	**Within 1 year**	**Within 3 years**	**Over 3 years**
	(in billions of Won)					
Won-denominated:						
Asset position	₩ 276,977	₩ 82,778	₩ 53,674	₩ 60,644	₩ 55,036	₩ 24,844
Liability position	267,133	103,544	47,169	61,945	30,477	23,998
Gap	9,843	(20,766)	6,505	(1,301)	24,559	846
Average maturity	N/A[(1)]	0	0	1	2	7
Interest rate volatility	N/A	2.0%	2.0%	2.0%	2.0%	2.0%
Amount at risk	(1,031)	16	(47)	18	(820)	(199)

	As of 31 March 2020					
	Total	**Within 3 months**	**Within 6 months**	**Within 1 year**	**Within 3 years**	**Over 3 years**
	(in millions of US$)					
Foreign currency-denominated:						
Asset position	$ 9,383	$ 5,814	$ 1,212	$ 287	$ 1,381	$ 689
Liability position	9,761	2,628	4,118	894	1,427	696
Gap	(378)	3,186	(2,906)	(607)	(45)	(6)
Average maturity	N/A	0	0	1	2	7
Interest rate volatility	N/A	2.0%	2.0%	2.0%	2.0%	2.0%
Amount at risk	23	(3)	15	11	2	(1)

Note:

(1) N/A means not applicable.

The Issuer enters into interest rate swaps and contracts to mitigate its interest rate risk. All of the interest rate derivative products purchased by the Issuer are on behalf of its customers or to hedge the Issuer's own positions. As of 31 March 2020, the Issuer had entered into interest rate derivative contracts with an aggregate notional amount equivalent to Won 15,118 billion.

Foreign Exchange Risk Management

The Issuer funds all of its foreign currency lending and investments in foreign currencies and seeks to match its foreign currency assets and liabilities in order to reduce exposure to currency fluctuations. Pursuant to the Foreign Exchange Transaction Regulations of Korea, the Issuer's overpurchased and oversold positions are each limited to 50% of the Issuer's Tier I and Tier II capital as of the end of the prior month. Risks relating to exchange rate fluctuations are also managed through the Issuer's foreign exchange dealings, which are conducted by the Issuer's foreign exchange and derivatives trading centre and overseas branches. Counterparties to the Issuer's foreign exchange dealings are restricted to domestic and foreign financial institutions and banks with which the Issuer's Risk Management Department has established foreign exchange dealing limits. The Issuer's foreign exchange dealings are primarily conducted in the Won/Dollar market and are subject to what the Issuer considers to be conservative daily maximum and closing limits and stop-loss limits.

Pursuant to the Foreign Exchange Transaction Regulations of Korea, a licensed foreign exchange bank, such as the Issuer, may, with certain exceptions, enter into derivative transactions without restrictions so long as such transactions are not linked to the credit risks of a party thereto or any third party, in which case a report to the Bank of Korea is necessary.

The Issuer generally does not engage in unmatched speculative trading of derivative instruments for its own account, unless it is within the open position limits applicable to its foreign exchange dealings. The Issuer instead enters into interest rate and currency derivative transactions such as swaps, options and forward contracts either on behalf of its customers or for hedging interest rate and foreign exchange mismatches. The Issuer's exposure relating to such transactions is, therefore, generally limited to the credit risk of its counterparties in such transactions. As of 31 March 2020, the Issuer had entered into foreign currency derivative transactions, with an aggregate notional amount equivalent to Won 59,561 billion.

Operational Risk Management

The Basel Committee currently defines operational risk as the "*risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.*" Operational risk is difficult to quantify and subject to different definitions. The Issuer similarly defines its operational risk as the risk of loss resulting from improper or inadequate internal procedures, people and systems and from external events (including legal risks but excluding strategy and reputation-related risks). Operational risk has the following characteristics: (i) as such risk is inherent in all operations, the range of activities that must be managed is broad and such risk may occur due to multiple factors; (ii) unlike market risk and credit risk, it is difficult to objectively quantify the level of such risk; and (iii) it requires the cooperation of multiple departments of the Issuer, such as the Internal Audit Department, the Legal and Compliance Department and the Risk Management Department.

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 organisation and to monitor and control operational risk. The Issuer's operational risk management system is executed by the operational risk team of the Risk Management Department. Through its operational risk management system, the Issuer manages operational risk by applying various methods including risk control self-assessments, risk quantification through the use of key risk indicators, loss data collection, scenario management and operational risk capital measurement.

The Issuer considers legal risk to be part of its operational risk. The uncertainty in the enforceability of the obligations of its customers and counterparties, including foreclosure on collateral, creates legal risk. Changes in laws and regulations could also adversely affect the Issuer. The Issuer's Legal And Compliance Department seeks to minimise legal risk by using standardised legal documentation, employing procedures designed to ensure that transactions are properly authorised and consulting legal advisers.

MANAGEMENT AND EMPLOYEES

Management

Board of Directors

The Board of Directors is responsible for the management and strategy of the Issuer. The Board of Directors is currently composed of Executive Directors (including the President), Non-Executive Directors and Independent Non-Executive Directors. The Board of Directors must have at least three Independent Non-Executive Directors. Regular Board meetings are held once every three months.

The Chairman is appointed from among the Independent Non-Executive Directors by a resolution of the Board of Directors and has a term of one year. The appointments of Executive Directors and Non-Executive Directors are approved at shareholders' meetings, prior to which Independent Non-Executive Directors are recommended by the Officer Candidate Recommendation Committee. Members of the Audit Committee are recommended by the Officer Candidate Recommendation Committee, and their appointments are approved at shareholders' meetings.

The address for each of the Directors of the Board is: 120, Tongil-ro, Jung-gu, Seoul, 04517, Korea.

As of the date of this Offering Circular, the Board of Directors consisted of the following persons.

Name	Year of Birth	Director Since	Title	Other Activities
Byung Hwan Son	1962	26 March 2020	President; Chief Executive Officer; Executive Director	None
Ik Joong Lee	1961	1 April 2019	Executive Director; Member of the Audit Committee	None
Hyung Chul Shin.	1964	1 June 2020	Non-Executive Director	None
Jun Ho Kim	1955	1 April 2020	Non-Executive Director	None
In Tae Kim.	1962	27 April 2020	Non-Executive Director	Vice President of Corporate Planning Department of NH Financial Group
Jung Kie Hahn	1949	1 April 2018	Chairman; Independent Non-Executive Director; Member of the Audit Committee	None
Han Joo Lee	1956	1 April 2019	Independent Non-Executive Director	Director of Gyeonggi Research Institute; Professor of Gachon University
Kwang Beom Lee	1959	1 April 2019	Independent Non-Executive Director; Member of the Audit Committee	Partner of L.K.B & Partners LLC
Joon Ha	1959	1 April 2019	Independent Non-Executive Director	None

Brief descriptions of the experience of each member of the Board of Directors are set forth below:

Mr. Byung Hwan Son was appointed to the Board of Directors of the Issuer on 26 March 2020. He is currently the President, Chief Executive Officer and Executive Director of the Issuer. Mr. Son has an undergraduate degree in Agricultural Education from Seoul National University. He previously served as the Vice President of the Corporate Planning Department of NH Financial Group and Head of the Business Strategy Department of the NACF.

Mr. Ik Joong Lee was appointed to the Board of Directors of the Issuer on 1 April 2019. He is currently an Executive Director and member of the Audit Committee of the Issuer. Mr. Lee has an undergraduate degree in Business Administration from Konkuk University. He previously served as the Director of Creditors' Coordination Committee and the Specialised Banking Investigation Director of the FSS.

Mr. Hyung Chul Shin was appointed to the Board of Directors of the Issuer on 1 June 2020. He is currently a Non-Executive Director of the Issuer. Mr. Shin previously served as a Representative of the NACF and the Union Leader of Gammun Nonghyup Labor Union.

Mr. Jun Ho Kim was appointed to the Board of Directors of the Issuer on 1 April 2020. He is currently a Non-Executive Director of the Issuer. Mr. Kim has an undergraduate degree from Soongsil University and a Ph.D. in Business Administration from the University of Suwon. He previously served as a Vice President of the Issuer and the Vice President of Namhae Chemical Corp.

Mr. In Tae Kim was appointed to the Board of Directors of the Issuer on 27 April 2020. He is currently a Non-Executive Director of the Issuer. Mr. Kim has an undergraduate degree in Metal Engineering from Kookmin University. He is currently the Vice President of Corporate Planning Department of NH Financial Group and has previously served as a Vice President of the Issuer.

Mr. Jung Kie Hahn was appointed to the Board of Directors of the Issuer on 1 April 2018. He is currently the Chairman of the Board of Directors, an Independent Non-Executive Director and member of the Audit Committee of the Issuer. Mr. Hahn has an undergraduate degree in Business Administration from Seoul National University. He previously served as the President of Koscom Co., Ltd.

Mr. Han Joo Lee was appointed to the Board of Directors of the Issuer on 1 April 2019. He is currently an Independent Non-Executive Director. Mr. Lee has an undergraduate degree in Biology from Seoul National University and a graduate degree and a Ph.D. in Law from Seoul National University. He is currently a Director of Gyeonggi Research Institute and a professor at Gachon University.

Mr. Kwang Beom Lee was appointed to the Board of Directors of the Issuer on 1 April 2019. He is currently an Independent Non-Executive Director and member of the Audit Committee of the Issuer. Mr. Lee has undergraduate and graduate degrees in Law from Seoul National University. He is currently a partner of L.K.B & Partners LLC and previously served as the Chief Judge of the Seoul Administrative Court.

Mr. Joon Ha was appointed to the Board of Directors of the Issuer on 1 April 2019. He is currently an Independent Non-Executive Director of the Issuer. Mr. Ha has undergraduate and graduate degrees in Public Administration from Hankuk University of Foreign Studies. He previously served as a Director at Hyundai Asan Co., Ltd and the Director of Corporate Intelligence Department of Newsis Co., Ltd.

Committees

The Issuer has the following four committees that serve under the Board of Directors: (i) the Risk Management Committee, (ii) the Audit Committee, (iii) the Officer Candidate Recommendation Committee and (iv) the Remuneration Committee, as well as the Management Committee.

The Management Committee is composed of the President and the Vice Presidents of the Issuer who discuss and determine important matters relating to the Issuer's business and major current issues, including matters that are required to be resolved by the Board of Directors and/or shareholders of the Issuer, as well as matters delegated to it by the Board of Directors. The Management Committee holds regular meetings on a monthly basis.

Risk Management Committee

The Risk Management Committee is composed of three or more Directors, a majority of whom are required to be Independent Non-Executive Directors. The members are elected by the Directors, and the chairperson is elected by members of the Risk Management Committee. The Risk Management Committee oversees and determines all issues relating to the Issuer's comprehensive risk management functions, including the establishment of general risk management policies and strategies. In order to ensure the stability of the Issuer's financial condition, this committee monitors the Issuer's overall risk exposure and reviews its 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 and reviews risk-based capital allocations and internal control plans. This committee holds regular meetings every three months.

Audit Committee

The Audit Committee is responsible for auditing the assets and operations of the Issuer. The Audit Committee is composed of three or more Directors, at least two-thirds of whom are required to be Independent Non-Executive Directors and at least one member of whom must be an expert in accounting or finance, pursuant to the Act on Corporate Governance of Financial Companies and the enforcement decree thereof. This committee holds regular meetings every three months.

Officer Candidate Recommendation Committee

The Officer Candidate Recommendation Committee is composed of three or more Directors, a majority of whom are required to be Independent Non-Executive Directors. The chairperson is required to be an Independent Non-Executive Director elected by the members. The Officer Candidate Recommendation Committee is responsible for nominating candidates for the Issuer's President, Independent Non-Executive Directors and members of the Audit Committee. This committee convenes when such candidates require nomination.

Remuneration Committee

The Remuneration Committee is composed of three or more Directors, including at least one member of the Risk Management Committee and at least one Director with experience in finance, accounting or the financial affairs of a financial company or other company established under the Commercial Code of Korea. A majority of the members of the committee are required to be Independent Non-Executive Directors, and the chairperson must be an Independent Non-Executive Director elected by the members. The Remuneration Committee monitors the establishment and management of the Issuer's remuneration system and has the independent authority to set up and implement remuneration strategies. This committee convenes annually.

Compensation of Management

For 2019 and the three months ended 31 March 2020, an aggregate amount of remuneration and benefits of Won 3 billion and Won 1 billion, respectively, were paid to key management.

Stock Options and Warrants

As of 31 March 2020, there were no warrants or options of the Issuer held by the Directors. As of the same date, none of the Directors owned shareholding interests in the Issuer.

Involvement of the Issuer and the Directors in Certain Legal Proceedings

Neither the Issuer nor any of its current Directors have been subject to any order, judgment or decree, or violated any securities or commodities law in the last five years, or are involved in any litigation or arbitration proceedings that may have, or have had, a material adverse effect on the Issuer's financial condition, nor, so far as any of them is aware, are any such proceedings pending or threatened.

Employees

As of 31 March 2020, the Issuer had 16,134 employees. The following table sets forth the number of the Issuer's employees by category as of 31 March 2020.

Category	Number of employees
Full-time employees	13,411
Contract employees	2,723
Total	16,134

The Issuer believes that it maintains a good relationship with its employees. As of 31 March 2020, 11,400 employees were members of a union. Currently, the Issuer's employees are members of two labour unions, the Korea Financial Industry Union and the Korean Federation of Clerical & Financial Labor Union. The Issuer has not experienced any work stoppage of a serious nature due to labour issues since its inception. Every year each of the union and management negotiate and enter into new collective bargaining agreements of one-year durations.

The Issuer, like most other Korean banks, grants its employees annual increases in basic wages and pays periodic bonuses and overtime. For the year ended 31 December 2019 and the three months ended 31 March 2020, employee benefits comprised 66.1% and 69.2%, respectively, of total general and administrative expenses of the Issuer. The Issuer also provides a wide range of fringe benefits to its employees, including housing subsidies, medical care assistance and educational and training opportunities.

In accordance with the National Pension Act of Korea, the Issuer contributes an amount equal to 4.5% of employees' wages, and each employee contributes 4.5% of his or her wages into each employee's personal pension account. Furthermore, in accordance with the Issuer's policy and the Act on the Guarantee of Employees' Retirement Benefits, employees with one year or more of services are entitled, upon termination of employment, to receive a lump sum severance payment comprising the average of the last three months' wages and accrued bonuses for the last 12 months.

In addition, in accordance with the Act on the Guarantee of Employees' Retirement Benefits, the Issuer has adopted a retirement pension plan for its employees. Contributions under the retirement pension plan 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, which guarantees a certain payout at retirement, according to a fixed formula based on the employee's average wages and the number of years for which the employee has been a plan member. Under Korean law, the Issuer may not terminate full time employees except under certain circumstances.

RELATED PARTY TRANSACTIONS

The Issuer enters into transactions with, and intends to continue to enter into transactions with, its affiliates and other related parties (together, the "**related parties**") in the ordinary course of business. In accordance with the Issuer's policies, such transactions are made substantially on the same terms and conditions as transactions of comparable risks with other unrelated individuals and businesses. The Issuer's related party transactions include banking transactions with its affiliates and shareholders. For information regarding transactions with the Issuer's affiliates, see Note 37 of the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 and the Issuer's unaudited interim condensed consolidated financial statements as of 31 March 2020 and 31 December 2019 and for the three months ended 31 March 2020 and 2019, included elsewhere in this Offering Circular.

None of the Issuer's directors or officers have or had any interest in any transactions effected by the Issuer that are or were unusual in their nature or conditions or significant to the Issuer's business which were effected during the current or immediately preceding fiscal year or were effected during an earlier year and remain in any respect outstanding or unperformed.

SUPERVISION AND REGULATION

Overview

The banking system in Korea is governed by the Banking 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 Bank of Korea, the MPC, the FSC and its executive body, the FSS.

The Bank of Korea, 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 stabilisation through establishing and implementing efficient monetary and credit policies with a focus on financial stability. The Bank of Korea acts under instructions of the MPC, the supreme policy-making body of the Bank of Korea.

Under the Bank of Korea Act, the MPC's primary responsibilities are to formulate monetary and credit policies and to determine the operations, management and administration of the Bank of Korea.

The FSC, established in April 1998, regulates commercial banks pursuant to the Banking 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 Banking 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, such as a trust business, must obtain approval from the FSC. 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 also 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 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/or
- suspensions of a part or all of its business operations for not more than six months.

Capital Adequacy and Allowances

The Banking Act requires nationwide banks, such as the Issuer, to maintain a minimum paid-in capital of Won 100 billion and regional banks, to maintain a minimum paid-in capital of Won 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 instruments, 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 the 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 BIS standards. These requirements were adopted and became effective in 1996, and were amended effective 1 January 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 1 December 2013, which minimum ratios were increased to 4.0% and 5.5%, respectively, from 1 January 2014 and increased further to 4.5% and 6.0%, respectively, from 1 January 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 a domestic systemically important bank for 2019 and 2020, which subjects it to an additional capital requirement of 1.0% in such years.

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:

(1) for those banks which adopted a standardised 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

(2) 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 the 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 Stabilisation Bonds issued by the Bank of Korea or debentures and stocks referred to in items 1 and 2, respectively, of paragraph (6) of Article 11 of the Act on the Improvement of the Structure of the Financial Industry. The FSC uses the liquidity coverage ratio as the principal liquidity risk management measure, and currently requires each Korean bank to:

- maintain a liquidity coverage ratio of not less than 100% (temporarily reduced to 85% until September 2020);
- maintain a foreign currency liquidity coverage ratio of not less than 80% (temporarily reduced to 70% until September 2020); and
- submit monthly reports with respect to the maintenance of these ratios.

The MPC 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, only if such deposits were made prior to 28 February 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 the 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 31 January 2018, the FSC implemented amendments to the Regulation on Supervision of the Banking Business, which impose certain liquidity- and leverage-related ratio requirements on banks in Korea, in accordance with Basel III. Pursuant to such 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 portion of assets requiring stable funding over a time horizon of one year or longer, each as calculated in accordance with the Detailed Regulation on 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) core capital includes paid-in capital, capital surplus, retained earnings and hybrid Tier I capital instruments and (ii) total exposures include on-balance sheet exposure and off-balance sheet exposures, each as calculated in accordance with the Detailed Regulation on Supervision of the Banking Business; and

- submit monthly reports with respect to the maintenance of these ratios.

Financial Exposure to any Individual Customer and Major Shareholder

Under the Banking 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 (only in the nature of a credit) 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 Banking 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 pursuant to the Enforcement Decree of the Banking 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 Won 2 trillion in aggregate; or (iii) any investment company under 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 and Protection of Finance Users and the regulations thereunder, interest rates on loans made by registered banks in Korea to individuals or small corporations, as defined under the Framework Act on Small and Medium Enterprises, may not exceed 24% per annum. Historically, interest rates on deposits and lending were regulated by the MPC. 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 Bank of Korea 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 Bank of Korea 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:

(1) financial condition and profit and loss of the bank and its subsidiaries;

(2) fund raising by the bank and the appropriation of such funds;

(3) any sanctions levied on the bank under the Banking Act or any corrective measures or sanctions under the Law on Improvement of Structure of Financial Industry;

(4) 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, occurrence of any of the following events or any other event as prescribed by the applicable regulations:

(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 Won 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 Won 1 billion.

Restrictions on Lending

Pursuant to the Banking Act and its sub-regulations, commercial banks may not provide:

- loans directly or indirectly secured by a pledge of a bank's own shares;
- loans directly or indirectly to enable a natural or juridical person to buy the bank's own shares;
- loans to any of the bank's officers or employees, other than *de minimis* loans of up to (i) Won 20 million in the case of a general loan, (ii) Won 50 million in the case of a general loan plus a housing loan or (iii) Won 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 shares of a subsidiary corporation of the bank or to enable a natural or juridical person to buy shares of a subsidiary corporation of the bank; or
- loans to any officers or employees of a subsidiary corporation of the bank, other than general loans of up to Won 20 million or general and housing loans of up to Won 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 collateral of 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 collateral of housing (including apartments) located in areas of excessive investment or housing (including apartments) located in areas of 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 should be 50% for low-income households that (i) have an annual income of less than Won 70 million (or Won 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 Won 600 million;
- as to any new loans secured by collateral of housing to be extended to a household, any member of which has already received one or more loans secured by collateral of housing, the maximum loan-to-value ratio is 10% lower than the applicable loan-to-value ratio described above;
- as to loans secured by collateral of housing (including apartments) located in areas of excessive investment or housing (including apartments) located in areas of 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 Won 70 million (or Won 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 Won 600 million;

- as to any new loans secured by collateral of housing to be extended to a household, any member of which has already received one or more loans secured by collateral of housing, the maximum debt-to-income ratio is 10% lower than the applicable debt-to-income ratio described above;

- as to apartments located in areas of high speculation as designated by the Government, a household is permitted to have only one new loan secured by such apartment; and

- where a household has two or more loans secured by apartments located in areas of high speculation as designated by the Government, the loan with the earliest maturity date must be repaid first and the number of loans must be eventually reduced to one.

Regulations Regarding Advertisement of Financial Products

Under the Banking Act, a bank, when advertising financial products, must specify the name of the bank, description of the financial product and transaction terms and conditions. In addition, a bank must indicate in its advertisement the range and calculation methods of interest rates, dates of interest payment and accrual, and other benefits and costs regarding such financial product. In particular, a bank must not state the abovementioned terms that are preliminary to appear as final nor claim comparative advantage over other financial products without stating supporting facts. Banks must internally adopt these financial products advertising guidelines and obtain prior approval from the bank's compliance department when advertising a financial product to ensure these guidelines are met.

Restrictions on Investments in Property

A bank may not invest in securities set forth below 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 stabilisation bonds issued by the Bank of Korea and bonds within the meaning of item 2, paragraph (6) of Article 11 of the Act on the Improvement of the Structure 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 Improvement of the Structure 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 for the conduct of 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 Banking Act, must be disposed of within three years, unless specified otherwise by the regulations thereunder.

Restrictions on Shareholdings in Other Companies

Under the Banking Act, a bank may not own more than 15% of 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 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 Banking Act provides that a bank using its bank accounts and its trust accounts is not permitted to acquire the shares 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).

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 Banking Act are required to pay an insurance premium to KDIC on a quarterly basis, and the rate is determined under the Enforcement Decree to the Depositor Protection Act. If KDIC makes a payment on an insured amount, it will acquire the depositors' claims with respect to that payment amount. KDIC insures a maximum of Won 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 Korean Foreign Exchange Transaction Law, each of a bank's net overpurchased and oversold positions may not exceed 50% of its shareholder's equity as of the end of the prior month.

Laws and Regulations Governing Other Business Activities

A bank must register with the MOEF 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.

Regulations on 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. Since January 1999, the Government has prohibited Korean banks from offering new guaranteed fixed rate trust account products whose principal and interest are guaranteed.

Under the FSCMA, which became effective in February 2009, 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. Previously, banks were not permitted to offer unspecified money trust account products pursuant to the Indirect Investment Asset Management Act, which is no longer in effect following the effectiveness of the FSCMA. Due to the changes in applicable regulations, new sales of pension saving trusts, a form of unspecified money trust account product, have been suspended starting in January 2018. Transactions involving existing pension saving trusts, however, are still permitted.

Regulations on Credit Card Business

General

In order to enter the credit card business, a company must obtain a license from the FSC. Credit card businesses are governed by the Specialised Credit Financial Business Act, which sets forth specific requirements with respect to the credit card business as well as generally prohibiting unsound business practices relating to the credit card business which may infringe on the rights of credit card holders or negatively affect the soundness of the credit card industry. Credit card companies are regulated by the FSC and the FSS.

Disclosure and Reports

Under the Specialised Credit Financial Business Act and the regulations thereunder, a credit card company is required to disclose on a periodic and on-going basis certain material matters and events. In addition, a credit card company must submit periodic reports with respect to its results of operations to the Governor of the Financial Supervisory Service, in accordance with the guidelines of the FSS.

Restrictions on Funding

Under the Specialised Credit Financial Business Act and the regulations thereunder, a credit card company must ensure that its total assets do not exceed an amount equal to six times its equity capital and that the ratio of its adjusted equity capital to its adjusted total assets is not less than 8.0%. However, if a credit card company is unable to comply with such limit upon the occurrence of unavoidable events, such as drastic changes in the domestic and global financial markets, such limit may be adjusted through a resolution of the FSC.

Risk of Loss Due to Lost, Stolen, Forged or Altered Credit Cards

Under the Specialised Credit Financial Business Act, a credit card company is liable for any loss arising from the unauthorised use of credit cards or debit cards after it has received notice from the holder of the loss or theft of the card. A credit card company is also responsible for any losses resulting from the use of forged or altered credit cards, debit cards and pre-paid cards. A credit card company may, however, transfer all or part of this latter risk of loss to holders of credit card in the event of willful misconduct or gross negligence by holders of credit card if the terms and conditions of the agreement entered between the credit card company and members of such cards specifically provide for that transfer.

For these purposes, disclosure of a customer's password that is made intentionally or through gross negligence, or the transfer of or giving as collateral of the credit card or debit card, is considered willful misconduct or gross negligence. However, a disclosure of a cardholder's password that is made under irresistible force or threat to cardholder or his/her relatives' life or health will not be deemed as willful misconduct or negligence of the cardholder.

Each credit card company must institute appropriate measures to fulfill these obligations, such as establishing provisions, purchasing insurance or joining a cooperative association.

Pursuant to the Enforcement Decree to the Specialised Credit Financial Business Act, a credit card company will be liable for any losses arising from loss or theft of a credit card (which was not from the holder's willful misconduct or negligence) during the period beginning 60 days before the notice by the holder to the credit card company.

Pursuant to the Specialised Credit Financial Business Act, the FSC may either restrict the limit or take other necessary measures against the credit card company with respect to such matters as the maximum limits on the amount per credit card, details of credit card terms and conditions, management of credit card merchants and collection of claims, including the following:

- maximum limits for cash advances on credit cards;
- use restrictions on debit cards with respect to per day or per transaction usage;
- aggregate issuance limits and maximum limits on the amount per card on pre-paid cards; and
- other matters prescribed by the Enforcement Decree to the Specialised Credit Financial Business Act.

Lending Ratio in Ancillary Business

Pursuant to the Enforcement Decree to the Specialised Credit Financial Business Act, a credit card company must maintain an aggregate quarterly average outstanding lending balance to credit cardholders (including cash advances and credit card loans, but excluding restructured loans) no greater than the sum of (i) its aggregate quarterly average outstanding credit card balance arising from the purchase of goods and services and (ii) the aggregate quarterly debit card transaction volume.

Issuance of New Cards and Solicitation of New Cardholders

The Enforcement Decree to the Specialised Credit Financial Business Act establishes the conditions under which a credit card company may issue new cards and solicit new members. New credit cards may be issued only to the following persons:

- persons who are at least 19 years old when they apply for a credit card;
- persons whose capability to pay bills as they come due has been verified using standards established by the credit card company; and
- in the case of minors who are 18 years old, persons who submit documents evidencing employment as of the date of the credit card application, such as an employment certificate, or persons for whom the issuance of a credit card is necessitated by governmental policies, such as financial aid.

In addition, a credit card company may not solicit credit card members by:

- providing economic benefits or promising to provide economic benefits in excess of 10% of the annual credit card fee (in the case of credit cards with annual fees that are less than the average of the annual fees charged by major credit cards in Korea, the annual fee will be deemed to be equal to such average annual fee) in connection with issuing a credit card; provided, however, that providing or promising economic benefits to provide economic benefits not exceeding the amount of the annual credit card fee to an applicant that becomes a credit card member through an online platform is permissible;
- soliciting applicants on roads, public places or along corridors used by the general public;
- soliciting applicants through visits, except those visits made upon prior consent and visits to a business area;
- soliciting applicants through the Internet without verifying whether the applicant is who he or she purports to be, by means of a certified digital signature under the Digital Signature Act; and

- soliciting applicants through pyramid sales methods.

Compliance Rules on Collection of Receivable Claims

Pursuant to the Supervisory Regulation on the Specialised Credit Financial Business, a credit card company may not:

- exert violence or threaten violence;
- inform a related party (a guarantor of the debtor, blood relative or fiancé(e) of the debtor, a person living in the same household as the debtor or a person working in the same workplace as the debtor) of the debtor's obligations without just cause;
- provide false information relating to the debtor's obligation to debtor or his or her related parties;
- threaten to sue or sue the debtor for fraud despite lack of affirmative evidence to establish that the debtor has submitted forged or false documentation with respect to his or her ability to make payment;
- visit or telephone the debtor during late evening hours (between the hours of 9:00 p.m. and 8:00 a.m.); and
- utilise other uncustomary methods to collect the receivables that interfere with the privacy or the peace in the workplace of the debtor or his or her related parties.

TAXATION

The information provided below does not purport to be a comprehensive description of all tax considerations which may be relevant to a decision to purchase Notes. Such information is based upon laws, regulations, decrees, rulings, income tax conventions (treaties), administrative practice and judicial decisions in effect as of the date of this Offering Circular. Legislative, judicial or administrative changes or interpretations may, however, be forthcoming that could alter or modify the statements and conclusions set forth herein. Any such changes or interpretations may be retroactive and could affect the tax consequences to holders of the Notes.

In particular, the information does not consider any specific facts or circumstances that may apply to a particular purchaser. Neither these statements nor any other statements in this Offering Circular are to be regarded as advice on the tax position of any holder of the Notes or of any person acquiring, selling or otherwise dealing with the Notes or on any tax implications arising from the acquisition, sale or other dealings in respect of the Notes. The statements do not purport to be a legal opinion or a comprehensive description of all the tax considerations that may be relevant to a decision to purchase, own or dispose of the Notes and do not purport to deal with the tax consequences applicable to all categories of investors, some of which (such as dealers in securities) may be subject to special rules.

Prospective purchasers of Notes are advised to consult their own tax advisers as to the tax consequences of the purchase, ownership and disposition of Notes, including the effect of any state or local taxes, under the tax laws applicable in Korea or the United States and each country of which they are residents.

United States Taxation

The following is a summary of certain U.S. federal income tax considerations that may be relevant to a beneficial owner of a Registered Note that is a citizen or resident of the United States or a domestic corporation for U.S. federal income tax purposes 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**"), as well as certain considerations (described below under "*–Reporting Provisions–Information Reporting and Backup Withholding*" and "*–Reporting Provisions–Foreign Account Tax Compliance Act*") relevant to a holder of a Registered Note that is not a U.S. holder. This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), its legislative history, laws, regulations, rulings and decisions now in effect, all of which are subject to change, possibly on a retroactive basis. This summary deals only with holders that will hold Registered Notes as capital assets, and does not address particular tax considerations that may be applicable to investors that may be subject to special tax rules, such as affiliates of the Issuer, banks, tax-exempt entities, insurance companies, regulated investment companies, dealers in securities or currencies, traders in securities electing to mark to market, entities taxed as partnerships or partners therein, persons subject to the alternative minimum tax, 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, persons that own or are treated as owning 10% or more of the Issuer's shares by vote or value, U.S. expatriates, non-resident alien individuals present in the United States for more than 182 days in a taxable year 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, Dual Currency Notes, Partly Paid Notes or Subordinated Notes, will be provided in the applicable Pricing Supplement.

This summary assumes that the Issuer will issue the Registered Notes through its principal office in Korea. If the Issuer issues Registered Notes through a non-U.S. branch outside Korea, certain additional U.S. federal income tax considerations relevant to the particular issue of Registered Notes may be addressed in the applicable Pricing Supplement. If the Issuer issues Registered Notes through a U.S. branch, the tax considerations relevant to U.S. holders and non-U.S. holders will be addressed in the applicable Pricing Supplement. The Issuer will not issue Bearer Notes through a U.S. branch.

This summary does not discuss tax considerations relevant to the ownership and disposal of Bearer Notes. In addition, this summary does not address the tax consequences of a redenomination. If the Issuer effects a redenomination, investors should consult their own advisors regarding the tax consequences to them, including the possibility that an investor will recognise foreign currency gain or loss as a result of the redenomination.

Further, this summary addresses only U.S. federal income tax consequences, and does not address consequences arising under state, local, or non-U.S. tax laws or the Medicare tax on net investment income. Investors should consult their own tax advisors 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.

Senior Notes

This section addresses Senior Notes that are properly characterised as indebtedness for U.S. federal income tax purposes. Particular tax considerations relating to Senior Notes having a term to maturity of more than 30 years will be discussed in the applicable Pricing Supplement.

Book/Tax Conformity. U.S. holders that use an accrual method of accounting for tax purposes ("**accrual method holders**") are generally required to include certain amounts in income no later than the time such amounts are reflected on certain financial statements (the "**book/tax conformity rule**"). The application of the book/tax conformity rule thus may require the accrual of income earlier than would be the case under the general tax rules described below. It is not entirely clear to what types of income the book/tax conformity rule applies, or, in some cases, how the rule is to be applied if it is applicable. However, proposed regulations generally would exclude, among other items, original issue discount and market discount (in either case, whether or not *de minimis*) from the applicability of the book/tax conformity rule. Although the proposed regulations generally will not be effective until taxable years beginning after the date on which they are issued in final form, taxpayers generally are permitted to elect to rely on their provisions currently. Accrual method holders should consult with their tax advisors regarding the potential applicability of the book/tax conformity rule to their particular situation.

Payments of Interest and Additional Amounts. The gross amount of payments of "**qualified stated interest**" (as defined below under "*Original Issue Discount*") and additional amounts, if any (*i.e.*, without reduction for withholding taxes imposed by any Tax Jurisdiction, determined utilising the appropriate withholding tax rate for that Tax Jurisdiction applicable to the U.S. holder), but excluding any pre-issuance accrued interest, 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 payments of this kind 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 realised 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 in fact is converted into U.S. dollars. A U.S. holder that uses the accrual method of accounting for tax purposes will accrue interest income on the Registered Note in the relevant foreign 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 this date is within five business days of the last day of the accrual period. A U.S. holder that makes this election must apply it consistently to all debt instruments from year to year and cannot change the election without the consent of the Internal Revenue Service (the "**IRS**"). A U.S. holder that uses the accrual method of accounting for tax purposes will recognise 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 Registered 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 the Registered Note.

Under certain circumstances as described below under "*Taxation–Korean Taxation–Tax on Interest*" and "*Taxation–Korean Taxation–Tax Treaties*," U.S. holders may be subject to Korean withholding tax upon the payments of interest with respect to a Registered Note. Korean withholding taxes paid at the appropriate rate applicable to the U.S. holder generally will be treated as foreign income taxes eligible for credit against such U.S. holder's U.S. federal income tax liability, subject to applicable limitations and conditions, or, at the election of such U.S. holder, for deduction in computing such U.S. holder's taxable income (provided that the U.S. holder elects to deduct, rather than credit, all foreign income taxes paid or accrued for the relevant taxable year). Interest and additional amounts will constitute income from sources without the United States for U.S. foreign tax credit purposes. The calculation of foreign tax credits and, in the case of a U.S. holder that elects to deduct foreign taxes, the availability of deductions, involves the application of rules that depend on a U.S. holder's particular circumstances. U.S. holders should consult their own tax advisors regarding the availability of foreign tax credits and the treatment of additional amounts.

Purchase, Sale and Retirement of Registered Notes. A U.S. holder's tax basis in a Registered Note generally will equal the cost of such Note to such U.S. holder, increased by any amounts includible in income by the U.S. holder as original issue discount and market discount and reduced by any amortised 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 foreign 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 tax basis in a Registered Note in respect of original issue discount, 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 recognise gain or loss equal to the difference between the amount realised on the sale, exchange or retirement (less any accrued qualified stated interest, which will be taxable as such) and the U.S. holder's 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 realised will be the U.S. dollar value of the specified currency received calculated at the exchange rate in effect on the date the instrument is disposed of or retired. 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 realised 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 recognised by a U.S. holder generally will be long-term capital gain or loss if the U.S. holder has held such Registered Note for more than one year at the time of disposition. Long-term capital gains recognised by an individual holder generally are subject to tax at a lower rate than short-term capital gains or ordinary income. The deduction of capital losses is subject to limitations.

Gain or loss recognised 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 holder held such Note. This foreign currency gain or loss will not be treated as an adjustment to interest income received on such Notes.

Under certain circumstances as described below under "*Taxation–Korean Taxation–Tax on Capital Gains*" and "*Taxation–Korean Taxation–Tax Treaties*," U.S. holders may be subject to Korean withholding tax upon the sale exchange or retirement of a Registered Note. If the U.S. holder is eligible for benefits of the Korea-United States tax treaty, which exempts capital gains from tax in Korea, or if such Korean tax is not otherwise compulsory for the holder, the U.S. holder would not be eligible to credit against its U.S. federal income tax liability any such Korean tax withheld. In addition, any gain or loss recognised on the exchange or retirement of a Registered Note generally will be treated as U.S. source income. Consequently, even if a U.S. holder is not eligible for an exemption from such taxes under the Korea-United States tax treaty or otherwise, such U.S. holder may not be able to claim a credit for any Korean tax imposed upon the sale, or exchange or retirement of a Registered Note unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources. U.S. holders should consult their own tax advisers with respect to their eligibility for benefits under the Korea-United States tax treaty and, if they are not eligible for treaty benefits, their ability to credit any Korean tax withheld upon sale, exchange or retirement of the Registered Notes against their U.S. federal income tax liability.

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 the product of one-fourth of 1% (0.25%) of the stated redemption price at maturity of the Notes multiplied by the number of full years to their maturity (the "***de minimis* threshold**"), the Notes will be "Original Issue Discount Notes." The difference between the issue price and the stated redemption price at maturity of the Notes will be the "original issue discount" ("**OID**"). The "issue price" of the Notes will be the first price at which a substantial amount of the Notes are sold to the public (*i.e.*, excluding sales of the Notes to underwriters, placement agents, wholesalers, or similar persons). The "stated redemption price at maturity" will include all payments under the 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 the Notes at a single fixed interest rate or, subject to certain conditions, based on one or more interest indices.

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, regardless of whether the holder uses the cash or the accrual method of tax accounting, will be required to include in ordinary gross 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 product 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. 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 the Note, including payments of qualified stated interest, over the amount paid by such U.S. holder for the 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 this election will also be deemed to have made the election (discussed below in "*–Premium and Market Discount*") to amortise 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 above under "*–Payments of Interest*"), 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. Because exchange rates may fluctuate, a U.S. holder of an Original Issue Discount Note that is also a Foreign Currency Note may recognise 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 recognise 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 the 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 the 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, the holder is required to reduce its periodic inclusions of OID income to reflect the premium paid over the adjusted issue price. The "remaining redemption amount" for a Note is the total of all future payments to be made on the 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 qualifying as a "variable rate debt instrument" is an Original Issue Discount Note, for purposes of determining the amount of OID allocable to each accrual period under the rules above, the Note's "yield to maturity" and "qualified stated interest" will generally be determined as though the Note bore interest in all periods at a fixed rate generally equal to the rate that would be applicable to the interest payments on the 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. If a Floating Rate Note does not qualify as a "variable rate debt instrument," the 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 advisors with respect to the 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 the Notes.

If a Registered 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 on which interest is generally paid on an annual basis), then stated interest on the Note will not qualify as "qualified stated interest" under the OID Regulations. As a result, the Note would be an Original Issue Discount Note. In that event, among other things, cash-method U.S. holders will be required to accrue stated interest on the Note under the OID Regulations, 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 the Note at a cost greater than the Note's remaining redemption amount (as defined in the fourth preceding paragraph) will be considered to have purchased the Note at a premium, and may elect to amortise this premium (as an offset to interest income), using a constant-yield method, over the remaining term of the Note. This 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 amortise such premium must reduce its tax basis in the Registered Note by the amount of the premium amortised during its holding period. Original Issue Discount Notes purchased at a premium 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 amortisation of the premium in the specified currency. Amortisation 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 realised with respect to amortised bond premium on a Registered Note based on the difference between the exchange rate on the date or dates the premium is recovered through interest payments on the Note and the exchange rate on the date on which the U.S. holder acquired the Note. With respect to a U.S. holder that does not elect to amortise bond premium, the amount of bond premium will be included in the U.S. holder's tax basis when the Registered Note matures or is disposed of by the U.S. holder. Therefore, a U.S. holder that does not elect to amortise such premium and that holds the Note to maturity generally will be required to treat the premium as capital loss when the Note matures.

If a U.S. holder of a Registered Note purchases the Note, other than a Short-Term Note (as defined below), 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 multiplied by the number of remaining whole years to maturity, the Note will be considered to have "market discount" in the hands of the U.S. holder. In such case, gain realised by the U.S. holder on the disposition of the Registered Note generally will be treated as ordinary income to the extent of the market discount that accrued on the Note while held by the 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 the Registered Note. In general terms, market discount on a Registered Note will be treated as accruing ratably over the term of the Note, or, at the election of the 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 the Registered 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 realised 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 the 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 realised 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 original issue discount 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 Short-Term Note's stated redemption price at maturity (*i.e.*, all amounts payable on the Short-Term Note) 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.

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. holders of any Contingent Debt Obligations will be provided in the applicable Pricing Supplement.

Subordinated Notes

If the Issuer issues Subordinated Notes, the relevant tax considerations will be addressed in the applicable Pricing Supplement.

Reporting Provisions

Information Reporting and Backup Withholding. Information returns will be filed with the IRS in connection with payments on the Registered Notes made to, and the proceeds of dispositions of Registered Notes effected by, certain U.S. taxpayers. In addition, certain U.S. taxpayers may be subject to U.S. backup withholding in respect of such amounts if they do not provide their taxpayer identification numbers to the person from whom they receive payments. Non-U.S. taxpayers may be required to comply with applicable certification procedures to establish that they are not U.S. taxpayers in order to avoid the application of such information reporting requirements and backup withholding. The amount of any U.S. backup withholding from a payment to a U.S. or non-U.S. taxpayer will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

Specified Foreign Financial Assets. Certain U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of US$50,000 on the last day of the taxable year or US$75,000 at any time during the taxable year are generally required to file an information statement along with their tax returns, currently on IRS 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. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors 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 is 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 IRS 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 FATCA, holders and beneficial owners of the Registered Notes may be required to provide to 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, the Paying Agents, and other financial institutions through which payments are made, may become required to withhold U.S. tax at a 30% rate on "foreign passthru payments" (a term not yet 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 Registered Notes directly or indirectly through, a non-U.S. financial institution that is not in compliance with FATCA.

Under a grandfathering rule, this withholding tax (i) will not apply to a series of Registered Notes unless the relevant series of Notes is issued or materially modified after the date that is six months after the date on which final U.S. Treasury Regulations defining the term "foreign passthru payment" are filed with the U.S. Federal Register and (ii) in any event, will only apply to payments made more than two years after the issuance of such guidance. If U.S. withholding tax were to be deducted or withheld from payments on any series of Registered Notes as a result of a failure by an investor (or by an institution through which an investor holds the Notes) to comply with FATCA, neither the Issuer nor any Paying Agent nor any other person would, pursuant to the terms of the Notes, be required to pay additional amounts as a result of the deduction or withholding of such tax. These requirements may be modified by the adoption or implementation of an intergovernmental agreement between the United States and another country, including the intergovernmental agreement concerning FATCA signed by the Republic of Korea and the United States. Prospective investors should consult their own tax advisers about how FATCA may apply to their investment in the Registered Notes.

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 advisors.

The taxation of non-resident individuals and non-Korean corporations ("**Non-Residents**") 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 income is effectively connected. Non-Residents without a permanent establishment in Korea are taxed in the manner described below. Non-Residents with permanent establishments in Korea are taxed in accordance with different rules.

Tax on Interest

Interest on the Notes paid to Non-Residents (excluding payments to their permanent establishment in Korea), being foreign currency denominated bonds, is exempt from income tax and corporation tax (whether payable by withholding or otherwise) pursuant to the Tax Exemption and Limitation Law (the "**TELL**"), so long as the Notes are "foreign currency denominated bonds" under the TELL and the issuance of the Notes is deemed to be an overseas issuance under the TELL. The term "foreign currency denominated bonds" in this context is not defined under the TELL. In this regard, the Korean tax authority issued a ruling on September 1, 1990 to the effect that "a notes issuance facility, commercial paper issued in U.S. dollars or euros or a banker's acceptance" are not treated as "foreign currency denominated bonds."

If the tax exemption under the TELL referred to above were to cease to be in effect, the rate of income tax or corporation tax applicable to interest on the Notes, for a Non-Resident without a permanent establishment in Korea, would be 14% of income. In addition, a tax surcharge called a local income tax would be imposed at the rate of 10% of the income tax or corporation tax (raising the total tax rate to 15.4%). The tax is withheld by the payer or the Issuer. These tax rates may be reduced by an applicable tax treaty, convention or agreement between Korea and the country of the recipient of the income. The relevant tax treaties are discussed below under "–*Tax Treaties*."

Tax on Capital Gains

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 Non-Residents (other than to their permanent establishments in Korea). In addition, capital gains earned by Non-Residents with or without permanent establishments in Korea from the transfer taking place outside Korea of the Notes are currently exempt from taxation by virtue of the TELL, *provided that* the issuance of the Notes is deemed to be an overseas issuance under the TELL.

If the exclusion or exemption from Korean taxation referred to above were to cease to be in effect, in the absence of an applicable tax treaty reducing or eliminating tax on capital gains, the applicable rate of tax would be the lower of 11% (including local income tax) of the gross realisation proceeds and (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Note) 22% (including local income tax) of the realised gain (i.e., the excess of the gross realisation proceeds over the acquisition cost and certain direct transaction costs) made. 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 relevant Korean law for offsetting gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of the Notes issued by Korean companies. The purchaser or any other designated withholding agent of the 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 tax under an applicable tax treaty or on the failure of the seller to produce satisfactory evidence of his acquisition cost and certain direct transaction costs in relation to the instruments being sold, the purchaser or such withholding agent must withhold an amount equal to 11% (including local income tax) of the gross realisation proceeds. Any amounts withheld by the purchaser or such withholding agent must be paid to the competent Korean tax office. The purchaser or withholding agent must pay any withholding tax no later than the tenth day of the month following the month in which the payment for the purchase of the relevant instruments occurred. Failure to transmit the withheld tax to the Korean tax authorities in time subjects the purchaser or such withholding agent to penalties under Korean tax laws. The Korean tax authorities may attempt to collect such tax from a Non-Resident who is liable for payment of any Korean tax on gains, as a purchaser or withholding agent who is obliged to withhold such tax, through proceedings against payments due to the Non-Resident from its Korean investments and 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 had 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 the rate varies from a rate of 10% to 50% according to the value of the relevant property and the identity of the persons involved. At present, Korea has not entered into any tax treaties regarding its inheritance or gift taxes.

Under Korean inheritance and gift tax laws, bonds issued by Korean corporations are deemed located in Korea irrespective of where they are physically located or by whom they are owned. And, consequently, the Korean inheritance and gift taxes will be imposed on transfers of the Notes by inheritance and gift. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of Korea inheritance and gift tax.

Stamp Duty and Securities Transaction Tax

No stamp, issue or registration duties will be payable in Korea by the Holders in connection with the issue of the Notes except for a nominal amount of stamp duty on certain documents executed in Korea which will be paid by the Issuer. No securities transaction tax will be imposed upon 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 under which the rate of withholding tax on interest is reduced, generally to between 10 and 15% (including local income tax), and the tax on capital gains is often eliminated.

Each Holder should inquire whether he is entitled to the benefit of a tax treaty with respect to any transaction involving the Notes. It is the responsibility of the party claiming the benefits of a tax treaty in respect of interest payments to file with the payer or the Issuer a certificate as to his residence. In the absence of sufficient proof, the payer or the Issuer must 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 should submit to the payer of such Korean source income an application (for a reduced withholding tax rate, the "application for entitlement to reduced tax rate," and for an exemption from withholding tax, the "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 of such Korean source income ("**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 (as well as the BO applications collected from each beneficial owner, if such beneficial owner is applying for a tax exemption) to the withholding agent prior to the payment date of such income. Effective 1 January 2020, an OIV that was not established for the purpose of unjustifiably reducing income tax liabilities in Korea and bears tax liabilities in the country of its residence is deemed to be a beneficial owner of Korean source income for income tax purposes. The benefits under a tax treaty between Korea and the country of such OIV's residence will apply with respect to the relevant income paid to such OIV, subject to certain application requirements as prescribed by the Corporate Income Tax or Individual Income Tax Law. 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.

Withholding and Gross Up

As mentioned above, interest on the Notes is exempt from any withholding or deduction on account of income tax or corporation tax pursuant to TELL. However, in the event that the payer or the Issuer is required by law to make any withholding or deduction for or on account of any Korean taxes (as more fully described in "*Terms and Conditions of the Notes–Taxation*") the Issuer has agreed to pay (subject to the customary exceptions as set out in "*Terms and Conditions of the Notes–Taxation*") such additional amounts as may be necessary in order that the net amounts received by the Holder of any Note after such withholding or deduction shall equal the respective amounts which would have been received by such Holder in the absence of such withholding or deduction.

The Proposed Financial Transaction Tax

The European Commission has published a proposal (the "**Commission's Proposal**") for a Directive for a common financial transaction tax ("**FTT**") in Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia and Spain (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced in its current form, apply to certain dealings in the Notes in certain circumstances.

Under the Commission's Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

The FTT remains subject to negotiation between the participating Member States and the legality of the proposal is uncertain. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate and/or certain of the participating Member States may decide to withdraw.

Prospective holders of the Notes are advised to seek their own professional advice in relation to the FTT.

CERTAIN ERISA CONSIDERATIONS

The following is a summary of certain considerations associated with the purchase of the Notes by employee benefit plans that are subject to Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), plans, individual retirement accounts and other arrangements that are subject to Section 4975 of the Code or provisions under any other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "**Similar Laws**"), and entities whose underlying assets are considered to include "plan assets" of any such plan, account or arrangement (each, a "**Plan**").

General Fiduciary Matters

ERISA and the Code impose certain duties on persons who are fiduciaries of a Plan subject to Title I of ERISA or Section 4975 of the Code (an "**ERISA Plan**") and prohibit certain transactions involving the assets of an ERISA Plan and its fiduciaries or other interested parties. Under ERISA and the Code, any person who exercises any discretionary authority or control over the administration of such an ERISA Plan or the management or disposition of the assets of such an ERISA Plan, or who renders investment advice for a fee or other compensation to such an ERISA Plan, is generally considered to be a fiduciary of the ERISA Plan.

In considering an investment in the Notes of a portion of the assets of any Plan, a fiduciary should determine whether the investment is in accordance with the documents and instruments governing the Plan and the applicable provisions of ERISA, the Code or any Similar Law relating to a fiduciary's duties to the Plan including, without limitation, the prudence, diversification, delegation of control and prohibited transaction provisions of ERISA, the Code and any other applicable Similar Laws.

Prohibited Transaction Issues

Section 406 of ERISA and Section 4975 of the Code prohibit ERISA Plans from engaging in specified transactions involving plan assets with persons or entities who are "parties in interest," within the meaning of ERISA, or "disqualified persons," within the meaning of Section 4975 of the Code, unless an exemption is available. A party in interest or disqualified person who engaged in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and the Code. In addition, the fiduciary of the ERISA Plan that engaged in such a non-exempt prohibited transaction may be subject to penalties and liabilities under ERISA and the Code. The acquisition and/or holding of Notes by an ERISA Plan with respect to which the Issuer or a Dealer is considered a party in interest or a disqualified person may constitute or result in a direct or indirect prohibited transaction under Section 406 of ERISA and/or Section 4975 of the Code, unless the investment is acquired and is held in accordance with an applicable statutory, class or individual prohibited transaction exemption. In this regard, the U.S. Department of Labor has issued prohibited transaction class exemptions ("**PTCEs**") that may apply to the acquisition and holding of the Notes. These class exemptions include, without limitation, PTCE 84-14 respecting transactions determined by independent qualified professional asset managers, PTCE 90-1 respecting insurance company pooled separate accounts, PTCE 91-38 respecting bank collective investment funds, PTCE 95-60 respecting life insurance company general accounts and PTCE 96-23 respecting transactions determined by in-house asset managers. In addition, Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code provide limited relief from the prohibited transaction provisions of ERISA and Section 4975 of the Code for certain transactions, *provided that* neither the party in interest nor any of its affiliates (directly or indirectly) have or exercise any discretionary authority or control or render any investment advice with respect to the assets of any ERISA Plan involved in the transaction and provided further that the ERISA Plan pays no more than adequate consideration in connection with the transaction. There can be no assurance that all of the conditions of any such exemptions will be satisfied.

Because of the foregoing, the Notes should not be purchased or held by any person investing "**plan assets**" of any Plan, unless such purchase and holding will not constitute a non-exempt prohibited transaction under ERISA and the Code or a similar violation of any applicable Similar Laws.

Representation

Accordingly, by acceptance of a Note or any beneficial interest therein, each purchaser and subsequent transferee of a Note or any beneficial interest therein will be deemed to have represented and warranted that either (i) no portion of the assets used by such purchaser or transferee to acquire or hold the Note or any beneficial interest therein constitutes assets of any Plan or (ii) the purchase and holding of the Note or any beneficial interest therein by such purchaser or transferee will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a similar violation under any applicable Similar Laws.

Each Plan investor is advised to contact its own financial advisor or other fiduciary unrelated to the Issuer and its affiliates about whether an investment in the Notes may be appropriate for the Plan's circumstances.

The foregoing discussion is general in nature and is not intended to be all inclusive. Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries, or other persons considering purchasing the Notes on behalf of, or with the assets of, any Plan, consult with their counsel regarding the potential applicability of ERISA, Section 4975 of the Code and any Similar Laws to such investment and whether an exemption would be applicable to the purchase and holding of the Notes.

CLEARANCE AND SETTLEMENT

*The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear, Clearstream or the CMU Service (together, 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.*

The Clearing Systems

DTC

DTC has advised the Issuer that it is a limited purpose trust company organised under the New York Banking Law, a "**banking organisation**" 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 computerised book-entry 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 organisations. 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 Notes in registered form, 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–Transfer 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.

Euroclear and Clearstream

Euroclear and Clearstream 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 provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

CMU Service

The CMU Service 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 Service.

The CMU Service 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 Service is open to all members of the Hong Kong Capital Markets Association and "authorised institutions" under the Banking Ordinance (Cap. 155) of Hong Kong.

Compared to clearing services provided by Euroclear and Clearstream, the standard custody and clearing service provided by the CMU Service is limited. In particular (and unlike the European Clearing Systems), 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 in any Notes held in the CMU Service will hold that interest through the respective accounts which Euroclear and Clearstream each have with the CMU Service.

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. 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. In the case of any payment in a currency other than U.S. dollars, payment will be made to the Exchange Agent on behalf of DTC or its nominee and the Exchange Agent will (in accordance with instructions received by it) remit all or a portion of such payment for credit directly to the beneficial holders of interests in the Registered Global Note in the currency in which such payment was made and/or cause all or a portion of such payment to be converted into U.S. dollars and credited to the applicable Participants' account.

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 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–Transfer Restrictions,*" cross-market transfers between DTC, on the one hand, and directly or indirectly through Clearstream 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 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 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 or Euroclear and DTC participants will need to have an agreed upon settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Clearstream and Euroclear, on the other, transfers of interests in the relevant Registered Global Notes will be effected through the Registrar, the 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 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 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 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 or Euroclear, the CMU Service 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 Dealer Agreement dated 5 September 2014, as supplemented by the First Supplemental Dealer Agreement dated 2 September 2016, the Second Supplemental Dealer Agreement dated 23 June 2017, the Third Supplemental Dealer Agreement dated 13 July 2018 and the Fourth Supplemental Dealer Agreement dated 7 July 2020, as amended, supplemented and/or restated from time to time (the "**Dealer 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.*" In the Dealer Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment and any future update 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. The Dealer Agreement makes provision for the resignation or termination of appointment of existing Dealers and for the appointment of additional or other Dealers either generally in respect of the Programme or in relation to a particular Tranche of Notes.

In order to facilitate the offering of any Tranche of the Notes, certain persons participating in the offering of the Tranche may to the extent permitted by applicable laws and regulations engage in transactions that stabilise, maintain or otherwise affect the market price of the relevant Notes for a limited period after the issue date. Specifically such persons may overallot 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 stabilise 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 stabilisation transactions or otherwise. The effect of these transactions may be to stabilise 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 stabilising or other transactions. Such transactions, if commenced, may be discontinued at any time and must be brought to an end after a limited period.

Certain Relationships

The Dealers and certain of their affiliates may have performed certain investment banking and advisory services for the Issuer and 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 and its affiliates in the ordinary course of their business. The Dealers or 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. One of the Dealers, NH Investment & Securities Co., Ltd., is an affiliate of the Issuer and a member of NH Financial Group.

The Dealers or their respective affiliates may place orders or allocations or purchase Notes for their own account (and such orders, allocations or purchase may be material) 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

To the extent required by the applicable laws and regulations of Korea, until the expiration of one year after the issuance of any Notes, such Notes may not be transferred to any "Korean resident" (as defined under the Foreign Exchange Transaction Law of Korea and the regulations thereunder) except as otherwise permitted by applicable Korean laws and regulations, and the Notes will bear a legend to the following effect:

"THE NOTES HAVE NOT BEEN REGISTERED UNDER THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA, AND, ACCORDINGLY, THE NOTES MAY NOT BE OFFERED OR SOLD, DIRECTLY OR INDIRECTLY, IN KOREA OR TO ANY KOREAN RESIDENT EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAW AND REGULATIONS (INCLUDING THE SALE OF THE NOTES TO QUALIFIED INSTITUTIONAL INVESTORS IN THE PRIMARY MARKET IF (A) THE AMOUNT OF THE NOTES ACQUIRED BY QUALIFIED INSTITUTIONAL INVESTORS IN THE PRIMARY MARKET IS LIMITED TO LESS THAN 20% OF THE AGGREGATE ISSUE AMOUNT OF THE NOTES AND (B) THE NOTES HAVE BEEN (I) LISTED IN ONE OF THE MAJOR MARKETS DESIGNATED BY THE FINANCIAL SUPERVISORY SERVICE OR (II) REGISTERED WITH OR REPORTED TO A FINANCIAL SUPERVISORY AUTHORITY LOCATED IN ONE OF SUCH MAJOR MARKETS OR (III) OFFERED THROUGH SUCH PROCEDURES AS MAY BE CONSIDERED A PUBLIC OFFERING). IN ADDITION, UNTIL THE EXPIRATION OF ONE YEAR AFTER THE ISSUANCE OF ANY NOTES, SUCH NOTES MAY NOT BE TRANSFERRED TO ANY RESIDENT OF KOREA EXCEPT AS OTHERWISE PERMITTED BY APPLICABLE KOREAN LAW AND REGULATIONS (INCLUDING THE SALE OF THE NOTES TO THE QUALIFIED INSTITUTIONAL INVESTORS IN THE SECONDARY MARKET IF THE NOTES HAVE BEEN (A) LISTED IN ONE OF THE MAJOR MARKETS DESIGNATED BY THE FINANCIAL SUPERVISORY SERVICE OR (B) REGISTERED WITH OR REPORTED TO A FINANCIAL SUPERVISORY AUTHORITY LOCATED IN ONE OF SUCH MAJOR MARKETS OR (C) OFFERED THROUGH SUCH PROCEDURES AS MAY BE CONSIDERED A PUBLIC OFFERING). AS USED HEREIN, THE TERM "KOREAN RESIDENT" HAS THE MEANING GIVEN TO IT BY THE FOREIGN EXCHANGE TRANSACTION LAW OF KOREA AND THE REGULATIONS THEREUNDER AND THE TERM "QUALIFIED INSTITUTIONAL INVESTORS" HAS THE MEANING GIVEN TO IT BY THE FINANCIAL INVESTMENT SERVICES AND CAPITAL MARKETS ACT OF KOREA AND ITS ENFORCEMENT DECREE."

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):

(a) that either: (i) 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 (ii) it is an Institutional Accredited Investor which has delivered an IAI Investment Letter or (iii) it is outside the United States and is not a U.S. person;

(b) 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;

(c) 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 (i) to the Issuer or any affiliate thereof, (ii) 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, (iii) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act, (iv) pursuant to the exemption from registration provided by Rule 144 under the Securities Act (if available) or (v) pursuant to an effective registration statement under the Securities Act, in each case in accordance with all applicable U.S. state securities laws;

(d) 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 (c) above, if then applicable;

(e) 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;

(f) 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 (I) 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 (II) 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 (I) TO THE ISSUER OR ANY AFFILIATE THEREOF, (II) 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, (III) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 903 OR RULE 904 UNDER THE SECURITIES ACT, (IV) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (V) 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).";

(g) 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 (i)(A) outside the United States in compliance with Rule 903 or 904 under the Securities Act or (B) to a QIB in compliance with Rule 144A and (ii) 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

(h) 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:

(a) 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;

(b) 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;

(c) that, in the normal course of its business, the Institutional Accredited Investor invests in or purchases securities similar to the Notes;

(d) 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;

(e) 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

(f) that, in the event that the Institutional Accredited Investor purchases Notes, it will acquire Notes having a minimum purchase price of at least US$250,000 (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 US$100,000 (or its foreign currency equivalent) principal amount or, in the case of sales to Institutional Accredited Investors, US$250,000 (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 US$100,000 (or its foreign currency equivalent) or, in the case of sales to Institutional Accredited Investors, US$250,000 (or its foreign currency equivalent) principal amount of Registered Notes.

Each purchaser and subsequent transferee of the Notes will be deemed to have represented and warranted that either: (A) no portion of the assets used by purchaser or subsequent transferee to acquire or hold the notes constitutes the assets of any (i) employee benefit plan that is subject to Title I of the Employee Retirement Income Security Act of 1974, as amended ("**ERISA**"), (ii) plan, individual retirement account or other arrangement that is subject to Section 4975 of the Code, or to provisions under other federal, state, local, non-U.S. or other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "**Similar Laws**") or (iii) entity whose underlying assets are considered to include "plan assets" (as defined in Section 3(42) of ERISA or any applicable Similar Laws) of any such plan, account or arrangement by reason of such plan's, account's or arrangement's investment in the entity or (B) the acquisition and holding of the Notes by such purchaser or transferee will not constitute a non-exempt prohibited transaction under ERISA or the Code or a similar violation under any applicable Similar Law.

Selling Restrictions

United States of America

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.

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 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 and regulations thereunder.

In connection with any Notes which are offered or sold outside the United States in reliance on an exemption from the registration requirements of the Securities Act provided under Regulation S ("**Regulation S Notes**"), each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it will not offer, sell or deliver such Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution, as determined and certified by the relevant Dealer or, in the case of an issue of Notes on a syndicated basis, the relevant lead manager, of all Notes of the Tranche of which such Regulation S Notes are a part, within the United States or to, or for the account or benefit of, U.S. persons. Each Dealer has further agreed, and each further Dealer appointed under the Programme will be required to agree, that it will send to each dealer to which it sells any Regulation S Notes during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Regulation S Notes within the United States or to, or for the account or benefit of, U.S. persons.

Until 40 days after the commencement of the offering of any Series of Notes, an offer or sale of such Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with an available exemption from registration under the Securities Act.

Dealers may arrange for the resale of Notes to QIBs pursuant to Rule 144A and each such purchaser of Notes is hereby notified that the Dealers may be relying on the exemption from the registration requirements of the Securities Act provided by Rule 144A. The minimum aggregate principal amount of Notes that may be purchased by a QIB pursuant to Rule 144A is US$100,000 (or the approximate equivalent thereof in any other currency). To the extent that the Issuer is not subject to or does not comply with the reporting requirements of Section 13 or 15(d) of the Exchange Act or the information furnishing requirements of Rule 12g3-2(b) thereunder, the Issuer has agreed to furnish to holders of Notes and to prospective purchasers designated by such holders, upon request, such information as may be required by Rule 144A(d)(4).

Each issuance of Index Linked Notes or Dual Currency Notes shall be subject to such additional U.S. selling restrictions as the Issuer and the relevant Dealer may agree as a term of the issuance and purchase of such Notes, which additional selling restrictions shall be set out in the applicable Pricing Supplement.

European Economic Area and the United Kingdom

The final terms (or Pricing Supplement, as the case may be) in respect of any Series of Notes may include information entitled "MiFID II Product Governance," which will outline the target market assessment in respect of the Notes of any such Series and which channels for distribution of the Notes are appropriate, and if such information is included, any person subsequently offering, selling or recommending the Notes (a "distributor") should take into consideration the target market assessment; however, a distributor subject to MiFID II will be responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining the appropriate distribution channels.

For the purpose of the MiFID Product Governance Rules, each of the Arranger and Dealers will be deemed not to be a manufacturer unless determined otherwise, the determination of which will be made in relation to each issue of Notes with respect to the Arranger and each Dealer.

Unless the final terms (or Pricing Supplement, as the case may be) in respect of any Series of Notes specifies "Prohibition of sales to EEA or UK retail investors" as "Not Applicable," 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, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Circular as completed by the final terms (or Pricing Supplement, as the case may be) in relation thereto to any retail investor in the EEA or in the UK. For the purposes of this provision: (a) the expression "retail investor" means a person who is one (or more) of the following: (i) a retail client as defined in point (11) of Article 4(1) of 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 the Prospectus Regulation; and (b) the expression "offer" includes 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.

If the final terms (or Pricing Supplement, as the case may be) in respect of any Notes specifies the "Prohibition of sales to EEA or 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) subject to any other restriction and obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer, at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation); 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.

The European Economic Area selling restriction described above is in addition to any other applicable selling restriction set out below.

United Kingdom

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant 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; and

(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 would not, if the Issuer 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

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that the Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948, as amended) (the "**FIEA**"). Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that it has not offered or sold and will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5, Paragraph 1, Article 6 of the Foreign Exchange and Foreign Trade Control Law (Law No. 228 of 1949, as amended)) or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and other applicable laws, regulations and ministerial guidelines of Japan.

Hong Kong

Each Dealer has represented, warranted and agreed and each further Dealer appointed under the Programme will be required to represent, warrant and agree that:

(a) it has not offered or sold, and will not offer or sell, in Hong Kong Special Administrative Region of the People's Republic of China ("**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) other than (i) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance, or (ii) 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 or which do not constitute an offer to the public within the meaning of that Ordinance; 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 Securities and Futures Ordinance of Hong Kong and any rules made under that Ordinance.

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, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant 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:

(1) 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;

(2) where no consideration is or will be given for the transfer;

(3) where the transfer is by operation of law;

(4) as specified in Section 276(7) of the SFA; or

(5) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018 of Singapore.

Korea

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that Notes have not been and will not be offered, delivered or sold directly or indirectly in Korea or to any resident of Korea (as defined under the Foreign Exchange Transaction Law of Korea and the regulations 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 the applicable laws of and regulations of Korea (including the sale of the Notes to qualified institutional investors (as such term is defined under the Financial Investment Services and Capital Markets Act of Korea and its enforcement decree) in the primary market if (a) the amount of the Notes acquired by qualified institutional investors in the primary market is limited to less than 20% of the aggregate issue amount of the Notes and (b) the Notes have been (i) listed in one of the major markets designated by the FSS or (ii) registered with or reported to a financial supervisory authority located in one of such major markets or (iii) offered through such procedures as may be considered a public offering). In addition, to the extent required by the applicable laws and regulations of Korea, until the expiration of one year after the issuance of any Notes, such Notes may not be transferred to any resident of Korea, except as otherwise permitted under the applicable laws of and regulations of Korea (including the sale of the Notes to qualified institutional investors in the secondary market if the Notes have been (a) listed in one of the major markets designated by the FSS or (b) registered with or reported to a financial supervisory authority located in one of such major markets or (c) offered through such procedures as may be considered a public offering).

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.

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 the 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.

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 any 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.

If a jurisdiction requires that the offering be made by a licensed broker or dealer and any Dealer or any affiliate of any Dealer is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by that Dealer or its affiliate on behalf of the Issuer in such jurisdiction.

LEGAL MATTERS

Certain legal matters with respect to the Programme as to Korean law will be passed upon for the Issuer by Bae, Kim & Lee LLC, Korean counsel for the Issuer.

Certain legal matters with respect to the Programme as to English law and U.S. federal law will be passed upon for the Dealers by Cleary Gottlieb Steen & Hamilton LLP, English and U.S. counsel for the Dealers.

INDEPENDENT AUDITORS

The Issuer's consolidated financial statements as of and for the years ended 31 December 2018 and 2017 included in this Offering Circular have been prepared in accordance with K-IFRS and have been audited by Ernst & Young Han Young. The Issuer's consolidated financial statements as of and for the years ended 31 December 2019 and 2018 included in this Offering Circular have been prepared in accordance with K-IFRS and have been audited by Deloitte Anjin LLC. The Issuer's unaudited consolidated interim financial statements as of 31 March 2020 and for the three months ended 31 March 2020 and 2019 included in this Offering Circular have been prepared in accordance with K-IFRS 1034 *Interim Financial Reporting* and have been reviewed by Deloitte Anjin LLC. Their review report included in this Offering Circular states that they did not audit and do not express an opinion on such financial statements. Accordingly, the degree of reliance on their report on such information should be restricted in light of the limited nature of the review procedures applied.

GENERAL INFORMATION

Authorisation

The establishment of the Programme has been duly authorised by the Representative Director signing the authorisation sheet dated 31 July 2012, respectively, in accordance with the Issuer's internal regulations.

The Issuer filed a report of the establishment of the Programme with the Korean Minister of Strategy and Finance, acting pursuant to his authority under the Foreign Exchange Transaction Act and related laws and regulations and the Minister of Strategy and Finance has accepted such report. A prior report to the Minister of Economy and Finance will also be required for each issue of Notes if the principal amount of a foreign currency-denominated borrowing of the Issuer (including foreign currency-denominated securities, such as the Notes) with a maturity of more than one year issued to non-residents of Korea exceeds US$50 million. In addition, a report to the Ministry of Agriculture, Food and Rural Affairs of Korea is required to be made by the Issuer in respect of each issue of Notes, and a report to the FSS is required to be made by the Issuer in respect of each issue of Subordinated Notes.

No other governmental approval in Korea is necessary for the subscription and issue of any Notes, or for their sale and purchase in the secondary market, outside Korea.

Listing of Notes

Approval in-principle has been received from the SGX-ST in connection with the Programme and application will be made for the listing and quotation of 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 on the SGX-ST. Such permission will be granted when such Notes have been admitted for listing and quotation on the SGX-ST. For so long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, such Notes, if traded on the SGX-ST, will be traded in a minimum board lot size of S$200,000 (or its equivalent in foreign currencies).

For so long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that a Global Note or, as the case may be, a Global Certificate representing such Notes, is exchanged for Definitive Notes or, as the case may be, Individual Note Certificates, the Issuer shall appoint and maintain a paying agent in Singapore where such Notes may be presented or surrendered for payment or redemption. In addition, in the event that a Global Note or, as the case may be, a Global Certificate representing such Notes, is exchanged for Definitive Notes or, as the case may be, Individual Note Certificates, an announcement of such exchange will be made by or on behalf of the Issuer through the SGX-ST, and such announcement will include all material information with respect to the delivery of the Definitive Notes or, as the case may be, Individual Note Certificates, including details of the paying agent in Singapore.

Documents Available

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 principal office of the Principal Paying Agent for the time being in Hong Kong:

(i) the Articles of Incorporation (together with the English translation) of the Issuer;

(ii) the Issuer's audited consolidated financial statements as of and for the years ended 31 December 2019 and 2018 (with an English translation thereof);

(iii) the Issuer's unaudited consolidated interim financial statements as of 31 March 2020 and for the three months ended 31 March 2020 and 2019 (with an English translation thereof);

(iv) the most recently published audited consolidated annual financial statements of the Issuer and the most recently published unaudited interim financial statements (if any) of the Issuer (with English translations thereof);

(v) the Dealer Agreement (as amended and/or supplemented from time to time), the Agency Agreement, the Deed of Covenant and the forms of the Global Notes, the Notes in definitive form, the Receipts, the Coupons, and the Talons;

(vi) a copy of the Offering Circular;

(vii) 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 Paying Agent as to its holding of Notes and identity), to the Offering Circular and any other documents incorporated herein or therein by reference; and

(viii) in the case of each issue of listed Notes subscribed pursuant to a subscription agreement, the subscription agreement (or equivalent document).

Ratings

As of the date hereof, the Issuer's current corporate ratings assigned by Moody's, Standard & Poor's and Fitch were A1 (Stable), A+ (Stable) and A- (Stable), respectively. The ratings do not constitute recommendations to purchase, hold or sell securities inasmuch as such ratings do not comment as to market price or suitability for a particular investor. The Issuer cannot assure investors that the ratings will remain in effect for any given period or that the ratings will not be revised by such rating agencies in the future if in their judgement circumstances so warrant.

Clearing Systems

Notes have been accepted for clearance through the Euroclear and Clearstream systems (which are the entities in charge of keeping the records). The Issuer may also apply to have Notes accepted for clearance through the CMU. The relevant CMU instrument number will be set out in the relevant Pricing Supplement. In addition, the Issuer may make an application for any Restricted Notes or Unrestricted Notes to be accepted for trading in book-entry form by DTC. Acceptance by DTC of such Notes will be confirmed in the relevant Notes. The relevant ISIN, the Common Code, the Committee on the Uniform Security Identification Procedure ("**CUSIP**") number and (where applicable) the identification number for any other relevant clearing system for each series of Notes 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 set out in the relevant Pricing Supplement.

INDEX TO FINANCIAL STATEMENTS

INDEPENDENT ACCOUNTANTS' REVIEW REPORT

English Translation of Independent Accountants' Review Report Originally Issued in Korean on May 14, 2020

To the Shareholders and the Board of Directors of NongHyup Bank:

Report on the Interim Condensed Consolidated Financial Statements

We have reviewed the accompanying interim condensed consolidated financial statements of NongHyup Bank and its subsidiaries (the "Group"). The interim condensed consolidated financial statements consist of the interim condensed consolidated statement of financial position as of March 31, 2020, and the related interim condensed consolidated statements of profit or loss and other comprehensive income, interim condensed consolidated statements of changes in equity and interim condensed consolidated statements of cash flows, all expressed in Korean won, for the three months ended March 31, 2020 and 2019, respectively, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Interim Condensed Consolidated Financial Statements

The Group's management is responsible for the preparation and fair presentation of the accompanying interim condensed consolidated financial statements in accordance with Korean International Financial Reporting Standards ("K-IFRSs") and for such internal control as management determines is necessary to enable the preparation of interim condensed consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Independent Accountants' Responsibility

Our responsibility is to express a conclusion on the accompanying interim condensed consolidated financial statements based on our review.

We conducted our review in accordance with standards for review of interim condensed consolidated financial statements in the Republic of Korea. A review is limited primarily to inquiries of company personnel and analytical procedures applied to financial data, and this provides less assurance than an audit. We have not performed an audit and, accordingly, we do not express an audit opinion.

Review Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying interim condensed consolidated financial statements of the Group are not presented fairly, in all material respects, in accordance with K-IFRS 1034, Interim Financial Reporting.

Others

We have audited the consolidated statement of financial position of the Group as of December 31, 2019, and the related consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, which are not accompanying this report, in accordance with Korean Standards on Auditing, and our report dated March 16, 2020, expressed an unmodified opinion thereon. The accompanying condensed consolidated statement of financial position as of December 31, 2019, presented for comparative purposes, is not different, in all material respects, from the above-audited consolidated statement of financial position.

/s/ Deloitte Anjin LLC

May 14, 2020

Notice to Readers

This report is effective as of May 14, 2020, the independent accountants' review report date. Certain subsequent events or circumstances may have occurred between the accountants' review report date and the time the accountants' review report is read. Such events or circumstances could significantly affect the interim condensed consolidated financial statements and may result in modifications to the independent accountants' review report.

NongHyup Bank and its subsidiaries
Interim condensed consolidated statements of financial position
As of March 31, 2020, and December 31, 2019
(Korean won in millions)

	Notes		March 31, 2020		December 31, 2019
Assets					
Cash and due from banks	5, 6, 35, 36, 39	₩	4,554,412	₩	5,946,042
Financial assets at fair value through profit or loss ("FVTPL")	5, 7, 35, 36		10,479,768		9,523,943
Derivative assets	5, 23, 35, 36		1,132,444		535,729
Financial assets at fair value through other comprehensive income ("FVTOCI")	5, 8, 35, 36		27,224,437		21,930,870
Securities at amortized cost	5, 9, 35, 36		15,374,029		12,441,531
Loans at amortized cost	5, 10, 35, 36		246,821,307		241,224,080
Investments in subsidiaries and associates	11		98,528		102,758
Tangible assets	12, 15		2,802,320		2,826,735
Investment properties	13		584,063		589,640
Intangible assets	14		451,586		437,548
Deferred income tax assets	27		476,915		513,828
Other assets	16, 35, 36		94,220		111,643
Non-current assets classified as held for sale	13, 35		15		15
Total assets		**₩**	**310,094,044**	**₩**	**296,184,362**
Liabilities					
Deposits	17, 18, 35, 36	₩	247,414,253	₩	236,384,433
Financial liabilities at FVTPL	17, 35, 36		13,309		13,342
Derivative liabilities	17, 23, 35, 36		1,101,601		510,654
Borrowings	17, 19, 35, 36		12,805,351		11,171,538
Debentures	17, 20, 35, 36		17,280,072		15,819,070
Provisions	21, 38		374,153		360,787
Current income tax liabilities			335,883		276,946
Net defined benefit liabilities	24		622,544		470,362
Other liabilities	17, 22, 35, 36		13,765,919		14,311,871
Share capital repayable on demand			22		23
Total liabilities			**293,713,107**		**279,319,026**
Equity					
Controlling interests					
Capital stock	25		2,162,191		2,162,191
Other paid-in capital	25		9,848,422		9,848,422
Retained earnings	25		5,088,810		5,573,782
(Regulatory reserves for bad debts as of March 31, 2020, and December 31, 2019, are ₩1,963,635 million and ₩1,742,296 million, respectively					
Regulatory reserves for bad debts to be reserved as of March 31, 2020 and 2019, are ₩69,572 million and ₩221,339 million, respectively.					
Planned provision of regulatory reserves for bad debts as of March 31, 2020 and 2019, are ₩69,572 million and ₩221,339 million, respectively)					
Other components of equity	25		(718,486)		(719,059)
			16,380,937		16,865,336
Non-controlling interests			-		-
Total equity			**16,380,937**		**16,865,336**
Total liabilities and equity		**₩**	**310,094,044**	**₩**	**296,184,362**

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

NongHyup Bank and its subsidiaries
Interim condensed consolidated statements of profit or loss and other comprehensive income
For the three months ended March 31, 2020 and 2019

(Korean won in millions)

	Notes	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Net interest income	4, 28		
Interest income			
Interest income calculated using the effective interest method		₩ 2,070,321	₩ 2,151,627
Interest income on financial instruments at FVTPL		27,489	32,549
		2,097,810	2,184,176
Interest expense		796,542	916,934
		1,301,268	1,267,242
Net commission income	4, 29		
Commission income		287,716	272,607
Commission expenses		99,461	96,943
		188,255	175,664
Gain (loss) on financial instruments at FVTPL, net	28		
Gain on financial instruments at FVTPL		1,763,266	576,063
Loss on financial instruments at FVTPL		1,843,463	530,096
		(80,197)	45,967
Gain on financial assets at FVTOCI, net	28		
Gain on financial assets at FVTOCI		44,157	8,891
Loss on financial assets at FVTOCI		-	-
		44,157	8,891
Gain on disposal of financial assets at amortized cost, net	28		
Gain on disposal of financial assets at amortized cost		1,926	371
Loss on disposal of financial assets at amortized cost		611	83
		1,315	288
Other operating income (expenses), net	30		
Other operating income		758,847	335,921
Other operating expenses		861,488	437,407
		(102,641)	(101,486)
Operating income before expected credit losses and general and administrative expenses		1,352,157	1,396,566
Transfer in allowance for expected credit losses	4, 21, 28	51,313	75,891
Operating income before general and administrative expenses		₩ 1,300,844	₩ 1,320,675
General and administrative expenses	**4**		
Employee benefits	31	₩ 536,777	₩ 523,616
Depreciation and amortization expenses	12, 14, 15	108,779	99,381
Other selling and administrative expenses	32	130,231	120,417
		775,787	743,414
Operating income		525,057	577,261
Gain (loss) on valuation of equity method investments, net	11	(2,214)	5,946
Other income (expenses), net	33	(78,147)	(78,696)
Income before income tax expenses		444,696	504,511
Income tax expenses	4, 27	128,540	138,285
Net income	25	316,156	366,226
(Net income after the provision of regulatory reserve for bad debts for the three months ended March 31, 2020 and 2019, is ₩246,584 million and ₩311,063 million, respectively)			
Controlling interests		316,156	366,226
Non-controlling interests		-	-
		316,156	366,226

(Continued)

NongHyup Bank and its subsidiaries
Interim condensed consolidated statements of profit or loss and other comprehensive income (cont'd)
For the three months ended March 31, 2020 and 2019

(Korean won in millions)

	Notes	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Other comprehensive income (loss)			
Items not subsequently reclassified to profit or loss			
Remeasurements of net defined benefit liabilities	24, 25	(378)	(1,464)
Gain (loss) on equity securities at FVTOCI	25	(33,401)	6,130
		(33,779)	4,666
Items subsequently reclassified to profit or loss			
Gain on valuation of debt securities at FVTOCI	25	25,239	30,401
Exchange differences on translation of foreign operations	25	9,113	2,670
Gain on valuation of investments in associates	11, 25	-	94
		34,352	33,165
		573	37,831
Total comprehensive income			
Controlling interests		316,729	404,057
Non-controlling interests		-	-
		₩ 316,729	₩ 404,057
Earnings per share			
Basic earnings and diluted earnings per share (Korean won)	34	₩ 721	₩ 837

(Concluded)

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

NongHyup Bank and its subsidiaries
Interim condensed consolidated statements of changes in equity
For the three months ended March 31, 2020 and 2019
(Korean won in millions)

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings (deficit)	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2019	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 4,573,397	₩ (648,623)	₩ 15,935,387	-	₩ 15,935,387
Changes due to consolidated tax	-	-	-	-	15,175	-	15,175	-	15,175
Total comprehensive income									
Net income	-	-	-	-	366,226	-	366,226	-	366,226
Other comprehensive income (loss)									
Gain on valuation of debt securities at FVTOCI	-	-	-	-	-	30,401	30,401	-	30,401
Gain on equity securities at FVTOCI	-	-	-	-	-	6,130	6,130	-	6,130
Exchange differences on translation of foreign operations	-	-	-	-	-	2,670	2,670	-	2,670
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(1,464)	(1,464)	-	(1,464)
Loss on valuation of investments in associates	-	-	-	-	-	94	94	-	94
Dividends on hybrid equity securities	-	-	-	-	(4,270)	-	(4,270)	-	(4,270)
Dividends	-	-	-	-	(600,000)	-	(600,000)	-	(600,000)
Balance as of March 31, 2019	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 4,350,528	₩ (610,792)	₩ 15,750,349	-	₩ 15,750,349

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings (deficit)	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2020	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 5,573,782	₩ (719,059)	₩ 16,865,336	-	₩ 16,865,336
Changes due to consolidated tax	-	-	-	-	3,142	-	3,142	-	3,142
Total comprehensive income									
Net income	-	-	-	-	316,156	-	316,156	-	316,156
Other comprehensive income (loss)									
Gain on valuation of debt securities at FVTOCI	-	-	-	-	-	25,239	25,239	-	25,239
Gain on equity securities at FVTOCI	-	-	-	-	-	(33,401)	(33,401)	-	(33,401)
Exchange differences on translation of foreign operations	-	-	-	-	-	9,113	9,113	-	9,113
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(378)	(378)	-	(378)
Dividends on hybrid equity securities	-	-	-	-	(4,270)	-	(4,270)	-	(4,270)
Dividends	-	-	-	-	(800,000)	-	(800,000)	-	(800,000)
Balance as of March 31, 2020	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 5,088,810	₩ (718,486)	₩ 16,380,937	-	₩ 16,380,937

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

NongHyup Bank and its subsidiaries
Interim condensed consolidated statements of cash flows
For the three months ended March 31, 2020 and 2019
(Korean won in millions)

	Note	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Operating activities			
Income before income tax expenses		₩ 444,696	₩ 504,511
Adjustments to reconcile income before income tax expenses to net cash provided by operating activities:			
Net interest income		(1,301,268)	(1,267,242)
Dividend income		(3,713)	(3,018)
Loss (gain) related to financial assets at FVTPL		23,164	(55,149)
Loss (gain) on valuation of trading derivatives		23,292	(428)
Gain on valuation of hedging derivatives		(42,064)	(17,464)
Loss on fair value hedge		43,093	17,156
Gain related to financial assets at FVTOCI		(41,955)	(7,384)
Gain on disposal of financial assets at amortized cost		(1,315)	-
Gain on disposal of investments in associates		-	(4)
Loss (gain) on valuation of equity method investments		2,214	(5,947)
Depreciation and amortization		110,028	100,570
Loss (gain) on disposal of assets		(944)	41
Allowance for expected credit losses		51,313	75,891
Other provisions		9,061	8,705
Retirement expenses of net defined benefit liabilities		48,269	44,914
Gain on transaction of foreign exchange		(62,908)	(39,276)
Others		14,195	(24,243)
		(1,129,538)	(1,172,878)
Changes in operating assets and liabilities:			
Financial assets at FVTPL		(612,666)	(400,957)
Derivative assets		600,184	(103,817)
Loans and other receivables		(5,275,586)	7,263,058
Due from banks		1,248,315	(6,305,676)
Other assets		27,396	20,130
Plan assets		106,610	158,655
Deposits		10,878,956	8,385,039
Derivative liabilities		(587,260)	63,792
Provisions		(2,419)	(3,440)
Payment of retirement benefits and changes resulting from transfer of staff among affiliates		(3,202)	(14,505)
Other liabilities		(646,584)	(1,773,700)
		5,733,744	7,288,579
Cash provided by operating activities:			
Cash received for interest		2,024,229	1,971,702
Cash received for dividend		2,298	1,869
		2,026,527	1,973,571
Cash used in operating activities:			
Payment of interest expenses		756,094	613,295
Payment of income tax		25,963	21,353
		(782,057)	(634,648)
Net cash provided by operating activities		₩ 6,293,372	₩ 7,959,135

(Continued)

NongHyup Bank and its subsidiaries
Interim condensed separate statements of cash flows (cont'd)
For the three months ended March 31, 2020 and 2019
(Korean won in millions)

	Note	For the three months ended March 31, 2020		For the three months ended March 31, 2019
Investing activities				
Cash flows provided by investing activities:				
Disposal of financial assets at FVTPL		₩	6,344,203	₩ 4,348,034
Disposal of financial assets at FVTOCI			9,463,617	3,367,661
Disposal or redemption of securities at amortized cost			514,849	490,334
Disposal of tangible assets			8,782	335
Disposal of intangible assets			1,299	-
Disposal of investments in associates			2,994	4,116
Dividend of investments in associates			222	-
			16,335,966	8,210,480
Cash flows used in investing activities:				
Purchase of financial assets at FVTPL			6,641,868	5,001,066
Purchase of financial assets at FVTOCI			14,681,614	9,976,907
Purchase of securities at amortized cost			3,442,878	456,664
Purchase of investments in associates			1,200	6,272
Purchase of investment properties			54	564
Purchase of tangible assets			10,759	7,797
Purchase of intangible assets			54,639	72,694
Purchase of right-of-use assets			8,355	2,233
			(24,841,367)	(15,524,197)
Net cash used in investing activities		₩	(8,505,401)	₩ (7,313,717)
Financing activities				
Cash flows provided by financing activities:				
Increase in borrowings, net			1,385,590	709,144
Increase in debentures			1,589,209	-
Increase in borrowings from trust accounts, net			50,696	-
			3,025,495	709,144
Cash flows used in financing activities:				
Decrease in borrowings from trust accounts, net			-	730,802
Decrease in debentures			300,000	1,218,773
Dividends			804,270	602,736
Decrease in lease liabilities			18,996	17,257
			(1,123,266)	(2,569,568)
Net cash used in financing activities		₩	1,902,229	₩ (1,860,424)
Net decrease in cash and cash equivalents			(309,800)	(1,215,006)
Cash and cash equivalents at the beginning of the period			3,635,025	3,884,266
Effect of exchange rate changes on cash and cash equivalents			16,673	5,465
Cash and cash equivalents at the end of the period	39	₩	3,341,898	₩ 2,674,725

(Concluded)

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

1. CORPORATE INFORMATION:

1.1 NongHyup Bank as the parent company

NongHyup Bank (the "Bank") was established by the split-off of the Credit and Banking Business from the National Agricultural Cooperative Federation ("NACF") on March 2, 2012. The Bank's headquarters is located at 120 Tongil-ro, Jung-gu in Seoul.

As of March 31, 2020, the Bank's capital stock amounts to ₩2,162,191 million, with 432,438,179 shares of common stock outstanding, which are 100% owned by NongHyup Financial Group. As of March 31, 2020, the Bank operates 157 regional offices, 684 branches, 293 depositary offices and six overseas branches and offices.

1.2 Scope and principles of consolidation

The Bank's consolidated subsidiaries as of March 31, 2020, and December 31, 2019, are as follows:

	March 31, 2020			
Subsidiaries	Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small loan business	Myanmar	100.00	March 31, 2020
NongHyup Finance Cambodia Co., Ltd.	Small loan business	Cambodia	100.00	March 31, 2020
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	March 31, 2020
KAMCO Value Recreation 4th Securitization Specialty Ltd. (*2)	Asset securitization business	Korea	15.00	March 31, 2020
New Ari Second Co., Ltd. and seven other SPEs (*2)	Asset securitization business	Korea	-	March 31, 2020
Mirae Asset (NH Securities) Dividend Premium Privately Placed Balanced Investment Trust 10th and 29 others (*2)	Beneficiary certificate	Korea	100.00	March 31, 2020
IBK Private Securities Fund 13 (Bond Balanced) and another (*2)	Beneficiary certificate	Korea	99.98	March 31, 2020

(*1) The Bank controls the trust because it has power over the trust to determine the operation performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has ability to use power over the investee to affect performance result.

1. Corporate information (cont'd)

1.2 Scope and principles of consolidation (cont'd)

	December 31, 2019			
Subsidiaries	Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small loan business	Myanmar	100.00	December 31, 2019
NongHyup Finance Cambodia Co., Ltd.	Small loan business	Cambodia	100.00	December 31, 2019
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	December 31, 2019
KAMCO Value Recreation 4th Securitization Specialty Ltd. (*2)	Asset securitization business	Korea	15.00	December 31, 2019
New Ari Second Co., Ltd. and seven other SPEs	Asset securitization business	Korea	-	December 31, 2019
Mirae Asset (NH Securities) Dividend Premium Privately Placed Balanced Investment Trust 10th and 29 others (*2 and *3)	Beneficiary certificate	Korea	100.00	December 31, 2019
IBK Private Securities Fund 13 (Bond Balanced) and another (*2 and *4)	Beneficiary certificate	Korea	99.98	December 31, 2019

(*1) The Bank controls the trust because it has power over the trust to determine the operation performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has ability to use power over the investee to affect performance result.
(*3) The name of the subsidiary changed from Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th to Mirae Asset (NH Securities) Dividend Premium Privately Placed Balanced Investment Trust 10th.
(*4) The name of the subsidiary changed from Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23rd to IBK Private Securities Fund 13 (Bond Balanced).

The Bank and its subsidiaries (collectively, the "Group") include the structured entities, to which K-IFRS 1110 and K-IFRS 1112 are applicable, in the consolidation scope and controls the structured entity when the Group has power over the entity, exposure to variable returns from its involvement with the entity and the ability to use power over the entity to affect the amount of those returns.

1.3 Summary of financial information of subsidiaries

A summary of financial information of subsidiaries in consolidation as of March 31, 2020, and for the year then ended as of December 31, 2019, and for the year then ended is as follows (Korean won in millions):

	March 31, 2020					
Subsidiaries	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 27,794	₩ 2,503	₩ 25,291	₩ 2,055	₩ (265)	₩ 2,517
NongHyup Finance Cambodia Co., Ltd.	51,760	42,033	9,727	2,236	675	1,171
Personal pension trust and 10 other trusts	3,624,262	3,624,262	-	24,330	-	-
Consolidated securitization	499,430	610,907	(111,477)	4,024	(5,738)	(5,738)
Consolidated beneficiary certificate	1,964,166	379,929	1,584,237	18,975	(15,479)	(15,479)

1. Corporate information (cont'd)

1.3 Summary of financial information of subsidiaries (cont'd)

	December 31, 2019					
Subsidiaries	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 24,702	₩ 1,928	₩ 22,774	₩ 5,187	₩ 304	₩ 1,978
NongHyup Finance Cambodia Co., Ltd.	36,902	28,346	8,556	6,651	1,424	1,660
Personal pension trust and 10 other trusts	3,658,401	3,658,401	-	92,053	-	-
Consolidated securitization	469,112	577,502	(108,390)	13,126	(22,243)	(22,243)
Consolidated beneficiary certificate	2,027,876	426,602	1,601,274	79,940	43,084	43,084

1.4 Consolidated structured entities

Characteristics and intentions of contractual commitments offered by Group to consolidated structured entities are as follows:

Entity	Characteristics	Purpose
KAMCO Value Recreation 4th Securitization Specialty Ltd.	The Group has purchased subordinated bonds amounting to ₩42,165 million issued by its subsidiary, KAMCO Value Recreation 4th Securitization Specialty Ltd.	Credit risk mitigation of liquidation plan
New Ari Second Co., Ltd. and eight other SPEs	The Group offers the ABCP purchase agreement with the limit of ₩476,600 million to SPEs.	Credit risk mitigation of liquidation plan
Eleven trusts, including personal pension trust	The Group offers principal and interest conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case of the operation result of trust account standing below the principal.	Credit risk mitigation on financial management of trust account

1.5 Changes in subsidiaries

NH Green Bio Co., Ltd. became subsidiaries during the three months ended March 31, 2020.

1.6 Unconsolidated structured entities

A structured entity is designed such that voting rights or similar rights are not the dominant factor in deciding who controls the entity, and the Group is accordingly involved in the structured entity through project financing, asset-backed securitization, investment fund contracts and others as of March 31, 2020. Of the structured entities, the interests and nature of the risks of unconsolidated structured entities, for which the Group does not have control, are as follows:

1. Corporate information (cont'd)

1.6 Unconsolidated structured entities (cont'd)

1.6.1 Asset-backed securitization

The unconsolidated structured entity, whose objective is the securitization of assets, issues asset-backed securities based on the securitized assets and pays the redemption proceeds on such asset-backed securities with profits from the management, operation and sales of the securitized assets. The Group is liable for the risks associated with the issuance of asset-backed securities through the purchase of subordinated bonds, execution of asset-backed securities purchase agreements and granting of credit and, thus, recognizes the related interest income and commission income.

1.6.2 Investment funds

Non-consolidated structured entities, which are classified as investment funds, include investment trusts and private equity funds. The structure of an investment trust is formed by funding from various investors, engaging a manager in the trust to operate and distributing proceeds from investments to the investors according to the trust agreements. The structure of a private equity fund is normally established by distributing profit from investment fund of equity securities in order to acquire ownership interests in a target group and implement financial and operational restructuring. The Group recognizes gains and losses on valuation of investments in relation to its interest in investment funds. It is exposed to losses of principals when the value of investment fund decreases.

1.6.3 Project financing

Project financing is the main financing method for large-scale risky project, where investors will make investment decisions based on the project economic feasibility, instead of the credit rating of the principal party driving the project or the physical collateral involved, and will receive the profits that occur upon project progression. For effective implementation of the project financing, structured entities will be established as special-purpose entities ("SPEs"), funded through investment or lending institutions and participating entities. Structured entities for project financing include investment companies for real estate project financing, business infrastructure enforcement corporations and special-purpose companies for acquisition of ships and airlines. The Group has an influence on the structured entities investment, loans and granting of credit, and thus recognizes the related interest income, gains and losses on valuation of equity investments and dividend income. Although the entities that provide financial support in the form of funding guarantees, bonds and senior credit facilities exist, the Group may still be exposed to risk of losses resulting from failure of return on capital investment or discontinuation of the project, joint liabilities on guarantees, etc.

Total asset size of the unconsolidated structured entities, book value for the line items as recognized in the condensed consolidated financial statements, maximum exposure to loss and loss incurred for the three months ended March 31, 2020, are as follows. The maximum exposure to loss includes investment amounts recognized in the interim condensed consolidated financial statements and the amounts that are determined in the future by meeting certain conditions based on the agreements of purchase, granting credit, etc. (Korean won in millions):

1. Corporate information (cont'd)

1.6 Unconsolidated structured entities (cont'd)

	March 31, 2020			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 71,771,945	₩ 32,776,971	₩ 66,050,823	₩ 170,599,739
Recognized assets related to unconsolidated structured entities:				
Loans	109,625	-	1,845,862	1,955,487
Securities	5,859,835	3,858,240	19,358	9,737,433
	₩ 5,969,460	₩ 3,858,240	₩ 1,865,220	₩ 11,692,920
Recognized liabilities related to unconsolidated structured entities	₩ 13,720	₩ -	₩ -	₩ 13,720
Loss on unconsolidated structured entity	-	273	-	273
Maximum exposure to loss:				
Commitments and guarantees	2,660,750	-	-	2,660,750
Securities (including derivatives)	5,859,835	3,858,240	19,358	9,737,433
Loans	109,625	-	1,845,862	1,955,487
	₩ 8,630,210	₩ 3,858,240	₩ 1,865,220	₩ 14,353,670

	December 31, 2019			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 55,297,400	₩ 28,825,621	₩ 59,169,784	₩ 143,292,805
Recognized assets related to unconsolidated structured entities:				
Loans	316,024	-	1,532,751	1,848,775
Securities	4,464,125	3,289,243	19,358	7,772,726
	4,780,149	3,289,243	1,552,109	9,621,501
Recognized liabilities related to unconsolidated structured entities	11,476	-	-	11,476
Loss on unconsolidated structured entity	-	304	58,965	59,269
Maximum exposure to loss:				
Commitments and guarantees	2,220,531	-	-	2,220,531
Securities (including derivatives)	4,464,125	3,289,243	19,358	7,772,726
Loans	316,024	-	1,532,751	1,848,775
	₩ 7,000,680	₩ 3,289,243	₩ 1,552,109	₩ 11,842,032

2. SIGNIFICANT BASIS OF PREPARATION AND ACCOUNTING POLICIES:

2.1 Basis for preparation of quarterly condensed consolidated financial statements

The Group prepares interim condensed consolidated financial statements in the Korean language in accordance with K-IFRS 1034 Interim Financial Reporting enacted by the Act on External Audit of Stock Companies. The accompanying interim condensed consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent accountants' review report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The accompanying interim condensed consolidated financial statements do not include all the information and disclosures required in the annual consolidated financial statements, and should be read in conjunction with the Group's annual consolidated financial statements as of and for the year ended December 31, 2019.

2.2 Changes in accounting policies and disclosures

The accounting policies adopted in the preparation of the interim condensed consolidated financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements as of and for the year ended December 31, 2019, except for the adoption of new standards and interpretations as of January 1, 2020.

The nature and the impact of each new standard, amendment and enactments are described below.

Amendments to K-IFRS 1103, *Business Combinations - Definition of a Business*
The amendments clarify that while businesses usually have outputs, outputs are not required for an integrated set of activities and assets to qualify as a business. To be considered a business an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. Additional guidance is provided that helps to determine whether a substantive process has been acquired.

The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business, if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets. These amendments have no impact on the condensed consolidated financial statements of the Group.

Amendments to References to the Conceptual Framework in K-IFRS Standards
Together with the revised Conceptual Framework, which became effective upon publication on December 21, 2018, the IASB has also issued Amendments to References to the Conceptual Framework in IFRS Standards. The document contains amendments to K-IFRS 1102, K-IFRS 1103, K-IFRS 1106, K-IFRS 1114, K-IFRS 1001, K-IFRS 1008, K-IFRS 1034, K-IFRS 1037, K-IFRS 1038, K-IFRS 2112, K-IFRS 2119, K-IFRS 2120, K-IFRS 2122 and K-IFRS 2032.

Not all amendments, however, update those pronouncements with regard to references to and quotes from the framework so that they refer to the revised Conceptual Framework. Some pronouncements are only updated to indicate which version of the Framework they are referencing to (the IASC Framework adopted by the IASB in 2007, the IASB Framework of 2010 or the new revised Framework of 2018) or to indicate that definitions in the Standard have not been updated with the new definitions developed in the revised Conceptual Framework. These amendments have no impact on the condensed consolidated financial statements of the Group.

2.2 Changes in accounting policies and disclosures (cont'd)

Amendments to K-IFRS 1109, *Financial Instruments*, and K-IFRS 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. These amendments have no impact on the condensed consolidated financial statements of the Group.

Interpretations on the enforceable period of K-IFRS 1116, *Leases*

On December 16, 2019, IFRS Interpretations Committee decided when the lessee and the lessor each has the right to terminate the lease without permission from the other party, the enforceable period is determined considering economic disadvantage relating to the termination of lease contract. In accordance with the decision, the Group is analyzing the effects on the condensed consolidated financial statements when the accounting policy on the enforceable period is changed and will reflect the effects after the analysis.

3. SIGNIFICANT JUDGMENTS AND ESTIMATIONS:

In preparation of the interim condensed consolidated financial statements, the management must make the application of the Group's accounting policies, judgments, estimations and assumptions, which give effects to assets, liabilities, revenues and expenses. Actual results can differ from those estimates.

The significant judgments, which management has made regarding the application of the Group's accounting policies and key sources of uncertainty in accounting estimates do not differ from those used in preparing the annual interim consolidated financial statements for the year ended December 31, 2019.

The COVID-19 pandemic is affecting major economic and financial markets, and virtually all industries are facing challenges associated with the economic conditions resulting from the COVID-19.

The banking business operated by the Group principally performs the money brokerage business, such as providing consumers with the various types of financing including loans. As a result of the COVID-19, the ability of borrowers, whether corporate or individuals, to meet their obligations under loan relationship can be deteriorated and the uncertainty in the management's estimations can increase measuring the expected credit losses on the financial assets, such as calculating the borrowers' probability of default.

To identify the exposures of the financial assets affected by the uncertainty associated with COVID-19, the Group classifies the exposures related to COVID-19 by industries directly affected or industries related to Chinese manufacturing, business recession or real estate using Standard Industrial Classification Code (Refer to Note 35).

Considering the uncertainty associated with the COVID-19, the significant estimations and assumptions used in the Group's condensed consolidated financial statements could be changed. The Group cannot expect the impact of the pandemic on its condensed consolidated financial statements as of March 31, 2020.

4. OPERATING SEGMENT INFORMATION:

The Group is organized into four operating segments as follows based on their products and services:

Segment	Main business activities
Personal financing	Personal banking services for general public - lending and borrowing, financial services, etc.
Corporate financing	Corporate banking services for conglomerates, small- and medium-sized companies, institutions - lending and borrowing, import and export supports, financial services, etc.
Credit card	Credit card services for credit card holders, etc.
Others	Activities other than the above

Details of net income by operating segment for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 749,506	₩ 395,011	₩ 145,230	₩ 122,944	₩ 1,412,691	₩ (111,423)	₩ 1,301,268
Net commission income (losses)	70,300	62,839	876	(316)	133,699	54,556	188,255
Net other operating income (losses)	(85,384)	(33,175)	(1,737)	86,844	(33,452)	(184,275)	(217,727)
	734,422	424,675	144,369	209,472	1,512,938	(241,142)	1,271,796
Operating expenses:							
General and administrative expenses	275,692	127,602	69,398	14,286	486,978	288,809	775,787
Operating income before credit losses and income tax expenses	458,730	297,073	74,971	195,186	1,025,960	(529,951)	496,009
Allowance for expected credit losses	-	-	-	-	-	51,313	51,313
Income tax expenses	-	-	-	-	-	128,540	128,540
Net income for the period	₩ 458,730	₩ 297,073	₩ 74,971	₩ 195,186	₩ 1,025,960	₩ (709,804)	₩ 316,156

4. Operating segment information (cont'd)

	For the three months ended March 31, 2019						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 735,085	₩ 439,943	₩ 132,698	₩ 107,926	₩ 1,415,652	₩ (148,410)	₩ 1,267,242
Net commission income (losses)	186,572	56,538	8,457	20,611	272,178	(96,514)	175,664
Net other operating income (losses)	(204,802)	(33,948)	(1,020)	38,288	(201,482)	82,392	(119,090)
	716,855	462,533	140,135	166,825	1,486,348	(162,532)	1,323,816
Operating expenses:							
General and administrative expenses	272,876	125,136	65,818	11,068	474,898	268,516	743,414
Operating income before credit losses and income tax expenses	443,979	337,397	74,317	155,757	1,011,450	(431,048)	580,402
Allowance for expected credit losses	-	-	-	-	-	75,891	75,891
Income tax expenses	-	-	-	-	-	138,285	138,285
Net income for the period	₩ 443,979	₩ 337,397	₩ 74,317	₩ 155,757	₩ 1,011,450	₩ (645,224)	₩ 366,226

Revenue from external customers for the three months ended March 31, 2020 and 2019, and non-current assets as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	Revenue from external customers		Non-current assets	
Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019	March 31, 2020	December 31, 2019
Domestic	₩ 4,946,634	₩ 3,370,502	₩ 3,933,297	₩ 3,954,718
Foreign	7,088	7,527	3,200	1,963
	₩ 4,953,722	₩ 3,378,029	₩ 3,936,497	₩ 3,956,681

5. FINANCIAL ASSETS:

Details of book value and far value of financial assets as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020 Book value	March 31, 2020 Fair value
Financial assets at FVTPL:			
Financial assets at FVTPL		₩ 10,479,768	₩ 10,479,768
Trading derivative assets		1,054,034	1,054,034
		11,533,802	11,533,802
Derivative assets:			
Hedging derivative assets		78,410	78,410
Financial assets at FVTOCI:			
Financial assets at FVTOCI		27,224,437	27,224,437
Financial assets at amortized cost:			
Deposits (*1)	Deposits in Korean won	1,082,334	1,082,334
	Deposits in foreign currency	1,259,473	1,259,473
		2,341,807	2,341,807
Debt securities (*1)		15,374,029	15,560,246
Loans (*2)	Loans in Korean won	214,942,348	218,585,483
	Loans in foreign currency	2,062,775	2,324,889
	Credit card receivables	6,768,214	6,869,321
	Others	18,253,096	18,296,888
		242,026,433	246,076,581
Receivables (*3 and *4)		4,458,565	4,170,709
		264,200,834	268,149,343
		₩ 303,037,483	₩ 306,985,992

(*1) Deposits and debt securities are presented at net carrying amount after deduction of allowance for expected credit losses.
(*2) Loans are presented at net carrying amount after deduction of allowance for expected credit losses and present value discounts. Deferred LOF/LOC amounting to ₩336,309 million as of March 31, 2020, is excluded (Note 10. (3)).
(*3) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*4) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for expected credit losses and present value discounts.

5. Financial assets (cont'd)

Classification		December 31, 2019 Book value	Fair value
Financial assets at FVTPL:			
Financial assets at FVTPL		₩ 9,523,943	₩ 9,523,943
Trading derivative assets		501,661	501,661
		10,025,604	10,025,604
Derivative assets:			
Hedging derivative assets		34,068	34,068
Financial assets at FVTOCI:			
Financial assets at FVTOCI		21,930,870	21,930,870
Financial assets at amortized cost:			
Deposits (*1)	Deposits in Korean won	2,271,471	2,271,471
	Deposits in foreign currency	1,649,110	1,649,110
		3,920,581	3,920,581
Debt securities (*1)		12,441,531	12,571,821
Loans (*2)	Loans in Korean won	210,441,970	213,904,922
	Loans in foreign currency	1,714,337	1,843,219
	Credit card receivables	7,323,588	7,433,526
	Others	18,315,191	18,358,902
		237,795,086	241,540,569
Receivables (*3 and *4)		3,104,821	2,839,509
		257,262,019	260,872,480
		₩ 289,252,561	₩ 292,863,022

(*1) Deposits and dept securities are presented at net carrying amount after deduction of allowance for expected credit losses.
(*2) Loans are presented at net carrying amount after deduction of allowance for expected credit losses and present value discounts. Deferred LOF/LOC amounting to ₩324,173 million as of December 31, 2019, is excluded. (Note 10. (3))
(*3) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*4) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for expected credit losses and present-value discounts.

5. Financial assets (cont'd)

Transferred financial assets derecognized not in their entirety as of March 31, 2020, and December 31, 2019, are as follows:

1) Bonds sold under repurchase agreements

Transferred bonds sold under repurchasable agreements with a condition to repurchase at a firm price derecognized not in their entirety as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020	December 31, 2019
Transferred assets	Financial assets at FVTPL	₩ 384,289	₩ 321,561
Related liabilities	Bonds sold under repurchase agreements	₩ 363,300	₩ 303,400

2) Securities for lending

In case, the Group loans securities held by the Group, the ownership of the securities is transferred. However, those loaned securities must be returned at the end of the lending period. Therefore, as the Group holds most of the risks and rewards of the securities, the Group continues to recognize the entire securities for lending.

Details of securities for lending as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019	Loaned to
Financial assets at FVTPL			Korea Securities Depository and others
- Debt securities	₩ 40,210	₩ 5,978	
Financial assets at FVTOCI			
- Debt securities	1,393,573	-	
Financial assets at amortized cost			
- Debt securities	376,302	-	

6. CASH AND DUE FROM BANKS:

Cash and due from banks as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	Details	Interest rate (%)	March 31, 2019	December 31, 2019
Cash in Korean won	Cash on hand	-	₩ 1,751,465	₩ 1,671,563
Cash in foreign currency	Cash on hand	-	461,140	353,898
Due from banks in Korean won	Reserve deposits	-	558,899	1,849,487
	Monetary stabilization account	1.41	501	501
	Bank deposits	0.00–1.58	124,862	104,061
	Other deposits	0.00–1.80	398,079	317,431
			1,082,341	2,271,480
Due from banks in foreign currency	Reserve deposits	-	133,667	72,307
	Deposits at other banks	(-)1.50–0.80	1,067,804	1,550,833
	Time deposits	2.15–8.50	7,337	8,088
	Other deposits	0.08	51,691	21,754
			1,260,499	1,652,982
Allowance for expected credit losses			(1,033)	(3,881)
			₩ 4,554,412	₩ 5,946,042

6. Cash and due from banks (cont'd)

Changes in the total book value of due from banks for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 3,924,462	₩ -	₩ -	₩ 3,924,462
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Financial assets originated or derecognized	(1,729,658)	-	-	(1,729,658)
Others (*1)	148,036	-	-	148,036
Ending balance	₩ 2,342,840	₩ -	₩ -	₩ 2,342,840

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 4,278,801	₩ -	₩ -	₩ 4,278,801
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	(122,000)	-	-	(122,000)
Financial assets originated or derecognized	(210,695)	-	-	(210,695)
Others (*1)	(21,644)	-	-	(21,644)
Ending balance	₩ 3,924,462	₩ -	₩ -	₩ 3,924,462

(*1) Other changes are due to exchange rate fluctuations.

6. Cash and due from banks (cont'd)

Changes in allowance for expected credit losses of due from banks for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 3,881	₩ -	₩ -	₩ 3,881
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Reversal of allowance for expected credit losses	(3,849)	-	-	(3,849)
Others (*1)	1,001	-	-	1,001
Ending balance	₩ 1,033	₩ -	₩ -	₩ 1,033

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 17,947	₩ -	₩ -	₩ 17,947
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Reversal of allowance for expected credit losses	(14,663)	-	-	(14,663)
Others (*1)	597	-	-	597
Ending balance	₩ 3,881	₩ -	₩ -	₩ 3,881

(*1) Other changes are due to exchange rate fluctuations.

6. Cash and due from banks (cont'd)

Cash and due from banks in Korean won and in foreign currency that are restricted in use as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	Financial institution	March 31, 2020	December 31, 2019	Reason for restriction
Reserve deposits in Korean won	The Bank of Korea	₩ 558,899	₩ 1,849,487	Required under the *Banking Act* and other related regulations
Other deposits in Korean won	The Bank of Korea	390,000	300,000	Required by the Bank of Korea for the purpose of liquidity management
Non-monetary financial institution deposits in Korean won	Korea Exchange	501	501	Penalty joint fund related to government bond transaction and guarantee deposit
Reserve deposits in foreign currency	The Bank of Korea	133,667	72,307	Required under the *Banking Act* and other related regulations
Other deposits in foreign currency	Other financial institutions	51,691	21,754	Deposits related to derivatives trading
Deposit on securities and futures	Samsung Futures Inc. and seven others	1,253	849	Reserve securities and futures
Allowance for expected credit losses		(5)	(5)	
		₩ 1,136,006	₩ 2,244,893	

7. FINANCIAL ASSETS AT FVTPL:

Details of financial assets at FVTPL as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2019		December 31, 2019
Equity securities:				
Marketable equity securities	₩	37,467	₩	110,676
Non-marketable equity securities		62,352		62,628
		99,819		173,304
Debt securities:				
Government bonds		2,223,294		1,399,304
Financial bonds		3,131,485		3,238,762
Corporate bonds		428,523		449,021
Public and private bonds		340,196		342,654
Others		45,283		64,919
		6,168,781		5,494,660
Other securities:				
Beneficiary certificate		3,089,371		2,875,764
Mutual fund		225,562		223,688
Foreign currencies		431,715		396,254
Others		444,773		340,958
		4,191,421		3,836,664
Loans		19,747		19,315
	₩	10,479,768	₩	9,523,943

The Group irrevocably designates a financial asset as measured at FVTPL at the time of initial recognition of the financial asset if doing so eliminates or significantly reduces the accounting mismatch. In this case, financial instruments designated as measured at FVTPL cannot be reversed. The Group does not hold financial instruments designated as measured at FVTPL as of March 31, 2020.

The Group has no financial assets at FVTPL provided as collateral as of March 31, 2020.

7. Financial assets at FVTPL (cont'd)

Financial assets at FVTPL provided as collaterals as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

		March 31, 2020			
Provided to	Remarks	Pledged amount		Book value of securities provided as collaterals	
BNK Asset Management and 22 others	Interinstitutional repurchase sale	₩	381,601	₩	384,289
Samsung Futures Co., Ltd. and 12 others	Substitute securities for derivative transactions		15,560		18,871
Korea Securities depository	Others		88,000		88,907
		₩	485,161	₩	492,067

		December 31, 2019			
Provided to	Remarks	Pledged amount		Book value of securities provided as collaterals	
BNK Asset Management and 22 others	Interinstitutional repurchase sale	₩	322,400	₩	321,561
NH Futures Co., Ltd. and 11 others	Substitute securities for derivative transactions		19,460		22,678
Korea Securities depository and 3 others	Others		116,200		116,901
		₩	458,060	₩	461,140

8. FINANCIAL ASSETS AT FVTOCI:

Details of financial assets at FVTOCI as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020			
Classification	Book value		Allowance for expected credit losses	
Equity securities:				
Marketable equity securities	₩	117,319	₩	-
Non-marketable equity securities		213,028		-
Foreign currencies		273		-
		330,620		-
Debt securities:				
Government bonds		5,484,429		-
Financial bonds		15,913,126		(1,013)
Corporate bonds		2,874,765		(928)
Public bonds		1,777,132		(157)
Foreign currencies		844,365		(366)
		26,893,817		(2,464)
	₩	27,224,437	₩	(2,464)

8. Financial assets at FVTOCI (cont'd)

Classification	December 31, 2019			
		Book value		Allowance for expected credit losses
Equity securities:				
Marketable equity securities	₩	193,564	₩	-
Non-marketable equity securities		218,738		-
Foreign currencies		273		-
		412,575		-
Debt securities:				
Government bonds		3,557,499		-
Financial bonds		13,845,930		(588)
Public bonds		2,162,861		(715)
Corporate bonds		1,265,465		(126)
Foreign currencies		686,540		(189)
		21,518,295		(1,618)
	₩	21,930,870	₩	(1,618)

Details of financial assets designated as measured at FVTOCI as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020		December 31, 2019
Equity securities:				
Marketable equity securities	₩	117,319	₩	193,564
Non-marketable equity securities		213,028		218,738
Foreign currencies		273		273
	₩	330,620	₩	412,575

The Group designates financial assets that are held for strategic reasons as measured at FVTOCI, as these financial assets are not held for capital appreciation through investment. In other cases, they are classified as financial assets at FVTPL.

8. Financial assets at FVTOCI (cont'd)

Details of disposal of equity securities at FVTOCI for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	
	Fair value at the time of disposal	Accumulated profit and loss at the time of disposal
Equity securities:		
Marketable equity securities (*1)	₩ 44,595	₩ (19,763)

(*1) The effect of income tax is not considered.

Classification	For the year ended December 31, 2019	
	Fair value at the time of disposal	Accumulated profit and loss at the time of disposal
Equity securities:		
Marketable equity securities (*1)	₩ 44,816	₩ (4,134)

(*1) The effect of income tax is not considered.

The Group disposed an equity instrument at FVTOCI for the three months ended March 31, 2020, to realize a gain and loss from changes in the fair value of an investment in the equity instrument. The Group will reclassify the accumulative profits or losses on equity securities at FVTOCI from other comprehensive income to retained earnings at the end of the year.

Details of financial assets at FVTOCI provided as collateral as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Provided to	Remarks	March 31, 2020	
		Pledged amount	Book value of securities provided as collaterals
The Bank of Korea	Daylight overdraft	₩ 500,000	₩ 504,531
	Borrowing	210,000	211,903
NH Investment & Securities Co., Ltd. and 19 others	Credit enhancement for derivative transactions	302,814	305,182
Korea Securities Depository and others	Others	1,000	1,013
		₩ 1,013,814	₩ 1,022,629

Provided to	Remarks	December 31, 2019	
		Pledged amount	Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 2,020,000	₩ 2,036,736
	Daylight overdraft	600,000	604,376
	Borrowing	410,000	412,764
NH Investment & Securities Co., Ltd. and eight others	Credit enhancement for derivative transactions	33,159	33,430
Korea Securities Depository	Others	1,000	1,012
		₩ 3,064,159	₩ 3,088,318

8. Financial assets at FVTOCI (cont'd)

Changes in the total book value of debt securities at FVTOCI for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 21,518,295	₩ -	₩ -	₩ 21,518,295
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	14,672,905	-	-	14,672,905
Disposal or repayment	(9,405,461)	-	-	(9,405,461)
Amortization of effective interest rate	(2,806)	-	-	(2,806)
Valuation	70,349	-	-	70,349
Others (*1)	40,535	-	-	40,535
Ending balance	₩ 26,893,817	₩ -	₩ -	₩ 26,893,817

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 19,696,787	₩ -	₩ -	₩ 19,696,787
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	16,643,733	-	-	16,643,733
Disposal or repayment	(14,929,256)	-	-	(14,929,256)
Amortization of effective interest rate	(12,456)	-	-	(12,456)
Valuation	96,569	-	-	96,569
Others (*1)	22,918	-	-	22,918
Ending balance	₩ 21,518,295	₩ -	₩ -	₩ 21,518,295

(*1) Other changes are due to exchange rate fluctuations.

8. Financial assets at FVTOCI (cont'd)

Changes in allowance for expected credit losses of debt securities at FVTOCI for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,618	₩ -	₩ -	₩ 1,618
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses (*1)	927	-	-	927
Disposal	(91)	-	-	(91)
Others (*2)	10	-	-	10
Ending balance	₩ 2,464	₩ -	₩ -	₩ 2,464

(*1) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.
(*2) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,385	₩ -	₩ -	₩ 1,385
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses (*1)	305	-	-	305
Disposal	(79)	-	-	(79)
Others (*2)	7	-	-	7
Ending balance	₩ 1,618	₩ -	₩ -	₩ 1,618

(*1) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.
(*2) Other changes are due to exchange rate fluctuations.

9. SECURITIES AT AMORTIZED COST:

Details of securities at amortized cost as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020	
Classification	Book value	Allowance for expected credit losses
Debt securities:		
Government bonds	₩ 6,982,898	₩ -
Financial bonds	3,292,200	-
Corporate bonds	4,679,969	(1,287)
Public bonds	420,258	(9)
	₩ 15,375,325	₩ (1,296)

	December 31, 2019	
Classification	Book value	Allowance for expected credit losses
Debt securities:		
Government bonds	₩ 4,973,080	₩ -
Financial bonds	3,069,105	-
Corporate bonds	3,950,166	(1,086)
Public bonds	450,275	(9)
	₩ 12,442,626	₩ (1,095)

Details of securities at amortized cost provided as collateral as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

		March 31, 2020	
Provided to	Remarks	Pledged amount	Book value of securities provided as collateral
The Bank of Korea	Payment risk	₩ 6,240,000	₩ 6,200,853
	Daylight overdraft	410,000	406,083
	Borrowing	670,000	667,878
NH Futures Co., Ltd. and four others	Substituted securities for derivative transaction	26,000	26,000
NH Capital Co., Ltd. and another	Others	15,000	14,901
		₩ 7,361,000	₩ 7,315,715

		December 31, 2019	
Provided to	Remarks	Pledged amount	Book value of securities provided as collateral
The Bank of Korea	Payment risk	₩ 3,730,000	₩ 3,706,046
	Daylight overdraft	310,000	307,914
	Borrowing	470,000	468,214
NH Futures Co., Ltd. and four others	Substituted securities for derivative transaction	26,000	26,000
Korea Exchange and another	Others	15,871	15,799
		₩ 4,551,871	₩ 4,523,973

9. Securities at amortized cost (cont'd)

Changes in the total book value for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 12,442,626	₩ -	₩ -	₩ 12,442,626
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	3,442,862	-	-	3,442,862
Disposal or repayment	(513,431)	-	-	(513,431)
Amortization of effective interest rate	3,268	-	-	3,268
Ending balance	₩ 15,375,325	₩ -	₩ -	₩ 15,375,325

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	4,716,824	-	-	4,716,824
Repayment	(1,624,962)	-	-	(1,624,962)
Amortization of effective interest rate	13,529	-	-	13,529
Ending balance	₩ 12,442,626	₩ -	₩ -	₩ 12,442,626

9. Securities at amortized cost (cont'd)

Changes in allowance for expected credit losses for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,095	₩ -	₩ -	₩ 1,095
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Reversal of allowance for expected credit losses (*1)	217	-	-	217
Disposal	(16)	-	-	(16)
Ending balance	₩ 1,296	₩ -	₩ -	₩ 1,296

(*1) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,132	₩ -	₩ -	₩ 1,132
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses (*1)	(37)	-	-	(37)
Ending balance	₩ 1,095	₩ -	₩ -	₩ 1,095

(*1) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.

10. LOANS AT AMORTIZED COST:

Details of loans at amortized cost as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	Type	March 31, 2020	December 31, 2019
Loans in Korean won	Corporate	₩ 96,871,005	₩ 93,457,121
	Household	114,375,122	112,690,462
	Public	4,005,389	4,588,068
	Integrated	529,122	551,346
		215,780,638	211,286,997
	Allowance for expected credit losses	(838,290)	(845,027)
	Book value, net	214,942,348	210,441,970
Loans in foreign currency	Loans	1,656,367	1,407,749
	Offshore	487,748	392,632
		2,144,115	1,800,381
	Allowance for expected credit losses	(81,340)	(86,044)
	Book value, net	2,062,775	1,714,337
Other loans	Credit card receivables	7,006,502	7,561,021
	Bills purchased	590,124	750,747
	Bills purchased in foreign currency	1,452,635	1,816,895
	Private placement bonds	18,243	18,243
	Payment for acceptances and guarantees	11,178	8,010
	Domestic import usance	2,089,417	1,840,359
	Others	14,152,981	13,944,085
		25,321,080	25,939,360
	Allowance for expected credit losses	(299,770)	(300,580)
	Book value, net	25,021,310	25,638,780
Receivables	Receivables	4,478,760	3,124,665
	Allowance for expected credit losses	(4,602)	(4,727)
	Book value, net	4,474,158	3,119,938
Total loans and receivables		247,724,593	242,151,403
Total allowance for expected credit losses		(1,224,002)	(1,236,378)
Deferred LOF/LOC		336,309	324,172
Present value discounts of receivables		(15,593)	(15,117)
Total loans and receivables, net		₩ 246,821,307	₩ 241,224,080

10. Loans at amortized cost (cont'd)

Details of receivables at amortized cost as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020		December 31, 2019
Domestic exchange settlement debits	₩	531,511	₩	204,600
Accrued income		865,944		664,229
Accounts receivable		2,311,547		1,141,485
Suspense payment		5,509		5,433
Guarantee deposits paid		482,613		485,085
Unsettled credit card receivables		261,946		340,735
Receivables from proxy sale of NACF		3,125		957
Others		16,565		282,141
Total receivables		4,478,760		3,124,665
Allowance for expected credit losses		(4,602)		(4,727)
Present value discounts		(15,593)		(15,117)
Total of receivables, net	₩	4,458,565	₩	3,104,821

Changes in deferred LOF/LOC for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020							
		January 1, 2020		Increase		Decrease		March 31, 2020
Deferred LOF	₩	(17,800)	₩	(4,769)	₩	(3,726)	₩	(18,843)
Deferred LOC		341,972		77,995		64,815		355,152
Deferred LOC, net	₩	324,172	₩	73,226	₩	61,089	₩	336,309

Classification	For the year ended December 31, 2019							
		January 1, 2019		Increase		Decrease		December 31, 2019
Deferred LOF	₩	(14,427)	₩	(14,080)	₩	(10,707)	₩	(17,800)
Deferred LOC		291,666		264,880		214,574		341,972
Deferred LOC, net	₩	277,239	₩	250,800	₩	203,867	₩	324,172

10. Loans at amortized cost (cont'd)

Changes in the total book value for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses (*1)		
	12-month expected credit losses (*1)	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 223,200,993	₩ 17,571,406	₩ 1,379,004	₩ 242,151,403
Transfer to 12-month expected credit losses	3,680,874	(3,669,782)	(11,092)	-
Transfer to financial assets with a significant increase in credit risk	(3,886,632)	3,905,943	(19,311)	-
Transfer to credit-impaired financial assets	(106,842)	(282,397)	389,239	-
Financial assets originated or derecognized	7,069,937	(1,397,177)	(156,379)	5,516,381
Write-offs	-	-	(114,999)	(114,999)
Disposals	(234)	(29,344)	(59,092)	(88,670)
Others (*2)	260,478	-	-	260,478
Ending balance	₩ 230,218,574	₩ 16,098,649	₩ 1,407,370	₩ 247,724,593

(*1) Deferred LOF/LOC and present value discounts are not included.
(*2) Others include the amount of changes in exchange rates and restructured loans.

	For the year ended December 31, 2019			
		Lifetime expected credit losses (*1)		
	12-month expected credit losses (*1)	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 213,160,478	₩ 18,949,092	₩ 1,865,663	₩ 233,975,233
Transfer to 12-month expected credit losses	6,429,159	(6,417,806)	(11,353)	-
Transfer to financial assets with a significant increase in credit risk	(9,446,504)	9,489,990	(43,486)	-
Transfer to credit-impaired financial assets	(669,352)	(495,132)	1,164,484	-
Financial assets originated or derecognized	13,396,300	(3,755,251)	(647,066)	8,993,983
Write-offs	-	-	(801,921)	(801,921)
Disposals	(110,997)	(199,487)	(147,317)	(457,801)
Others (*2)	441,909	-	-	441,909
Ending balance	₩ 223,200,993	₩ 17,571,406	₩ 1,379,004	₩ 242,151,403

(*1) Deferred LOF/LOC and present value discounts are not included.
(*2) Others include the amount of changes in exchange rates and restructured loans.

10. Loans at amortized cost (cont'd)

Changes in allowance for expected credit losses for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 349,891	₩ 364,344	₩ 522,143	₩ 1,236,378
Transfer to 12-month expected credit losses	46,770	(44,811)	(1,959)	-
Transfer to financial assets with a significant increase in credit risk	(26,101)	28,137	(2,036)	-
Transfer to credit-impaired financial assets	(7,236)	(45,016)	52,252	-
Provision of allowance for expected credit losses	(7,219)	35,098	24,864	52,743
Write-offs	-	-	(114,999)	(114,999)
Recovery of write-offs	-	-	64,118	64,118
Disposals	(153)	(1,112)	(8,149)	(9,414)
Others (*1)	6,352	-	(11,176)	(4,824)
Ending balance	₩ 362,304	₩ 336,640	₩ 525,058	₩ 1,224,002

(*1) Others include the amount of changes in exchange rates, restructured loans and interest income on impaired loans.

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 341,851	₩ 446,350	₩ 853,425	₩ 1,641,626
Transfer to 12-month expected credit losses	78,501	(75,306)	(3,195)	-
Transfer to financial assets with a significant increase in credit risk	(33,230)	42,338	(9,108)	-
Transfer to credit-impaired financial assets	(323,393)	(251,938)	575,331	-
Provision (reversal) of allowance for expected credit losses	276,236	213,566	(227,195)	262,607
Write-offs	-	-	(801,921)	(801,921)
Recovery of write-offs	-	-	254,371	254,371
Disposals	(801)	(10,666)	(35,247)	(46,714)
Others (*1)	10,727	-	(84,318)	(73,591)
Ending balance	₩ 349,891	₩ 364,344	₩ 522,143	₩ 1,236,378

(*1) Others include the amount of changes in exchange rates, restructured loans and interest income on impaired loans.

10. Loans at amortized cost (cont'd)

The uncollected contractual amount of financial assets that was written off but still under the process of pursuing collection by the Group as of March 31, 2020, amounts to ₩4,944,067 million.

11. INVESTMENTS IN ASSOCIATES:

Details of investments in associates as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions and shares in thousands):

	March 31, 2020					
	Main business	Location	Date of the interim condensed consolidated financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	March 31, 2020	180	9.00	₩ 8,047
NH-QCP Global Partnership PEF (*2)	Other financial business	Korea	March 31, 2020	-	24.95	11,578
IBK-NH Smallgiant PEF (*3)	Other financial business	Korea	March 31, 2020	3.5	44.90	32,793
NH-AJUIB Growth 2013 PEF	Other financial business	Korea	March 31, 2020	18,300,049	29.95	21,736
Kyunggi-DSC Superman Investment Fund No. 1	Other financial business	Korea	March 31, 2020	2.7	25.00	6,506
NH Agri-Biz Value Creative 1st PEF	Other financial business	Korea	March 31, 2020	8,164,870	48.03	7,631
NH-AJU Digital Fund	Other financial business	Korea	March 31, 2020	2.4	40.00	3,256
NH-NAU Agro Food 1st Private Equity Fund	Other financial business	Korea	March 31, 2020	7,500,000	50.00	6,981
2012sunlight, Co., Ltd. (*4)	Meat processing	Korea	-	9.8	46.57	-
Yujinmplus Co., Ltd. (*4)	Mold manufacturing	Korea	-	33	23.02	-
Seasons Shipping Co., Ltd. (*4)	Cargo transportation	Korea	-	16	20.27	-
Inkordan Trading Co., Ltd. (*4)	Clothing manufacturing	Korea	-	15	42.30	-
						₩ 98,528

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through its ability to designate members of the board of directors.
(*2) For the three months ended March 31, 2020, the entire issued capital of the entity was refunded and the number of shares is nil. However, the Group's right to the distribution of residual property is still effective and the entity is recognized as an associate.
(*3) The distribution rate of earnings is 44.90%, and the contribution rate of investments is 46.29%.
(*4) The shares were acquired pursuant to the debt-to-equity swaps. The investees are reclassified as investments in associates because their workout process was completed and the Group restored its voting rights over them.

11. Investments in associates (cont'd)

	December 31, 2019					
	Main business	Location	Date of the consolidated financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	December 31, 2019	180	9.00	₩ 7,820
NH-QCP Global Partnership PEF (*2)	Other financial business	Korea	December 31, 2019	2,994,000	24.95	15,625
IBK-NH Smallgiant PEF (*3)	Other financial business	Korea	December 31, 2019	3.5	44.90	32,578
NH-AJUIB Growth 2013 PEF	Other financial business	Korea	December 31, 2019	18,300,049	29.95	21,296
Kyunggi-DSC Superman Investment Fund No. 1	Other financial business	Korea	December 31, 2019	2.7	25.00	8,442
NH Agri-Biz Value Creative 1st PEF	Other financial business	Korea	December 31, 2019	8,164,870	48.03	7,725
NH-AJU Digital Fund	Other financial business	Korea	December 31, 2019	2.4	40.00	2,132
NH-NAU Agro Food 1st Private Equity Fund	Other financial business	Korea	December 31, 2019	7,500,000	50.00	7,140
2012sunlight, Co., Ltd. (*4)	Meat processing	Korea	-	9.8	46.57	-
Yujinmplus Co., Ltd. (*4)	Mold manufacturing	Korea	-	33	23.02	-
Seasons Shipping Co., Ltd. (*4)	Cargo transportation	Korea	-	16	20.27	-
Inkordan Trading Co., Ltd. (*4)	Clothing manufacturing	Korea	-	15	42.30	-
						₩ 102,758

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through its ability to designate members of the board of directors.
(*2) The distribution rate of earnings is 24.95%, and the contribution rate of investments is 83.17%.
(*3) The distribution rate of earnings is 44.90%, and the contribution rate of investments is 46.29%.
(*4) The shares were acquired pursuant to the debt-to-equity swaps. The investees are reclassified as investments in associates because their workout process was completed and the Group restored its voting rights over them.

Changes in investments in associates for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020						
	January 1, 2020	Acquisition	Disposal, etc.	Dividend	Gain (loss) on valuation of equity method investments	Share of other comprehensive gain (loss) of associates	March 31, 2020
Korea Credit Bureaus Co., Ltd.	₩ 7,820	₩ -	₩ -	₩ (90)	₩ 317	₩ -	₩ 8,047
NH-QCP Global Partnership PEF	15,625	-	(2,994)	(132)	(921)	-	11,578
IBK-NH Smallgiant PEF	32,578	-	-	-	215	-	32,793
NH-AJUIB Growth 2013 PEF	21,296	-	-	-	440	-	21,736
Kyunggi-DSC Superman Investment Fund No. 1	8,442	-	-	-	(1,936)	-	6,506
NH Agri-Biz Value Creative 1st PEF	7,725	-	-	-	(94)	-	7,631
NH-AJU Digital Fund	2,132	1,200	-	-	(76)	-	3,256
NH-NAU Agro Food 1st Private Equity Fund	7,140	-	-	-	(159)	-	6,981
	₩ 102,758	₩ 1,200	₩ (2,994)	₩ (222)	₩ (2,214)	₩ -	₩ 98,528

11. Investments in associates (cont'd)

	For the year end December 31, 2019						
	January 1, 2019	Acquisition	Disposal, etc.	Dividend	Gain (loss) on valuation of equity method investments	Share of other comprehensive gain (loss) of associates	December 31, 2019
Korea Credit Bureaus Co., Ltd.	₩ 7,630	₩ -	₩ -	₩ (135)	₩ 325	₩ -	₩ 7,820
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.) (*1)	3,919	-	(4,047)	-	-	128	-
NH-QCP Global Partnership PEF	19,510	-	(6,986)	-	3,101	-	15,625
IBK-NH Smallgiant PEF	25,714	5,792	-	-	1,072	-	32,578
NH-AJUIB Growth 2013 PEF	26,587	-	(4,792)	(1,383)	884	-	21,296
Kyunggi-DSC Superman Investment Fund No. 1	9,048	-	(750)	(750)	894	-	8,442
NH Agri-Biz Value Creative 1st PEF	5,786	2,160	-	-	(221)	-	7,725
NH-AJU Digital Fund	-	2,400	-	-	(268)	-	2,132
NH-NAU Agro Food 1st Private Equity Fund	-	7,500	-	-	(360)	-	7,140
	₩ 98,194	₩ 17,852	₩ (16,575)	₩ (2,268)	₩ 5,427	₩ 128	₩ 102,758

(*1) Donghang Lottery Co., Ltd. was disposed for the year ended December 31, 2019.

A summary of financial information of associates as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

	March 31, 2020					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 98,167	₩ 29,084	₩ 69,083	₩ 23,988	₩ 3,425	₩ 3,425
NH-QCP Global Partnership PEF	46,619	214	46,405	2,130	(4,060)	(4,060)
IBK-NH Smallgiant PEF	71,529	810	70,719	750	480	480
NH-AJUIB Growth 2013 PEF	72,760	187	72,573	8,635	1,467	1,467
Kyunggi-DSC Superman Investment Fund No. 1	30,418	4,395	26,023	1	(7,744)	(7,744)
NH Agri-Biz Value Creative 1st PEF	16,493	604	15,889	226	(196)	(196)
NH-AJU Digital Fund	8,265	125	8,140	2	(189)	(189)
NH-NAU Agro Food 1st Private Equity Fund	14,099	137	13,962	6	(318)	(318)

11. Investments in associates (cont'd)

	December 31, 2019					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 96,855	₩ 30,289	₩ 66,566	₩ 91,200	₩ 3,473	₩ 3,473
NH-QCP Global Partnership PEF	54,314	90	54,224	24,252	12,427	12,427
IBK-NH Smallgiant PEF	70,779	540	70,239	3,534	2,385	2,385
NH-AJUIB Growth 2013 PEF	71,287	181	71,106	9,573	2,337	2,337
Kyunggi-DSC Superman Investment Fund No. 1	38,385	4,618	33,767	4,097	3,574	3,574
NH Agri-Biz Value Creative 1st PEF	16,693	608	16,085	513	(458)	(458)
NH-AJU Digital Fund	5,454	125	5,329	10	(671)	(671)
NH-NAU Agro Food 1st Private Equity Fund	14,512	232	14,280	7	(720)	(720)

A reconciliation of the financial information presented in the carrying amount of interest in the associates as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

	March 31, 2020				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 69,083	9.00	₩ 6,217	₩ 1,830	₩ 8,047
NH-QCP Global Partnership PEF	46,405	24.95	11,578	-	11,578
IBK-NH Smallgiant PEF	70,719	44.90	31,753	1,040	32,793
NH-AJUIB Growth 2013 PEF	72,573	29.95	21,736	-	21,736
Kyunggi-DSC Superman Investment Fund No. 1	26,023	25.00	6,506	-	6,506
NH Agri-Biz Value Creative 1st PEF	15,889	48.03	7,631	-	7,631
NH-AJU Digital Fund	8,140	40.00	3,256	-	3,256
NH-NAU Agro Food 1st Private Equity Fund	13,962	50.00	6,981	-	6,981

(*1) Others represent the fair value adjustments arising from acquisition of equity interest and so on.

	December 31, 2019				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 66,566	9.00	₩ 5,990	₩ 1,830	₩ 7,820
NH-QCP Global Partnership PEF	54,224	24.95	13,529	2,096	15,625
IBK-NH Smallgiant PEF	70,239	44.90	31,537	1,041	32,578
NH-AJUIB Growth 2013 PEF	71,106	29.95	21,296	-	21,296
Kyunggi-DSC Superman Investment Fund No. 1	33,767	25.00	8,442	-	8,442
NH Agri-Biz Value Creative 1st PEF	16,085	48.03	7,725	-	7,725
NH-AJU Digital Fund	5,329	40.00	2,132	-	2,132
NH-NAU Agro Food 1st Private Equity Fund	14,280	50.00	7,140	-	7,140

(*1) Others represent the fair value adjustments arising from acquisition of equity interest and so on.

12. TANGIBLE ASSETS:

Changes in acquisition cost of tangible assets for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020						
	January 1, 2020	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	March 31, 2020
Land	₩ 1,424,426	₩ -	₩ (5,220)	₩ -	₩ (586)	₩ -	₩ 1,418,620
Buildings	959,958	663	(2,664)	(9,548)	7,500	(46)	955,863
Leasehold improvements	55,102	3,026	-	(6,037)	-	(63)	52,028
Movable properties	246,247	3,023	(4)	(32,814)	-	271	216,723
Construction in progress	13,088	4,047	-	-	(2,540)	-	14,595
Subsidy	(731)	-	-	51	-	-	(680)
Right-of-use assets	128,645	38,135	(806)	(20,852)	-	49	145,171
	₩ 2,826,735	₩ 48,894	₩ (8,694)	₩ (69,200)	₩ 4,374	₩ 211	₩ 2,802,320

(*1) Investment properties of ₩4,374 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩2,540 million was transferred to buildings.

Classification	For the year ended December 31, 2019						
	January 1, 2019	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	December 31, 2019
Land	₩ 1,431,767	₩ 50	₩ (4,077)	₩ -	₩ (3,314)	₩ -	₩ 1,424,426
Buildings	934,147	48,781	(3,429)	(35,875)	16,682	(348)	959,958
Leasehold improvements	52,522	25,346	(389)	(22,382)	-	5	55,102
Movable properties	251,525	116,900	(15)	(121,943)	34	(254)	246,247
Construction in progress	6,598	28,658	-	-	(22,153)	(15)	13,088
Subsidy	(954)	-	18	205	-	-	(731)
Right-of-use assets	127,311	92,741	(6,554)	(84,871)	-	18	128,645
	₩ 2,802,916	₩ 312,476	₩ (14,446)	₩ (264,866)	₩ (8,751)	₩ (594)	₩ 2,826,735

(*1) Investment properties of ₩8,752 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩22,120 million and ₩34 million were transferred to buildings and movable properties, respectively.

13. INVESTMENT PROPERTIES AND NON-CURRENT ASSETS CLASSIFIED AS HELD FOR SALE:

Fair values of investment properties amount to ₩784,278 million and ₩790,900 million as of March 31, 2020, and December 31, 2019, respectively. Fair values are measured based on valuation results performed by independent professionals. Rental income from investment properties for the three months ended March 31, 2020 and 2019, amounts to ₩4,310 million and ₩4,393 million, respectively. The fair value of investment properties is classified as Level 3 based on the input variables used in the valuation method. Valuation methods for investment properties and input variables, which are significant but unobservable in measurement of fair value, are as follows:

Classification	Valuation methods	Input variables which are significant but unobservable in measurement of fair value
Investment property	Calculated upon consideration of the yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject and escalation rate of the construction cost index	Yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject and escalation rate of the construction cost index

Changes in investment properties for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020					
Classification	January 1, 2020	Acquisition	Disposal	Depreciation	Transfer (*1)	March 31, 2020
Land	₩ 455,519	₩ -	₩ -	₩ -	₩ 586	₩ 456,104
Buildings	134,121	54	(8)	(1,249)	(4,960)	127,959
	₩ 589,640	₩ 54	₩ (8)	₩ (1,249)	₩ (4,374)	₩ 584,063

(*1) Certain investment properties amounting to ₩4,374 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

	For the year ended December 31, 2019						
Classification	January 1, 2019	Acquisition	Disposal	Depreciation	Transfer (*1)	Other	December 31, 2019
Land	₩ 452,226	₩ -	₩ (21)	₩ -	₩ 3,314	₩ -	₩ 455,519
Buildings	129,053	4,594	-	(4,893)	5,437	(70)	134,121
	₩ 581,279	₩ 4,594	₩ (21)	₩ (4,893)	₩ 8,751	₩ (70)	₩ 589,640

(*1) Certain investment properties amounting to ₩8,752 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

At the end of the reporting period, the book value of assets held for sale is ₩15 million, and there have been no changes for the three months ended March 31, 2020 and 2019.

14. INTANGIBLE ASSETS:

Changes in the book value of intangible assets for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020					
Classification	January 1, 2020	Acquisition	Disposal	Amortization	Others	March 31, 2020
Goodwill	₩ 4,454	₩ -	₩ -	₩ -	₩ 249	₩ 4,703
Development cost	218,155	3,043	-	(16,477)	(25)	204,696
Other intangible assets	214,939	51,596	(1,200)	(23,102)	(46)	242,187
	₩ 437,548	₩ 54,639	₩ (1,200)	₩ (39,579)	₩ 178	₩ 451,586

	For the year ended December 31, 2019						
Classification	January 1, 2019	Acquisition	Disposal	Amortization	Impairment	Others	December 31, 2019
Goodwill	₩ 4,301	₩ -	₩ -	₩ -	₩ -	₩ 153	₩ 4,454
Development cost	179,990	89,263	-	(51,115)	-	17	218,155
Other intangible assets	212,652	98,020	(1,157)	(87,014)	(7,207)	(355)	214,939
	₩ 396,943	₩ 187,283	₩ (1,157)	₩ (138,129)	₩ (7,207)	₩ (185)	₩ 437,548

15. RIGHT-OF-USE ASSETS:

Details of right-of-use assets as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020		
Classification	Acquisition cost	Accumulated depreciation	Book value
Properties	₩ 216,920	₩ (91,686)	₩ 125,234
Delivery equipment	27,615	(8,431)	19,184
Others	1,909	(1,156)	753
	₩ 246,444	₩ (101,273)	₩ 145,171

	December 31, 2019		
Classification	Acquisition cost	Accumulated depreciation	Book value
Properties	₩ 181,475	₩ (74,559)	₩ 106,916
Delivery equipment	27,497	(6,609)	20,888
Others	1,787	(947)	840
	₩ 210,759	₩ (82,115)	₩ 128,644

15. Right-of-use assets (cont'd)

Changes in the book value of right-of-use assets for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	January 1, 2020	Acquisition	Depreciation	Cancellation	Others	March 31, 2020
Properties	₩ 106,916	₩ 37,563	₩ (18,700)	₩ (594)	₩ 49	₩ 125,234
Delivery equipment	20,888	449	(1,943)	(212)	1	19,183
Others	840	123	(209)	-	-	754
	₩ 128,644	₩ 38,135	₩ (20,852)	₩ (806)	₩ 50	₩ 145,171

Classification	January 1, 2019	Acquisition	Depreciation	Cancellation	Others	December 31, 2019
Properties	₩ 108,325	₩ 80,811	₩ (76,222)	₩ (6,014)	₩ 16	₩ 106,916
Delivery equipment	17,607	11,522	(7,702)	(540)	1	20,888
Others	1,379	408	(947)	-	-	840
	₩ 127,311	₩ 92,741	₩ (84,871)	₩ (6,554)	₩ 17	₩ 128,644

Details of amount recognized in the profit or loss and other comprehensive income regarding leases for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Interest expenses for lease liabilities	₩ 560	₩ 591
Costs associated with small asset lease	228	637
Costs associated with variable lease payments that are not included in the lease liability measurement	94	194

16. OTHER ASSETS:

Details of other assets as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Prepaid expenses	₩ 78,508	₩ 87,813
Supplies	3,314	2,591
Guarantee deposits paid	4,605	4,478
Suspense payment	265	118
Guarantees	142	142
Telephone and telex rights	1,280	1,304
Others	6,106	15,197
	₩ 94,220	₩ 111,643

17. FINANCIAL LIABILITIES:

Details of financial liabilities as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	
	Book value	Fair value
Financial liabilities at FVTPL:		
FVTPL liabilities	₩ 13,309	₩ 13,309
Trading derivative liabilities	1,093,679	1,093,679
	1,106,988	1,106,988
Derivative liabilities:		
Hedging derivative liabilities	7,922	7,922
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	247,414,253	248,963,455
Borrowings (*2)	12,805,351	12,810,322
Debentures (*2)	17,280,072	17,582,862
Others (*1 and *3)	13,432,532	12,008,495
	290,932,208	291,365,134
	₩ 292,047,118	₩ 292,480,044

(*1) Others consist of domestic exchange settlement credits, trust account liabilities, guarantee deposits received, lease liabilities, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation of fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

Classification	December 31, 2019	
	Book value	Fair value
Financial liabilities at FVTPL:		
FVTPL liabilities	₩ 13,342	₩ 13,342
Trading derivative liabilities	503,116	503,116
	516,458	516,458
Derivative liabilities:		
Hedging derivative liabilities	7,538	7,538
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	236,384,433	237,890,234
Borrowings (*2)	11,171,538	11,176,928
Debentures (*2)	15,819,070	16,087,699
Others (*1 and *3)	13,928,794	12,449,169
	277,303,835	277,604,030
	₩ 277,827,831	₩ 278,128,026

(*1) Others consist of domestic exchange settlement credits, trust account liabilities, guarantee deposits received, lease liabilities, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation of fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

There are no financial liabilities designated as measured at FVTPL as of March 31, 2020, and December 31, 2019.

18. DEPOSITS DUE TO CUSTOMERS:

Details of deposits due to customers as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020	December 31, 2019
Demand deposits	Korean won	₩ 39,674,231	₩ 37,143,789
	Foreign currency	1,648,092	1,704,949
		41,322,323	38,848,738
Time deposits	Savings deposits in Korean won	196,934,332	189,443,852
	Savings deposits in foreign currency	1,916,693	1,862,295
	Installment deposits	4,719,992	4,709,112
		203,571,017	196,015,259
Certificates of deposit		2,520,913	1,520,436
		₩ 247,414,253	₩ 236,384,433

19. BORROWINGS:

Details of borrowings as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	Provider	Interest rate (%)	March 31, 2020	December 31, 2019
Borrowings in Korean won	The Bank of Korea	0.50-0.75	₩ 734,879	₩ 723,735
	Public sector	(-)1.25-5.15	5,645,490	5,500,756
	Others	0.00-3.88	1,638,910	1,683,141
			8,019,279	7,907,632
Borrowings in foreign currency	Borrowings from banks	1.15-3.79	2,862,817	2,485,009
	Borrowings from government	1.34-2.55	74,652	70,695
			2,937,469	2,555,704
Call money		0.10-2.90	1,086,936	34,900
Repurchase agreements		0.83-1.11	363,300	303,400
Bills sold		0.50-2.00	398,367	369,902
			₩ 12,805,351	₩ 11,171,538

20. DEBENTURES:

Details of debentures as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	Interest rate (%)	March 31, 2020	December 31, 2019
Debentures in Korean won:			
General agricultural financial bonds	1.48-3.77	₩ 10,270,000	₩ 9,380,000
Subordinated agricultural financial bonds	2.15-4.61	4,620,000	4,300,000
Present value discounts	-	(2,290)	(2,092)
		14,887,710	13,677,908
Debentures in foreign currency:			
General financial bonds	1.88-3.88	2,281,599	2,084,040
Offshore financial bonds	2.99	36,678	34,734
Accumulated loss on fair value hedges	-	82,063	30,900
Present value discounts	-	(7,978)	(8,512)
		2,392,362	2,141,162
		₩ 17,280,072	₩ 15,819,070

21. PROVISIONS:

Details of provisions as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020		December 31, 2019
Provision for acceptances and guarantees	₩	154,401	₩	140,315
Provision for unused credit limit		133,831		137,752
Provision for mileage		12,562		13,578
Provision for restoration		37,372		36,752
Other provisions		35,987		32,390
	₩	374,153	₩	360,787

Acceptances and guarantees (including endorsed bills) as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020		December 31, 2019
Confirmed acceptances and guarantees:				
Acceptances and guarantees in Korean won	₩	343,034	₩	373,479
Acceptances and guarantees purchased		96,535		136,237
Acceptances and guarantees for imported goods (letter of guarantees)		48,736		39,190
Other acceptances and guarantees in foreign currencies		2,310,876		2,438,520
		2,799,181		2,987,426
Unconfirmed acceptances and guarantees:				
Issuance of local letters of credit		230,568		164,652
Issuance of import letters of credit		1,494,707		1,382,579
Others		784,589		506,811
		2,509,864		2,054,042
Bills endorsed		41,520		36,600
	₩	5,350,565	₩	5,078,068

The percentage of provision for acceptances and guarantees to the outstanding balance of acceptances and guarantees as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification		Outstanding balance		Provision for acceptances and guarantees	Ratio (%)
March 31, 2020	₩	5,350,565	₩	154,401	2.89
December 31, 2019	₩	5,078,068	₩	140,315	2.76

The percentage of provision for unused credit limit to the outstanding balance of unused credit limit as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification		Outstanding balance		Provision for unused credit limit	Ratio (%)
March 31, 2020	₩	90,820,867	₩	133,831	0.15
December 31, 2019	₩	86,678,896	₩	137,752	0.16

21. Provisions (cont'd)

Changes in provision for acceptances and guarantees for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 8,737	₩ 62,721	₩ 68,857	₩ 140,315
Transfer to 12-month expected credit losses	77	(77)	-	-
Transfer to financial assets with a significant increase in credit risk	(29)	29	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision (reversal) of allowance for expected credit losses	(8,275)	9,665	3,805	5,195
Foreign currency translation	8,891	-	-	8,891
Ending balance	₩ 9,401	₩ 72,338	₩ 72,662	₩ 154,401

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 11,329	₩ 75,601	₩ 106,817	₩ 193,747
Transfer to 12-month expected credit losses	455	(455)	-	-
Transfer to financial assets with a significant increase in credit risk	(1)	1	-	-
Transfer to credit-impaired financial assets	(1)	-	1	-
Reversal of allowance for expected credit losses	(8,498)	(12,426)	(37,961)	(58,885)
Foreign currency translation	2,347	-	-	2,347
Others	3,106	-	-	3,106
Ending balance	₩ 8,737	₩ 62,721	₩ 68,857	₩ 140,315

21. Provisions (cont'd)

Changes in provision for unused credit limits for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 72,414	₩ 65,338	₩ -	₩ 137,752
Transfer to 12-month expected credit losses	14,446	(14,446)	-	-
Transfer to financial assets with a significant increase in credit risk	(2,584)	2,584	-	-
Transfer to credit-impaired financial assets	(97)	(455)	552	-
Provision (reversal) of allowance for expected credit losses	(12,594)	9,225	(552)	(3,921)
Ending balance	₩ 71,585	₩ 62,246	₩ -	₩ 133,831

	For the year ended December 31, 2019			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 72,891	₩ 65,001	₩ -	₩ 137,892
Transfer to 12-month expected credit losses	27,292	(27,292)	-	-
Transfer to financial assets with a significant increase in credit risk	(4,475)	4,475	-	-
Transfer to credit-impaired financial assets	(264)	(538)	802	-
Provision (reversal) of allowance for expected credit losses	(23,030)	23,692	(802)	(140)
Ending balance	₩ 72,414	₩ 65,338	₩ -	₩ 137,752

22. OTHER LIABILITIES:

Details of other liabilities as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification		March 31, 2020		December 31, 2019
Trust accounts payable	₩	2,266,466	₩	2,215,770
Domestic exchange settlement credits		2,423,405		3,786,815
Foreign exchange settlement credits		87,684		44,667
Accounts payable		2,584,840		1,357,677
Accrued expenses		1,921,991		1,898,821
Guarantee deposit received		289,385		241,938
Agency		2,001,225		2,045,449
Financial guarantee contract		17,910		28,057
Unearned revenue		38,035		31,783
Deferred mileage revenue		87,285		86,739
Suspense receipt		65,373		107,331
Lease liabilities		125,485		115,076
Other sundry liabilities		1,856,835		2,351,748
	₩	13,765,919	₩	14,311,871

23. DERIVATIVES AND HEDGE ACCOUNTING:

Details of derivatives as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 740,596	₩ -	₩ 852,144	₩ -
Swap	226,308	-	152,040	-
Options purchased	9,252	-	-	-
Options sold	-	-	9,252	-
	976,156	-	1,013,436	-
Interest rate:				
Forwards	31	-	-	-
Swap	75,344	78,410	78,917	7,922
Options purchased	1,058	-	-	-
Options sold	-	-	1,058	-
	76,433	78,410	79,975	7,922
Stock:				
Options purchased	1,445	-	-	-
Options sold	-	-	268	-
	1,445	-	268	-
	₩ 1,054,034	₩ 78,410	₩ 1,093,679	₩ 7,922

	December 31, 2019			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 352,167	₩ -	₩ 354,722	₩ -
Swap	84,041	-	92,123	-
Options purchased	4,662	-	-	-
Options sold	-	-	4,662	-
	440,870	-	451,507	-
Interest rate:				
Swap	58,993	34,068	50,112	7,538
Options purchased	871	-	-	-
Options sold	-	-	871	-
	59,864	34,068	50,983	7,538
Stock:				
Options purchased	927	-	-	-
Options sold	-	-	626	-
	927	-	626	-
	₩ 501,661	₩ 34,068	₩ 503,116	₩ 7,538

23. Derivatives and hedge accounting (cont'd)

The notional amounts outstanding for derivative contracts as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020 Trading	Hedging	Total
Currency:			
Forwards	₩ 48,842,250	₩ -	₩ 48,842,250
Swap	8,425,412	-	8,425,412
Options purchased	1,146,688	-	1,146,688
Options sold	1,146,688	-	1,146,688
	59,561,038	-	59,561,038
Interest rate:			
Forwards	100,000	-	100,000
Futures	51,483	-	51,483
Swap	12,231,395	2,675,538	14,906,933
Options purchased	30,000	-	30,000
Options sold	30,000	-	30,000
	12,442,878	2,675,538	15,118,416
Stock:			
Futures	335	-	335
Options purchased	55,624	-	55,624
Options sold	32,269	-	32,269
	88,228	-	88,228
	₩ 72,092,144	₩ 2,675,538	₩ 74,767,682

Classification	December 31, 2019 Trading	Hedging	Total
Currency:			
Forwards	₩ 41,071,743	₩ -	₩ 41,071,743
Swap	7,857,486	-	7,857,486
Options purchased	1,058,193	-	1,058,193
Options sold	1,058,193	-	1,058,193
	51,045,615	-	51,045,615
Interest rate:			
Forwards	200,000	-	200,000
Swap	11,043,599	2,560,359	13,603,958
Options purchased	30,000	-	30,000
Options sold	30,000	-	30,000
	11,303,599	2,560,359	13,863,958
Stock:			
Options purchased	52,416	-	52,416
Options sold	29,062	-	29,062
	81,478	-	81,478
	₩ 62,430,692	₩ 2,560,359	₩ 64,991,051

23. Derivatives and hedge accounting (cont'd)

The timing of hedging instruments' contracts outstanding as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification	March 31, 2020 Less than 1 year	1 year–5 years	More than 5 years	Total
Interest rate:				
Swap	₩ 556,283	₩ 2,082,577	₩ 36,678	₩ 2,675,538

Classification	December 31, 2019 Less than 1 year	1 year–5 years	More than 5 years	Total
Interest rate:				
Swap	₩ 518,694	₩ 2,006,931	₩ 34,734	₩ 2,560,359

Details of gain or loss on valuation of derivatives for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 894,783	₩ 999,121	₩ -	₩ -	₩ 894,783	₩ 999,121
Swap	223,457	133,156	-	-	223,457	133,156
Options purchased	9,484	480	-	-	9,484	480
Options sold	544	8,364	-	-	544	8,364
	1,128,268	1,141,121	-	-	1,128,268	1,141,121
Interest rate:						
Forwards	31	-	-	-	31	-
Swap	26,937	38,170	49,455	7,391	76,392	45,561
Options purchased	197	10	-	-	197	10
Options sold	10	197	-	-	10	197
	27,175	38,377	49,455	7,391	76,630	45,768
Stock:						
Options purchased	612	198	-	-	612	198
Options sold	360	11	-	-	360	11
	972	209	-	-	972	209
	₩ 1,156,415	₩ 1,179,707	₩ 49,455	₩ 7,391	₩ 1,205,870	₩ 1,187,098

Classification	For the three months ended March 31, 2019					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 266,615	₩ 306,094	₩ -	₩ -	₩ 266,615	₩ 306,094
Swap	78,086	35,141	-	-	78,086	35,141
Options purchased	2,131	42	-	-	2,131	42
Options sold	52	1,501	-	-	52	1,501
	346,884	342,778	-	-	346,884	342,778
Interest rate:						
Swap	12,258	15,836	21,417	3,953	33,675	19,789
Options purchased	116	28	-	-	116	28
Options sold	28	114	-	-	28	114
	12,402	15,978	21,417	3,953	33,819	19,931
Stock:						
Options purchased	-	74	-	-	-	74
Options sold	23	51	-	-	23	51
	23	125	-	-	23	125
	₩ 359,309	₩ 358,881	₩ 21,417	₩ 3,953	₩ 380,726	₩ 362,834

23. Derivatives and hedge accounting (cont'd)

At the end of the reporting period, hedged items applied with fair value hedge accounting include debt securities at FVTOCI and debentures. Changes in the fair value of derivatives due to fluctuation in interest rate are recognized in net income immediately. Interest rate swap is used as a hedging instrument in order to offset changes in fair values of hedged items due to fluctuation in interest rate.

Details of the Group's hedged items and type of hedge accounting as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020					
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Book value of hedged item	Fair value hedge accumulated adjustment	Fair value of hedging instrument
Debt securities at FVTOCI	Interest rate risk	Interest rate swap	Fair value hedge	₩ 484,129	₩ 9,104	₩ (7,662)
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	2,282,743	(82,063)	78,150

	December 31, 2019					
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Book value of hedged item	Fair value hedge accumulated adjustment	Fair value of hedging instrument
Debt securities at FVTOCI	Interest rate risk	Interest rate swap	Fair value hedge	₩ 480,435	₩ 1,034	₩ (132)
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	2,106,428	(30,900)	26,661

Details of gain (loss) on valuation of hedged items and hedging instruments for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020		
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instruments	Ineffective amount recognized in profit or loss (*1)
Debt securities at FVOCI	₩ 8,066	₩ (7,391)	₩ 675
Debentures	(51,163)	49,455	(1,708)
	₩ (43,097)	₩ 42,064	₩ (1,033)

(*1) The ineffective portion of the hedge is included in other operating income or expenses in the statement of profit or loss and other comprehensive income.

	For the three months ended March 31, 2019		
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instruments	Ineffective amount recognized in profit or loss (*1)
Debt securities at FVOCI	₩ 3,945	₩ (3,953)	₩ (8)
Debentures	(21,102)	21,417	315
	₩ (17,157)	₩ 17,464	₩ 307

(*1) The ineffective portion of the hedge is included in other operating income or expenses in the statement of profit or loss and other comprehensive income.

24. NET DEFINED BENEFIT LIABILITIES:

The Group operates a defined benefit pension plan ("DB plan") in accordance with Employee Retirement Benefits Laws, which is also classified as the DB plan under K-IFRSs. Under the DB plan, severance pay is made on a lump-sum basis or an employee is entitled to pension when he/she retires, based on the employee's service period and salary at retirement. The Group has purchased retirement benefits insurance, annuity, etc., and made deposits with Woori Bank and others. The deposits for retirement insurance and assets for the DB plan operation are presented as a deduction from defined benefit obligations under an account of plan assets.

If a retiree is up for quasi-retirement age limit of special retirement, the Group pays quasi-retirement age limit payments separately from general severance payments.

The Group is exposed to investment risk and interest risk.

Actuarial valuation for plan assets and defined benefit obligations related to the general severance payments and quasi-age severance payments is performed by an independent actuary as of March 31, 2020, and December 31, 2019, respectively. Current and past service costs related to present value of defined benefit obligations are measured using the projected unit credit method.

Key assumptions for actuarial valuation as of March 31, 2020, and December 31, 2019, are as follows (%):

Classification	March 31, 2020	December 31, 2019
Discount rate	2.02	2.02
Salary increase rate:		
Base-up	2.33	2.33
Empirical promotion rate	Empirical promotion rate by age	

Details of net defined benefit liabilities as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Present value of defined benefit obligations	₩ 2,000,275	₩ 1,948,033
Fair value of plan assets	(1,377,731)	(1,477,671)
Net defined benefit liabilities from the DB plan	₩ 622,544	₩ 470,362

Changes in net defined benefit liabilities for the three months ended March 31, 2020, and for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2020	₩ 1,948,033	₩ (1,477,671)	₩ 470,362
Current service cost	45,894	-	45,894
Interest expense (income)	9,566	(7,191)	2,375
Remeasurement elements:			
Return on plan assets (on the net basis of net interest cost)	-	521	521
Employer contributions	-	(49,828)	(49,828)
Payment	(3,536)	156,015	152,479
Transfer to related party	334	-	334
Others	(16)	423	407
Present value as of March 31, 2020	₩ 2,000,275	₩ (1,377,731)	₩ 622,544

24. Net defined benefit liabilities (cont'd)

Classification	For the year ended December 31, 2019		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2019	₩ 1,767,157	₩ (1,391,992)	₩ 375,165
Current service cost	184,758	-	184,758
Interest expense (income)	40,060	(31,319)	8,741
Remeasurement elements:			
Return on plan assets (on the net basis of net interest cost)	-	7,293	7,293
Actuarial gain and loss incurred due to changes in demographic assumptions	2,760	-	2,760
Actuarial gain and loss incurred due to changes in financial assumptions	61,668	-	61,668
Actuarial gain and loss incurred due to experience adjustments	27,630	-	27,630
Employer contributions	-	(223,000)	(223,000)
Payment	(128,492)	159,321	30,829
Transfer from related party	11,242	-	11,242
Transfer to related party	(18,698)	-	(18,698)
Other	(52)	2,026	1,974
Present value as of December 31, 2019	₩ 1,948,033	₩ (1,477,671)	₩ 470,362

Portfolio of plan assets as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Fixed deposits	₩ 1,377,731	₩ 1,477,671

Investment strategies and policies of plan assets aim to balance risk reduction and pursuit of profit. The objective to minimize the variability of assets in relation to debt is basically achieved through diversified investment of assets and partial asset-liability matching strategies. In order to reduce (adjust risk) variability of assets in relation to debt and achieve the intended levels of profit, investment is distributed over a vast range of many different types of assets. The distribution of assets is such that a regular income is secured, similar to bonds, and partially matches the characteristics of a long maturity period in pension obligations.

25. EQUITY:

Capital stock as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions and shares in units):

Classification	March 31, 2020		December 31, 2019	
Shares authorized (in shares)		1,000,000,000		1,000,000,000
Par value (in Korean won)	₩	5,000	₩	5,000
Shares issued (in shares)		432,438,179		432,438,179
Common stock	₩	2,162,191	₩	2,162,191

Other paid-in capital as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification	March 31, 2020		December 31, 2019	
Capital surplus:				
Capital in excess of par value	₩	9,465,845	₩	9,465,845
Other capital surpluses		35,948		35,948
		9,501,793		9,501,793
Capital adjustments (*1)		(3,019)		(3,019)
Hybrid equity securities (*2)		349,648		349,648
	₩	9,848,422	₩	9,848,422

(*1) Capital adjustment arose from the acquisition of IT department of NACF.
(*2) The Group classifies the hybrid equity securities as capital, as the maturity of the hybrid equity securities is more than 30 years and the Group holds the right to extend the bond maturity continuously under the same conditions and evade delivering cash or another financial asset to pay the contractual obligation.

There were no changes in capital stock and paid-in capital in excess of par value for the three months ended March 31, 2020 and 2019.

Details of other components of equity, which are recognized as accumulated other comprehensive income, as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020		December 31, 2019	
Remeasurements of the net defined benefit liabilities	₩	(692,239)	₩	(691,861)
Gain on valuation of debt securities at FVTOCI		121,122		95,884
Loss on equity securities at FVTOCI		(158,052)		(124,651)
Exchange differences on translating foreign operations		10,850		1,736
Loss on valuation of investments in associates		(167)		(167)
	₩	(718,486)	₩	(719,059)

25. Equity (cont'd)

Changes in other components of equity for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020			
	January 1, 2020	Changes for the period	Deferred income tax	March 31, 2020
Remeasurements of the net defined benefit liabilities	₩ (691,861)	₩ (521)	₩ 143	₩ (692,239)
Gain (loss) on valuation and foreign currency translation of financial assets at FVTOCI	(28,767)	(11,259)	3,096	(36,930)
Exchange differences on translating foreign operations	1,736	9,114	-	10,850
Loss on valuation of investments in associates	(167)	-	-	(167)
	₩ (719,059)	₩ (2,666)	₩ 3,239	₩ (718,486)

Classification	For the three months ended March 31, 2019			
	January 1, 2019	Changes for the period	Deferred income tax	March 31, 2019
Remeasurements of the net defined benefit liabilities	₩ (619,831)	₩ (2,019)	₩ 555	₩ (621,295)
Gain (loss) on valuation and foreign currency translation of financial assets at FVTOCI	(24,725)	50,388	(13,857)	11,806
Exchange differences on translating foreign operations	(3,807)	2,670	-	(1,137)
Gain (loss) on valuation of investments in associates	(260)	94	-	(166)
	₩ (648,623)	₩ 51,133	₩ (13,302)	₩ (610,792)

Details of retained earnings as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Regulatory reserve for bad debts	₩ 1,963,635	₩ 1,742,296
Legal reserve	430,024	278,922
Voluntary reserve for recapitalization	1,000,000	1,000,000
Voluntary reserve	14	14
Unappropriated retained earnings	1,695,137	2,552,550
	₩ 5,088,810	₩ 5,573,782

Changes in retained earnings for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Beginning balance	₩ 5,573,782	₩ 4,573,397
Net income	316,156	366,226
Changes in consolidated taxation payment	3,142	15,175
Dividends on hybrid equity securities	(4,270)	(4,270)
Cash dividends	(800,000)	(600,000)
Ending balance	₩ 5,088,810	₩ 4,350,528

25. Equity (cont'd)

Reserves for bad debts as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Beginning balance	₩ 1,963,635	₩ 1,742,296
Planned reserve for bad debts	69,572	221,339
Expected balance	₩ 2,033,207	₩ 1,963,635

Provision of reserve for bad debts and adjusted net income after reflecting reserve for bad debts for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Net income	₩ 316,156	₩ 366,226
Provision of reserve for bad debts	(69,572)	(55,163)
Adjusted net income after reserve for bad debts	246,584	311,063
Adjusted basic and diluted EPS after reserve for bad debt (in Korean won) (*1)	560	709

(*1) Hybrid equity securities' dividends of ₩4,270 million for the three months ended March 31, 2020 and 2019, are deducted from adjusted net income after reserve for bad debts when calculating adjusted basic EPS. Adjusted diluted EPS is identical to basic EPS as the Group does not retain dilutive common shares.

26. CAPITAL MANAGEMENT:

26.1 Current state of regulatory capital

The Group reports to the Financial Supervisory Service on a monthly or quarterly basis about Bank for International Settlement ("BIS") capital adequacy ratio, common equity ratio based on market risk, basic common equity ratio and their computation evidences. In addition, the Group reviews the soundness of its capital using the capital adequacy ratio representing capital over the risk-weighted asset (BIS capital adequacy ratio).

The Group's regulatory capitals consist of the following two categories:

- Tier 1 capital (basic capital): Basic capital is composed of common equity tier 1 and additional tier 1 capital. Common equity tier 1 is composed of capital stock; additional paid-in capital; retained earnings (excluding reserve for bad loans); non-controlling interests of a bank, which is the consolidated subsidiary; and accumulated other comprehensive income. Additional tier 1 capital is composed of capital securities (including hybrid bonds) and non-controlling interests of consolidated subsidiaries.
- Tier 2 capital (supplementary capital): Supplementary capital is composed of allowance for losses on credit for assets classified as normal or precautionary according to the forward-looking criteria, capital securities (such as subordinated bonds) and non-controlling interests of consolidated subsidiaries.

The basic and supplementary capitals listed above have many restrictions to be recognized as capital, and regulatory capital is computed reflecting items deducted from capital.

Besides the BIS ratios reported to the Financial Supervisory Service, the Group sets up internal policies on capital management for the criteria of capital adequacy and soundness of finance. In addition, the Group monitors the soundness of finance by allocating the risk appetite of the available capital to the limit of internal capital (the amount of capital that ensures that the Group will be able to continue its operation while bearing many risks and the necessary capital amount that covers the unexpected losses ("ULs") under specified probability).

Internal capital, subject to the management, is to consider interest rate risk and credit-concentrated risk in addition to the credit, market and operating risks managed by regulatory capital. The Group computes on appropriateness of internal capital under regular inspection.

26.2 Allocation of shareholders' equity

Allocation of shareholders' equity is determined by approval of the risk management committee within the available capital after the establishment of risk capital management plan reflecting business plan, strategies and analysis of risk situations. Allocated capitals by risk upon the risk capital management plan are divided by tolerance limits of department and business sector and managed by the risk management council.

The risk management committee and council of the Group review the internal capital policies on a regular basis and have a duty to maintain the stable capital adequacy and the soundness of finance by preliminary authorization process on excess of the limitation of internal capital forecasted due to new business or extension of business or exceptionally by an ex-post facto approval.

27. INCOME TAX EXPENSES:

The components of income tax expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification		For the three months ended March 31, 2020		For the three months ended March 31, 2019
Income tax currently payable	₩	109,879	₩	29,163
Adjustments recognized for the current period in relation to the current tax of prior periods		(21,491)		4,016
Change in deferred income tax due to temporary differences (*)		36,913		118,407
Total income tax effect		125,301		151,586
Income taxes directly applied to shareholders' equity		3,239		(13,301)
Income tax expenses	₩	128,540	₩	138,285
(*1) Net deferred tax assets due to temporary differences as of March 31, 2020 and 2019	₩	476,915	₩	460,714
Net deferred tax assets due to temporary differences as of January 1, 2020 and 2019		513,828		579,121
Change in deferred income tax due to temporary differences	₩	(36,913)	₩	(118,407)

A reconciliation of income before income tax and income tax expenses for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions and tax rate in):

Classification		For the three months ended March 31, 2020		For the three months ended March 31, 2019
Net income before income tax	₩	444,696	₩	504,511
Income tax expenses before adjustments (A) (*1)		119,701		136,150
Adjustments (B):				
Non-taxable income		(1,788)		(2,292)
Non-deductible expenses		2,333		596
Unrecognized deferred tax assets		552		283
Others		7,743		3,549
		8,840		2,135
Income tax expenses (A+B)	₩	128,540	₩	138,285
Effective tax rate		28.91%		27.41%

(*) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion and 27.5% on taxable income exceeding ₩300 billion for the three months ended March 31, 2020 and 2019.

28. INCOME AND EXPENSES BY CATEGORIES OF FINANCIAL INSTRUMENTS:

Interest income and expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Interest income:		
Deposits		
Due from banks	₩ 1,554	₩ 9,343
Due from other financial institutions	6,009	5,909
	7,563	15,252
Financial assets at FVTPL	27,489	32,549
Financial assets at FVTOCI	109,818	114,782
Financial assets at amortized cost	71,340	51,809
Loans and other receivables at amortized cost	1,880,691	1,966,816
Others	909	2,968
	2,097,810	2,184,176
Interest expenses:		
Deposits due to customers	650,804	755,770
Debentures	100,103	109,133
Borrowings	29,500	33,866
Others	16,135	18,165
	796,542	916,934
Interest income, net	₩ 1,301,268	₩ 1,267,242

28. Income and expenses by categories of financial instruments (cont'd)

Net gain or loss on financial assets at FVTPL for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Financial assets at FVTPL:		
Gain (loss) on valuation:		
Gain	₩ 36,287	₩ 55,916
Loss	(46,307)	(23,766)
	(10,020)	32,150
Gain (loss) on disposal:		
Gain	18,088	23,959
Loss	(50,783)	(1,718)
	(32,695)	22,241
Gain (loss) on redemption:		
Gain	2,352	3,742
Loss	(7,746)	(1,894)
	(5,394)	1,848
Dividend income	1,512	1,510
Other income	23,534	22,085
	(23,063)	79,834
Trading derivatives:		
Gain (loss) on valuation:		
Gain	1,156,415	359,309
Loss	(1,179,707)	(358,881)
	(23,292)	428
Gain (loss) on disposal:		
Gain	525,078	109,542
Loss	(558,920)	(143,837)
	(33,842)	(34,295)
	(57,134)	(33,867)
	₩ (80,197)	₩ 45,967

28. Income and expenses by categories of financial instruments (cont'd)

Net gain or loss on financial assets at FVTOCI for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Gain (loss) on disposal:		
Gain	₩ 41,956	₩ 7,122
Loss	-	-
	41,956	7,122
Gain on redemption:	-	261
Dividend income (*1)	2,201	1,508
	₩ 44,157	₩ 8,891

(*1) Dividend income arising from financial assets at FVTOCI which are disposed of for the three months ended March 31, 2020, is ₩1,882 million, and there is no dividend income arising from those for the three months ended March 31, 2019.

The amount reclassified from accumulated other comprehensive income to gain (loss) at the time of removal by financial assets at FVTOCI for the year ended December 31, 2020 is ₩20,530 million.

Net gain or loss on financial assets at amortized cost for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Gain (loss) on disposal: (*1)		
Gain	₩ 1,926	₩ 371
Loss	(611)	(83)
	₩ 1,315	₩ 288

(*1) For the purpose of credit risk management, certain loans at amortized cost were disposed of.

Provision of allowance for expected credit losses-related gain (loss) on financial assets at FVTOCI and financial assets at amortized cost for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Financial assets FVTOCI	₩ (928)	₩ (290)
Securities at amortized cost	(217)	28
Due from banks at amortized cost	3,849	8,609
Loans and receivables at amortized cost	(52,743)	(123,389)
	₩ (50,039)	₩ (115,042)

29. COMMISSION INCOME AND EXPENSES:

Commission income and expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Commission income:		
Deposits	₩ 392	₩ 404
Loans and credits	22,518	21,171
Foreign exchange	8,445	7,827
Credit card	72,877	80,035
Asset management	24,646	15,070
Agency business	40,820	39,050
Guarantee service	8,451	7,775
Trust service	44,365	38,776
Others	65,202	62,499
	287,716	272,607
Commission expenses:		
Loans and credits	8,694	6,052
Foreign exchange	1,976	2,401
Credit card	72,001	71,577
Agency business	5,188	5,559
Others	11,602	11,354
	99,461	96,943
Commission income, net	₩ 188,255	₩ 175,664

30. OTHER OPERATING INCOME AND EXPENSES:

Other operating income and expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Other operating income:		
Gain on valuation of hedging instruments	₩ 49,456	₩ 21,417
Gain on valuation of hedged items	8,070	3,946
Gain from changes in foreign exchange rate	664,700	274,091
Transfer from other provisions	515	5,486
Others	36,106	30,981
	758,847	335,921
Other operating expenses:		
Loss on valuation of hedging instruments	7,685	4,071
Loss on valuation of hedged items	51,163	21,102
Loss from changes in foreign exchange rate	593,392	222,770
Fund contribution	138,788	126,114
Transfer to other provisions	9,577	14,191
Others	60,883	49,159
	861,488	437,407
	₩ (102,641)	₩ (101,486)

31. EMPLOYEE BENEFITS:

Details of employee benefits for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Benefits:		
Employee benefits	₩ 372,326	₩ 365,233
Fringe benefits	116,113	113,160
	488,439	478,393
Retirement expenses	48,307	44,947
Termination benefits	31	276
	₩ 536,777	₩ 523,616

32. OTHER GENERAL AND ADMINISTRATIVE EXPENSES:

Other general and administrative expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Tax and dues	₩ 27,997	₩ 26,559
Telecommunications and transportation	6,453	5,507
Supplies	7,000	4,996
Advertising	14,602	13,795
Utilities	6,564	6,873
Rental	8,635	8,027
Service contract	31,753	28,669
Others	27,227	25,991
	₩ 130,231	₩ 120,417

33. OTHER INCOME AND EXPENSES:

Other income and expenses for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Other income:		
Gain on disposal of assets	₩ 2,481	₩ 78
Rental income	4,310	4,393
Miscellaneous income	3,753	2,750
Gain on disposal of investments in affiliates	-	4
Others	520	1,782
	11,064	9,007
Other expenses:		
Loss on disposal of assets	1,537	119
Expenses related to collecting receivables	1,600	1,270
Depreciation	1,249	1,190
Agricultural support project expenses (*1)	76,020	74,936
Expenses on restoration	56	456
Loss on disposal of investments in affiliates	-	185
Miscellaneous expenses	8,660	8,820
Others	89	727
	89,211	87,703
	₩ (78,147)	₩ (78,696)

(*1) Agricultural support project expenses, which is annually paid to the NACF in accordance with the *Agricultural Cooperative Act*, are computed by multiplying the imposed ratio by the average of operating revenue for the recent three years.

34. EARNINGS PER SHARE (“EPS”):

Net income and weighted-average number of common shares used for computation are as follows (Korean won in millions except per-share amounts):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Net income	₩ 316,156	₩ 366,226
Dividends on hybrid equity securities	(4,270)	(4,270)
Income attributable to common shares	311,886	361,956
Weighted-average number of common shares (in shares)	432,438,179	432,438,179
Basic and diluted EPS (in Korean won)	₩ 721	₩ 837

Diluted EPS equals to basic EPS as there is no dilution effect for the three months ended March 31, 2020 and 2019.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS:

The Group is exposed to various financial risks, such as credit, market and liquidity, associated with financial instruments.

For risk management, the Group has the risk management committee; the top legislative organization; the risk management council; the operational legislative organization and other executive departments, such as risk management task force department, individual risk management department and independent monitoring department.

The risk management committee consists of maximum of 10 directors and deliberates and determines major issues, such as establishment of risk management policies and strategies and determination of risk tolerance limit. Some ordinary and continual issues can be deliberated and determined by the risk management council.

The Group retains various risk management policies and systems, such as establishment of risk tolerance limit, constant monitoring to maintain optimum level of risk and performance evaluation and capital distribution considering the risk. The conditions and results of risk management, including risk management and analysis, are periodically reported to the risk management committee and council.

The risk management task force team establishes and manages the risk tolerance limit by business sector and accounting, and those risk measurement and analysis are periodically reported to the risk management council. Also, the Group regularly calculates and monitors the integrated risk to merge exposed risks into a single indicator and manage it comprehensively to be within the reasonable level of risk.

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in non-payment of the principal and interest to the payables and potential financial loss to the Group. Credit risk arises from deposits, securities, loans, off-balance accounts, etc. The purpose of credit risk management is to improve asset soundness and to secure the stable revenue by minimizing the probability of credit risk through the establishment and management of credit risk tolerance limit and the proper management of portfolios.

For credit risk management of loan process, the Group separated operation and underwriting process in the business process and monitored such various segments of its credit risk portfolio. The Group also established and operated a total exposure to credit risk limit management system to reduce concentration of credit risk by specific type of loans or borrowers to acceptable level and to diversify risk in the loan portfolio and manage risks in the individual exposure limit system. Furthermore, a credit risk is managed through an early alert system in the event of non-performance by counterparties and underwriting risk is managed by loan-underwriting specialists to maintain the tight underwriting standards.

The Group separately measures expected losses ("Els") and ULs. ELs are expected credit risks based on past experience and computed by multiplying exposure at default by probability of default and loss given default. ULs mean maximum credit losses under certain probability deducting ELs.

35.1.1 The Group's maximum level of exposures to credit risk

The Group's maximum level of exposures to credit risk as of March 31, 2020, and December 31, 2019, is summarized as follows (Korean won in millions):

Classification	March 31, 2020 (*2)	December 31, 2019 (*2)
Deposits	₩ 2,341,807	₩ 3,920,581
Loans (*1)	242,382,489	238,138,574
Receivables	4,458,565	3,104,821
Debt securities	48,436,627	39,454,487
Derivative assets	1,132,444	535,729
Loans and credit commitments	88,632,592	84,400,398
Guarantees and endorsed bills	5,120,779	4,805,306
Financial guarantee contracts	2,418,061	2,551,260
	₩ 394,923,364	₩ 376,911,156

(*1) The loans above include the loans measured at FVTPL.
(*2) Puttable financial instruments are excluded.

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk

Measurement of credit risk exposures of loans and receivables at amortized cost based on internal risk level as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Credit risk levels (internal level)	March 31, 2020					
	Household (*1)			Corporate (*1)		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 139,489,052	₩ 9,941,231	₩ -	₩ 60,385,378	₩ 3,736,392	₩ -
Rating 7	299,768	619,357	-	-	894,317	-
Rating 8	3,835	144,431	-	-	93,173	-
Rating 9–10	-	-	474,314	-	-	928,990
	₩ 139,792,655	₩ 10,705,019	₩ 474,314	₩ 60,385,378	₩ 4,723,882	₩ 928,990

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.

Credit risk levels (internal level)	March 31, 2020			
	Others (*1 and *2)			
	12-month	Significant increases	Impairment	Allowance
Rating 1–6	₩ 25,637,065	₩ 466,318	₩ -	₩ (485,726)
Rating 7	-	96,715	-	(143,428)
Rating 8	-	35,148	-	(66,183)
Rating 9–10	-	-	349	(524,063)
	₩ 25,637,065	₩ 598,181	₩ 349	₩ (1,219,400)

(*1) The above amounts of loans and receivables are not including the deferred LOF/LOC and present value discounts.
(*2) Receivables are not included in others.

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk (cont'd)

Credit risk levels (internal level)	December 31, 2019					
	Household (*1)			Corporate (*1)		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 135,755,114	₩ 10,752,803	₩ -	₩ 57,911,324	₩ 4,459,775	₩ -
Rating 7	341,354	639,391	-	-	850,197	-
Rating 8	4,804	145,017	-	-	84,175	-
Rating 9–10	-	-	455,203	-	-	924,207
	₩ 136,101,272	₩ 11,537,211	₩ 455,203	₩ 57,911,324	₩ 5,394,147	₩ 924,207

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.

Credit risk levels (internal level)	December 31, 2019			
	Others (*1 and *2)			
	12-month	Significant increases	Impairment	Allowance
Rating 1–6	₩ 26,126,442	₩ 475,411	₩ -	₩ (508,234)
Rating 7	-	75,650	-	(142,111)
Rating 8	-	25,525	-	(59,658)
Rating 9–10	-	-	345	(521,648)
	₩ 26,126,442	₩ 576,586	₩ 345	₩ (1,231,651)

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.
(*2) Receivables are not included in others.

The levels of exposures to credit risk of loan commitment and financial guarantee contract based on internal risk level at March 31, 2020, and December 31, 2019, are summarized as follows (Korean won in millions):

Credit risk levels (internal level)	March 31, 2020					
	Loan commitment			Financial guarantee contract		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 83,808,750	₩ 4,332,088	₩ -	₩ 1,678,451	₩ 739,610	₩ -
Rating 7	23,880	181,214	-	-	-	-
Rating 8	273	19,477	-	-	-	-
Rating 9–10	-	-	266,910	-	-	-
	₩ 83,832,903	₩ 4,532,779	₩ 266,910	₩ 1,678,451	₩ 739,610	₩ -

Credit risk levels (internal level)	December 31, 2019					
	Loan commitment			Financial guarantee contract		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 80,443,679	₩ 3,436,191	₩ -	₩ 1,833,348	₩ 717,122	₩ -
Rating 7	31,735	202,621	-	-	790	-
Rating 8	232	19,814	-	-	-	-
Rating 9–10	-	-	266,126	-	-	-
	₩ 80,475,646	₩ 3,658,626	₩ 266,126	₩ 1,833,348	₩ 717,912	₩ -

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk (cont'd)

The Group's maximum levels of exposure to credit risk of debt securities as of March 31, 2020, and December 31, 2019, are summarized as follows (Korean won in millions):

	March 31, 2020				
Credit risk levels (external level)	Financial assets at FVTPL	Financial assets at FVTOCI (*1)		Securities at amortized cost (*1)	
		12-month (*1)	Allowance (*2)	12-month (*1)	Allowance
AAA	₩ 3,634,228	₩ 23,838,507	₩ (1,110)	₩ 15,375,325	₩ (1,296)
AA+–AA-	2,502,535	2,730,963	(1,061)	-	-
A–BBB	21,966	324,347	(293)	-	-
BBB- or below	10,052	-	-	-	-
	₩ 6,168,781	₩ 26,893,817	₩ (2,464)	₩ 15,375,325	₩ (1,296)

(*1) There are no debt securities whose loss allowances are measured at an amount equal to the lifetime expected credit losses.
(*2) The effect from the loss allowance for financial assets at FVTOCI is recognized in accumulated other comprehensive income. So, the book values of those are unaffected by the effect.

	December 31, 2019				
Credit risk levels (external level)	Financial assets at FVTPL	Financial assets at FVTOCI (*1)		Securities at amortized cost (*1)	
		12-month (*1)	Allowance (*2)	12-month (*1)	Allowance
AAA	₩ 2,944,958	₩ 19,134,123	₩ (697)	₩ 12,442,626	₩ (1,095)
AA+–AA-	2,493,771	2,240,263	(836)	-	-
A–BBB	25,915	143,909	(85)	-	-
BBB- or below	30,016	-	-	-	-
	₩ 5,494,660	₩ 21,518,295	₩ (1,618)	₩ 12,442,626	₩ (1,095)

(*1) There are no debt securities whose loss allowances are measured at an amount equal to the lifetime expected credit losses.
(*2) The effect from the loss allowance for financial assets at FVTOCI is recognized in accumulated other comprehensive income. So, the book values of those are unaffected by the effect.

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk (cont'd)

Exposures by industry related to COVID-19 as of March 31, 2020, are as follows (Korean won in millions):

	March 31, 2020				
	Financial assets at FVTOCI		Securities at amortized cost		
Industry	Total book value	12-month	Total book value	12-month	Allowance
Directly affected:					
Retail	₩ 91,097	₩ 29	₩ 7,439,637	₩ 10,032	₩ 5,942
Restaurant	-	-	4,986,760	5,307	3,654
Hotel	80,612	26	1,435,493	1,956	1,736
Others	-	-	2,934,541	3,506	1,278
Related to Chinese manufacturing:					
Automotive components	-	-	1,260,837	5,465	1,453
Display	90,526	-	834,314	306	66
Others	85,639	91	1,263,132	1,796	634
Related to business recession:					
Chemical	181,947	63	3,233,303	6,523	2,116
Steel	109,722	47	1,684,662	6,668	1,387
Others	277,849	142	903,359	606	59
Related to real estate:					
Construction	12,291	3	4,970,765	16,170	6,176
Real estate leasing	20,220	11	15,790,210	13,691	3,430
	₩ 949,903	₩ 412	₩ 46,737,013	₩ 72,026	₩ 27,931

Determining the change in the risk of a default, the Group considers the significant deterioration of credit rate. Provided that credit deterioration related to COVID-19 affects the probability of default of the above exposures, the loss allowance for expected credit loss is expected to increase by ₩64,676 million as a result of sensitivity analysis.

35. Risk disclosure of financial instruments (cont'd)

35.1 Credit risk (cont'd)

35.1.3 Percentage of allowance for expected credit losses of financial instruments

As of March 31, 2020, and December 31, 2019, the percentage of allowance for expected credit losses is as follows (Korean won in millions):

Classification	March 31, 2020			
	Financial assets at FVTOCI	Financial assets at amortized cost		
		Due from banks	Securities	Loans (*1)
Total amount	₩ 26,893,817	₩ 2,342,840	₩ 15,375,325	₩ 243,245,833
Allowance for expected credit losses	2,464	1,033	1,296	1,219,400
Ratio (%)	0.01	0.04	0.01	0.50

(*1) Receivables and deferred LOF/LOC are not included in the above total amounts of loans and receivables.

Classification	December 31, 2019			
	Financial assets at FVTOCI	Financial assets at amortized cost		
		Due from banks	Securities	Loans (*1)
Total amount	₩ 21,518,296	₩ 3,924,462	₩ 12,442,626	₩ 239,026,737
Allowance for expected credit losses	1,618	3,881	1,095	1,231,651
Ratio (%)	0.01	0.10	0.01	0.52

(*1) Receivables and deferred LOF/LOC are not included in the above total amounts of loans and receivables.

35.1.4 Financial impact of collateral on loans

The extent of reducing credit risk due to collateral and other credit enhancements for credit-impaired financial assets as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Loans	₩ 457,005	₩ 430,200
Commitment to loans and credit	2,266	2,279
	₩ 459,271	₩ 432,479

35.1.5 Assets acquired by exercising security rights

Details of assets acquired by exercising security rights as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Property and equipment (*1)	₩ 15	₩ 15

(*1) Property and equipment are presented as non-current assets classified as held for sale in the interim condensed consolidated statements of financial position.

35. Risk disclosure of financial instruments (cont'd)

35.2 Market risk

35.2.1 Trading position

a) The trading position in accordance with 'Regulation of Trading Policy' is subject to the trading market management. The basic requirements of the trading position are as follows:

- The target position is not restricted to the sale. It is evaluated daily at fair value and should be able to be a hedge against important risks in the market.
- The trading position should be controlled by the instruction of the trading policy and managed by a separate trading department.
- The target position is operated in accordance with a documented trading strategy and the limit of trading should be controlled.
- Without prior approval, a professional dealer or an operation division for the target position should be authorized to handle transactions within the predetermined limit.
- The target position for the risk management should be periodically reported to the management.

b) Details of risk management by risk type

① Interest rate risk

Interest rate risk from trading positions arises mainly from the trades of Korean won-denominated debt securities. As the financial instruments in the trading accounts are marked to market daily, the Group manages the interest rate risk related to its trading accounts using market-value-based tools used to measure risk, such as Value at Risk ("VaR"), and sensitivity analysis.

② Equity price risk

Equity price risk arises from the Group's equity trading portfolio in Korean won since the Group has no trading position of equity securities denominated in foreign currencies. The equity trading portfolio in Korean won consists of exchange-traded stocks and nearest-month or second nearest-month futures contracts under the strict restrictions considering diversification as well as stop-loss limits and position limits.

③ Foreign exchange rate risk

Foreign exchange rate risk arises when the Group has assets and liabilities that are denominated in currencies other than Korean won as well as off-statement-of-financial position items, such as foreign exchange forwards and currency swaps. Assets and liabilities denominated in U.S. dollars, Japanese yen and Euro are typically accounted for the majority of the Group's foreign currency assets and liabilities.

c) Measurement of market risk occurring at the trading position

① VaR measurement

Daily VaR is a statistically estimated maximum amount of loss that could occur in a holding (or trading) period for a given confidence interval due to changes in market variables, such as interest rate, stock price, exchange rate and commodity price. The Group monitors risk arising from trading activities in business sectors and departments, and measures market risk of all the trading assets and liabilities in both Korean won and foreign currencies using VaR.

The Group calculates VaR using a historical simulation model when it measures market risk arising from the trading position. Under the historical simulation model, VaR is calculated as sublevel (1 - confidence level) of a normal distribution of risk resulting from revaluation of loan portfolio applying a scenario of actual profit ratio movements for the past 250 business days to currently holding loan portfolio. The Group discloses 10-day VaR measured at 99% confidence level.

35. Risk disclosure of financial instruments (cont'd)

35.2 Market risk (cont'd)

35.2.1 Trading position (cont'd)

VaR is a commonly used market risk measurement technique with the following limitations. 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 can be different depending on the changes in assumptions made at the time of the calculation. In addition, the time period used for the model, generally one day or 10 days, is assumed 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.

② Back testing

The Group conducts back testing of results against daily actual gain (loss) and expected gain (loss) on a daily basis. By performing back testing, the Group checks the validity of the model and any losses that might exceed a predetermined 99% confidence level.

③ Stress testing

The Group conducts stress testing to assess its market risk exposure to abnormal market fluctuations, such as changes in interest rate, equity price, exchange rate and implied volatility of derivatives, subject to the changes in the value of the portfolio. The Group uses not only hypothetical scenarios as a main scenario, but also historical scenarios as a supplementary analysis. Stress testing is conducted on a monthly basis.

The Group calculates VaR based on its condensed consolidated financial statements, and the following table shows average VaR, maximum VaR and minimum VaR at the 99% confidence level of interest rate risk, stock price risk, foreign exchange rate risk, commodity price risk and other risk for trading positions with a 10-day holding period as of March 31, 2020, and December 31, 2019 (Korean won in millions):

	March 31, 2020			
Classification	Maximum	Minimum	Average	March 31, 2020
Interest rate risk	₩ 31,060	₩ 27,894	₩ 28,968	₩ 30,872
Stock price risk	17,127	4,418	11,417	6,501
Foreign currency risk	2,102	1,086	1,546	1,395
Other risk	7	-	1	-
Total risk (*1)	33,779	22,858	25,379	33,779

(*1) Total VaR is computed taking into consideration the correlations of the risk factors.

	December 31, 2019			
Classification	Maximum	Minimum	Average	December 31, 2019
Interest rate risk	₩ 29,869	₩ 15,538	₩ 19,895	₩ 28,285
Stock price risk	18,208	6,579	14,044	10,209
Foreign currency risk	2,053	147	700	1,712
Other risk	8	-	3	1
Total risk (*1)	25,433	15,310	20,229	24,255

(*1) Total VaR is computed taking into consideration the correlations of the risk factors

35. Risk disclosure of financial instruments (cont'd)

35.2 Market risk (cont'd)

35.2.2 Non-trading positions

Non-trading positions refer to all positions, excluding trading positions. The Group's principal market risk from non-trading activities is interest rate risk. Interest rate risk refers to the risk of exposure to loss from reduction of net interest income or net asset value as a result of interest rate changes due to mismatched maturities between interest-earning assets and interest-bearing liabilities or mismatched interest rate change periods.

The subject for interest rate risk measurement includes non-trading positions, such as interest-bearing assets, interest-bearing liabilities, transaction of derivatives held for hedging and others among off-balance transactions. The Group has measured and managed the interest rate risk, which affects its earnings and the economic value of its net assets. From the Group's earnings perspective, the Group has measured and managed interest rate risk through interest rate accumulated gap ratio, net interest income simulations, △NII and others to manage changes in net interest income as a result of interest rate changes. With respect to the economic value of the Group's net assets, the Group has measured and managed interest rate risk through duration gap, △EVE and others to manage changes in the value of net assets of future cash flows as a result of interest rate changes.

The objective of interest risk management is to manage changes in interest income at a sustainable level due to change in interest rates and to manage stable net asset value through effective management of interest-earning assets and interest-bearing liabilities. The limits for interest rate accumulated gap ratio, △NII, △EVE and others are approved annually by the risk management committee for interest rate risk management.

△EVE for non-trading portfolios as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
△EVE	₩ 1,281,345	₩ 1,001,634

35.3 Liquidity risk

35.3.1 General

Liquidity risk is the risk of loss that the Group is unable to meet its payment obligations arising from financial liabilities as they fall due or raise funds with high interest rates and unfavorable disposal of securities to solve the shortage of funds or facing inability to pay due to unexpected cash flows.

The cash flows disclosed in maturity analysis do not correspond to the amounts of discounted principals and interest payments at the contracts in the interim condensed consolidated statements of financial position.

35.3.2 Liquidity risk management

The Group classifies and discloses contractual maturity of all financial liabilities in relation to liquidity risk into six categories, such as less than one month, one month to three months, three to six months, six months to one year, one year to five years and more than five years. The Group manages liquidity risk by analyzing cash flows of the liabilities in the groups of homogeneous accounts under the appropriate criteria (remaining contractual maturity, contract period, etc.).

35. Risk disclosure of financial instruments (cont'd)

35.3 Liquidity risk (cont'd)

35.3.3 The term structure of financial liabilities

The term structures of liabilities as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification (*1 and *2)	March 31, 2020						
	Less than 1 month	1 month– 3 months	3 months– 6 months	6 months– 1 year	1 year– 5 years	More than 5 years	Total
Deposits due to customers	₩ 122,273,010	₩ 32,595,877	₩ 36,313,371	₩ 48,639,632	₩ 7,980,196	₩ 2,036,854	₩ 249,838,940
Financial liabilities at FVTPL	2,559	-	-	10,750	-	-	13,309
Trading derivative liabilities	1,093,678	-	-	-	-	-	1,093,678
Hedging derivative liabilities	(75)	21	400	1,791	5,786	437	8,360
Borrowings	4,181,908	982,630	682,568	1,161,613	4,509,562	1,470,577	12,988,858
Debentures	24,694	2,138,006	1,290,285	2,155,574	10,856,686	1,847,230	18,312,475
Other financial liabilities	13,230,217	6,064	6,976	54,419	10,053	-	13,307,729
Lease liabilities	6,313	11,440	15,764	28,068	65,700	1,506	128,791
	₩ 140,812,304	₩ 35,734,038	₩ 38,309,364	₩ 52,051,847	₩ 23,427,983	₩ 5,356,604	₩ 295,692,140

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

Classification (*1 and *2)	December 31, 2019						
	Less than 1 month	1 month– 3 months	3 months– 6 months	6 months– 1 year	1 year– 5 years	More than 5 years	Total
Deposits due to customers	₩ 117,896,341	₩ 22,098,588	₩ 35,329,411	₩ 54,363,542	₩ 7,259,067	₩ 2,036,926	₩ 238,983,875
Financial liabilities at FVTPL	2,554	-	-	10,788	-	-	13,342
Trading derivative liabilities	503,116	-	-	-	-	-	503,116
Hedging derivative liabilities	631	1,929	39	2,014	3,003	45	7,661
Borrowings	3,114,493	631,534	674,317	1,215,380	4,212,772	1,524,768	11,373,264
Debentures	346,317	71,534	2,156,232	2,139,238	10,170,847	1,999,738	16,883,906
Other financial liabilities	13,745,258	3,280	7,338	47,543	11,033	-	13,814,452
Lease liabilities	7,031	10,245	12,727	21,185	66,351	848	118,387
	₩ 135,615,741	₩ 22,817,110	₩ 38,180,064	₩ 57,799,690	₩ 21,723,073	₩ 5,562,325	₩ 281,698,003

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

35. Risk disclosure of financial instruments (cont'd)

35.3 Liquidity risk (cont'd)

35.3.4 Maturity analysis of off-balance accounts

Guarantees and loan commitments, including guarantees for debenture issuance and guarantees for loans, which are financial guarantees provided by the Group, have expiration dates; however, under the term of the guarantees and loan commitments, the timely payment shall be made upon demand by the counterparty. Details of off-balance accounts as of March 31, 2020, and December 31, 2019, are as follows (Korea won in millions):

Classification	March 31, 2020		December 31, 2019	
Loan commitment (*1)	₩	91,986,157	₩	87,865,217
Guarantees and endorsed bills (*1)		5,350,565		5,078,068
	₩	97,336,722	₩	92,943,285

(*1) The amount of financial guarantee contracts is included. The total financial guarantee contracts amount to ₩2,418,061 million and ₩2,551,260 million as of March 31, 2020, and December 31, 2019, respectively.

35. Risk disclosure of financial instruments (cont'd)

35.4 Offsetting financial assets and liabilities

Details of financial assets that are set off and subject to an enforceable master netting arrangement or similar agreement as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020					
				Non-offsetting amount		
Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the interim condensed consolidated statement of financial position	Financial instruments	Cash collateral received	Net amounts
Derivative assets	₩ 1,132,444	₩ -	₩ 1,132,444	₩ 522,899	₩ 88,734	₩ 520,811
Loaned securities	1,810,085	-	1,810,085	1,810,085	-	-
Loans-bonds purchased under resale agreements	12,945,100	-	12,945,100	12,945,100	-	-
Receivables-receivable spot exchange	927,514	-	927,514	927,449	-	65
Receivables-receivable spot exchange in foreign currency	1,184,344	-	1,184,344	920,862	-	263,482
Receivables-domestic exchange settlement debits	9,767,631	9,236,120	531,511	-	-	531,511
Receivables-intercompany receivables	1,015	-	1,015	-	-	1,015
	₩ 27,768,133	₩ 9,236,120	₩ 18,532,013	₩ 17,126,395	₩ 88,734	₩ 1,316,884

	December 31, 2019					
				Non-offsetting amount		
Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the interim condensed consolidated statement of financial position	Financial instruments	Cash collateral received	Net amounts
Derivative assets	₩ 535,729	₩ -	₩ 535,729	₩ 261,774	₩ 25,290	₩ 248,665
Loaned securities	5,978	-	5,978	5,978	-	-
Loans-bonds purchased under resale agreements	13,075,600	-	13,075,600	13,075,600	-	-
Receivables-receivable spot exchange	284,226	-	284,226	284,189	-	37
Receivables-receivable spot exchange in foreign currency	708,293	-	708,293	520,807	-	187,486
Receivables-domestic exchange settlement debits	8,946,454	8,741,854	204,600	-	-	204,600
Receivables-intercompany receivables	277,566	70	277,496	-	-	277,496
	₩ 23,833,846	₩ 8,741,924	₩ 15,091,922	₩ 14,148,348	₩ 25,290	₩ 918,284

35. Risk disclosure of financial instruments (cont'd)

35.4 Offsetting financial assets and liabilities (cont'd)

Details of financial liabilities that are set off and subject to an enforceable master netting arrangement or similar agreement as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020					
				Non-offsetting amount		
Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the interim condensed consolidated statement of financial position	Financial instruments	Cash collateral provided	Net amounts
Derivative liabilities	₩ 1,101,601	₩ -	₩ 1,101,601	₩ 522,899	₩ 50,469	₩ 528,233
Borrowings-bonds sold under repurchase agreements	363,300	-	363,300	363,300	-	-
Other financial liabilities-payable spot exchange	920,889	-	920,889	920,862	-	27
Other financial liabilities-payable spot exchange in foreign currency	1,190,409	-	1,190,409	927,449	-	262,960
Other financial liabilities-domestic exchange settlement credits	11,659,524	9,236,120	2,423,404	-	-	2,423,404
Other financial liabilities-intercompany payables	65,894	-	65,894	-	-	65,894
	₩ 15,301,617	₩ 9,236,120	₩ 6,065,497	₩ 2,734,510	₩ 50,469	₩ 3,280,518

	December 31, 2019					
				Non-offsetting amount		
Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the interim condensed consolidated statement of financial position	Financial instruments	Cash collateral provided	Net amounts
Derivative liabilities	₩ 510,654	₩ -	₩ 510,654	₩ 261,774	₩ 20,597	₩ 228,283
Borrowings-bonds sold under repurchase agreements	303,400	-	303,400	303,400	-	-
Other financial liabilities-payable spot exchange	520,906	-	520,906	520,807	-	99
Other financial liabilities-payable spot exchange in foreign currency	471,594	-	471,594	284,189	-	187,405
Other financial liabilities-domestic exchange settlement credits	12,528,669	8,741,854	3,786,815	-	-	3,786,815
Other financial liabilities-intercompany payables	4,530	70	4,460	-	-	4,460
	₩ 14,339,753	₩ 8,741,924	₩ 5,597,829	₩ 1,370,170	₩ 20,597	₩ 4,207,062

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS:

Fair value hierarchy of financial instruments as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

All financial instruments at fair value are categorized into one of the following three fair value hierarchy levels:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
Level 3: Inputs for the asset or liability that are not based on the observable market data (unobservable inputs)

	March 31, 2020			
Classification	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ 1,759,643	₩ 6,836,660	₩ 1,883,465	₩ 10,479,768
Derivative assets	-	1,130,399	2,045	1,132,444
Financial assets at FVTOCI	12,781,614	14,229,523	213,300	27,224,437
	₩ 14,541,257	₩ 22,196,582	₩ 2,098,810	₩ 38,836,649
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 13,309	₩ -	₩ 13,309
Derivative liabilities	-	1,101,044	557	1,101,601
	₩ -	₩ 1,114,353	₩ 557	₩ 1,114,910

	December 31, 2019			
Classification	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ 1,065,788	₩ 6,630,083	₩ 1,828,072	₩ 9,523,943
Derivative assets	-	534,368	1,361	535,729
Financial assets at FVTOCI	11,361,564	10,350,295	219,011	21,930,870
	₩ 12,427,352	₩ 17,514,746	₩ 2,048,444	₩ 31,990,542
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 13,342	₩ -	₩ 13,342
Derivative liabilities	-	510,065	589	510,654
	₩ -	₩ 523,407	₩ 589	₩ 523,996

Financial assets and liabilities at FVTPL, financial assets at FVTOCI and derivative assets and liabilities are recognized at fair value. 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 at the measurement date.

Fair value of financial instruments traded in an active market is determined using the published price quotations based on market prices. However, if the market for a financial instrument is not active, fair value is determined using a valuation method.

The fair value of debt securities is calculated by the average of the appraised values of KIS Pricing, Korea Asset Pricing, NICE P&I and FN Pricing.

36. Fair value hierarchy of financial instruments (cont'd)

The following table gives information about how the fair values of these financial assets and financial liabilities included in Level 2 and Level 3 are determined (in particular, the valuation method, significant unobservable inputs and relationship of unobservable inputs to fair value).

Classification	Valuation techniques	Input variables, which are significant, but unobservable in measurement of fair value	Range
Financial instruments that are measured at fair value:			
Financial assets at FVTPL	Discounted cash flow, Comparable companies valuation method, FCFF model, Dividend discount model, Net asset value method, Binomial model, etc.	Expected growth rate	-
		Discount rate	2.96%–16.43%
		Volatility of the underlying assets	23.90%–32.74%
Derivatives	Discounted cash flow, Intrinsic forward rate, Option-pricing model, Monte Carlo simulation	Risk-free rate of return	-
		Forward rate	-
		Volatility of the underlying assets	3.59%–152.92%
		Discount curve	(-)5.37%–20.62%
Financial assets at FVTOCI	Discounted cash flow, Comparable companies valuation method, FCFF model, Dividend discount model, Net asset value method, etc.	Expected growth rate	-
		Discount rate	9.32%–15.47%
Financial instruments that are not measured at fair value (but fair value disclosures are required):			
Debt securities at amortized cost	Discounted cash flow	Market yield	-
Loans at amortized cost	Discounted cash flow	Market yield, credit spread, liquidity risk premium and other spread	-
Deposits and borrowings	Discounted cash flow	Market yield and other spread	-
Debentures	Discounted cash flow	Risk-free rate of return and Credit spread	-

Financial assets and financial liabilities that are classified as Level 3 are measured at fair value based on the valuation performed by independent professionals or the estimated amount using the valuation model of the Group. Unobservable input variables are calculated from an internal system, and suitability of the unobservable input variables is reviewed at all times. The valuation council of fair value reviews the valuation model of the Group and approves the suitability of the valuation model.

The following table shows the sensitivity analysis of the fair value of Level 3 financial instruments.

The sensitivity analysis of the financial instruments has been performed by classifying them as favorable and unfavorable changes based on how changes in unobservable assumptions have effects on the fluctuations of financial instruments' value. When the fair value of a financial instruments is affected by more than one input variable, the results from assuming the most favorable and the most unfavorable changes are shown in the table below. The sensitivity analysis was performed for two types of Level 3 financial instruments: (a) interest rate derivatives, equity derivatives, equity securities and loans whose fair value changes are recognized as current income and (b) equity securities whose fair value changes are recognized as other comprehensive income.

36. Fair value hierarchy of financial instruments (cont'd)

Sensitivity analysis by type of financial instruments as a result of changes in input parameters as of March 31, 2020, and December 31, 2019, is as follows (Korean won in millions):

	March 31, 2020				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Financial assets at FVTPL (*1)	₩ 1,883,465	₩ 6,881	₩ (4,399)	₩ -	₩ -
Derivative assets (*2)	2,045	2,327	(200)	-	-
Financial assets at FVTOCI (*1)	213,300	-	-	10,897	(5,665)
	₩ 2,098,810	₩ 9,208	₩ (4,599)	₩ 10,897	₩ (5,665)
Financial liabilities:					
Derivative liabilities (*2)	₩ 557	₩ 118	₩ (2,459)	₩ -	₩ -

(*1) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0%–1%) and the discount rate or the correlation between liquidation value (-1%–1%) and discount rate.
(*2) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20% and interest by 2%.

	December 31, 2019				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Financial assets at FVTPL (*1)	₩ 1,828,072	₩ 6,797	₩ (4,286)	₩ -	₩ -
Derivative assets (*2)	1,361	2,464	(336)	-	-
Financial assets at FVTOCI (*1)	219,011	-	-	13,594	(6,432)
	₩ 2,048,444	₩ 9,261	₩ (4,622)	₩ 13,594	₩ (6,432)
Financial liabilities:					
Derivative liabilities (*2)	₩ 589	₩ (21)	₩ (2,115)	₩ -	₩ -

(*1) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0%–1%) and the discount rate or the correlation between liquidation value (-1%–1%) and discount rate.
(*2) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20% and interest by 2%.

36. Fair value hierarchy of financial instruments (cont'd)

Changes in Level 3 financial instruments for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020						
	Beginning	Gain	Other comprehensive income	Purchase/ issue	Disposal/ settlement	Transfer from or to Level 3	Ending
Financial instruments:							
Financial assets at FVTPL	₩ 1,828,072	₩ 3,422	₩ -	₩ 88,909	₩ (36,938)	₩ -	₩ 1,883,465
Net derivative assets	772	716	-	-	-	-	1,488
Financial assets at FVTOCI	219,011	-	(5,711)	-	-	-	213,300
	₩ 2,047,855	₩ 4,138	₩ (5,711)	₩ 88,909	₩ (36,938)	₩ -	₩ 2,098,253

	For the three months ended March 31, 2019						
	Beginning	Gain	Other comprehensive income	Purchase/ issue	Disposal/ settlement	Transfer from or to Level 3	Ending
Financial instruments:							
Financial assets at FVTPL	₩ 1,559,718	₩ 16,085	₩ -	₩ 183,023	₩ (34,273)	₩ -	₩ 1,724,553
Net derivative assets	522	(42)	-	-	-	-	480
Financial assets at FVTOCI	213,525	-	(678)	-	-	-	212,846
	₩ 1,773,765	₩ 16,043	₩ (678)	₩ 183,023	₩ (34,273)	₩ -	₩ 1,937,879

36. Fair value hierarchy of financial instruments (cont'd)

Gain or loss recognized from changes in Level 3 financial instruments for the three months ended March 31, 2020 and 2019, is as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	
	Income or loss during the reporting period	Income or loss related to financial instruments held at the end of the reporting period
Gain on financial assets at FVTPL	₩ 4,136	₩ 4,260

Classification	For the three months ended March 31, 2019	
	Income or loss during the reporting period	Income or loss related to financial instruments held at the end of the reporting period
Gain on financial assets at FVTPL	₩ 16,043	₩ 16,502

The Group recognizes transfers between the fair value hierarchy levels as of the event or change in circumstances that caused the transfer. There are no changes in valuation techniques, which are used as measurement methods of fair value of financial instruments, which are classified as Level 2 and Level 3. There are no significant changes to the business environment or economic environment, which affect the fair value of financial instruments owned by the Group for the three months ended March 31, 2020 and 2019.

Fair value and carrying amount of financial assets and liabilities that are measured at amortized cost as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020				
	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 2,212,605	₩ 2,341,807	₩ -	₩ 4,554,412	₩ 4,554,412
Securities at amortized cost	3,219,657	12,340,589	-	15,560,246	15,374,029
Loans at amortized cost	17,992	-	250,565,606	250,583,598	246,821,307
Other financial assets	-	-	630	630	630
	₩ 5,450,254	₩ 14,682,396	₩ 250,566,236	₩ 270,698,886	₩ 266,750,378
Financial liabilities:					
Deposits	₩ 1,971	₩ -	₩ 248,961,484	₩ 248,963,455	₩ 247,414,253
Borrowings	-	-	12,810,322	12,810,322	12,805,351
Debentures	-	17,582,862	-	17,582,862	17,280,072
Other financial liabilities (*1)	115	-	12,008,380	12,008,495	13,432,532
	₩ 2,086	₩ 17,582,862	₩ 273,780,186	₩ 291,365,134	₩ 290,932,208

(*1) Interest payables included in the computation of fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

36. Fair value hierarchy of financial instruments (cont'd)

	December 31, 2019				
Classification	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 2,025,460	₩ 3,920,582	₩ -	₩ 5,946,042	₩ 5,946,042
Securities at amortized cost	1,705,620	10,866,201	-	12,571,821	12,441,531
Loans at amortized cost	13,818	-	244,690,433	244,704,251	241,224,080
Other financial assets	-	-	222	222	222
	₩ 3,744,898	₩ 14,786,783	₩ 244,690,654	₩ 263,222,335	₩ 259,611,875
Financial liabilities:					
Deposits	₩ 1,528	₩ -	₩ 237,888,706	₩ 237,890,234	₩ 236,384,433
Borrowings	-	-	11,176,928	11,176,928	11,171,538
Debentures	-	16,087,699	-	16,087,699	15,819,070
Other financial liabilities (*1)	58	-	12,449,111	12,449,169	13,928,794
	₩ 1,586	₩ 16,087,699	₩ 261,514,745	₩ 277,604,030	₩ 277,303,835

(*1) Interest payables included in the computation of fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

Fair value of financial instruments traded in an active market is determined by using the published price quotations based on market prices; however, if the market for a financial instrument is not active, fair value is determined by using a valuation method.

37. RELATED-PARTY TRANSACTIONS:

Details of related parties of the Group as of March 31, 2020, are as follows:

Classification	Company
Ultimate parent company	NACF
Parent company	NH Financial Group Inc.
Associates	Korea Credit Bureau Co., Ltd.; NH-AJUIB Growth 2013 PEF; NH-QCP Global Partnership PEF; IBK-NH Smallgiant PEF; Kyunggi-DSC Superman Investment Fund No. 1; NH Agri-Biz Value Creative 1st PEF; NHAJU Digital Fund; NH-NAU Agro Food 1st Private Equity Fund; 2012sunlight Co., Ltd.; Yujinmplus Co., Ltd.; Seasons Shipping Co., Ltd.; and Inkordan Trading Co., Ltd.
Other related parties	NH Life Insurance Co., Ltd.; NH Property and Casualty Insurance Co., Ltd.; NH Investment & Securities Co., Ltd.; NH NongHyup Capital Co., Ltd.; NH Savings Bank Co., Ltd.; NH REITs Management Co., Ltd.; NH Venture Investment Co., Ltd.; NH-Amundi Overseas Senior Loan Private Fund 2; NH-Amundi Global TPG Asia VII Private Master Fund(USD)[F0F]; NH-Amundi US Infra Private Fund 1; NH-Amundi MBKP Special Situations I Private Fund 1; MMT; Woori Global Real Estate Private Balanced Fund; KB Neulpureun(Evergreen) Private Fund No. 97 and 3 others; NH Futures Co., Ltd.; NH Investment & Securities (H.K.) Ltd.; NH Absolute Global Opportunity Fund; NH Absolute Return Investment Strategies Fund; NH Securities Vietnam Co., Ltd.; NH Securities America Inc.; NH Absolute Return Partners Pte., Ltd.; PT. NH Korindo Securities Indonesia; Beijing NH Investment Advisory Co., Ltd.; NH Absolute Return PEF No. 1; N.H. Bio First New Technology Association; KoFC Woori Growth Champ 2010 No. 3; NH New Growth Private Equity Fund; GnM Holdings Co., Ltd.; Granmonster Co., Ltd.; Makeulike Co., Ltd.; Gran Place Co., Ltd.; Doubletree Interactive Co., Ltd.; Amarketing Co., Ltd; NH Healthcare1 Fund; NH Hedge Co., Ltd.; Principal Guaranteed Trust of NH Investment & Securities; IBS 11th SPC Inc.; Woori Credit 6th Co., Ltd.; New Harmony 2nd Co., Ltd.; Precious 6th Co., Ltd.; Spes 9th Co., Ltd.; Biangko 2nd Co., Ltd.; Biangko 3rd Co., Ltd.; Biangko 7th Co., Ltd.; Biangko 8th Co., Ltd.; New start JH Co., Ltd.; New Real Two Namdaemun Co., Ltd.; Warmachine 8th Co., Ltd.; Warmachine 9th Co., Ltd.; Warmachine 12th Co., Ltd.; Warmachine 11th Co., Ltd.; Warmachine 15th Co., Ltd.; Tlindependence; Cube 4th Co., Ltd.; Cube 5th Co., Ltd.; Gochon Logis 2nd Co., Ltd.; Merigogo 4th Co., Ltd.; New Harmony sinnae 1st Co., Ltd; New Harmony sinnae 2nd Co., Ltd; Park One Alpha 7th Co. Ltd.; Park One Beta 1st Co. Ltd.; JSK 1st Co., Ltd.; Gwanggyo SK 2nd Co., Ltd.; Gwanggyo SK 1st Co., Ltd.; N-First Realty 3rd Co., Ltd.; Parkcity First co.,Ltd.; VictoryJije1st Co., Ltd.; NH Southgate Co., Ltd.; RG HVL overseas resources development Fund No. 1; Pavilion professional private equity real estate investment trust No. 20; Pavilion professional private equity real estate investment trust No. 27; PTR IPO Multi Private Investment Trust; Core IPO Series Multi private fund 2; LION Gold Bridge Loan Hedge Fund No. 1; NH-Amundi Asset Management Co., Ltd.; Genesis No. 1 Private Equity Fund; Blue Ocean Corporate"s Financial Stabilization PEF No. 1; NH-LB Growth Champ 2011-4 PEF; INIAS NH Private Equity Joint Venture; KDBC-EUM Corporate's Financial Stabilization PEF No. 4; Truben Global Healthcare Private Equity Joint Venture; Yeouido munhwa broadcasting PFV; NH Special Purpose Acquisition 12 Co., Ltd.; NH Special Purpose Acquisition 13 Co., Ltd.; NH Special Purpose Acquisition 14 Co., Ltd.; NH Special Purpose Acquisition 15 Co., Ltd.; NH Special Purpose Acquisition 16 Co., Ltd.; Stassets DA value Investment Association No. 2; Stassets DA value Investment Association No. 3; Midas PEF No. 1; Global Opportunity Private Equity Joint Venture; Glenwood Co-investment PEF No. 1; Bric-Obit New Technology Investment No. 1; Bric-Obit New Technology Investment No. 8; Ascendo New Generation Healthcare Investment; NH-Aju Kosdaq Scaleup Fund; Sprott Global Renewable Private Equity Fund I; NH-Paxtone Private Equity Fund; NH-OPUS Corporate Financial Stability Private Equity Fund; NH-OPUS Corporate Financial Stability Private Equity Fund II; Medical Investment Management Inc.; Sandonghansangchieop Co., Ltd.; Seoulseongbochieop Co., Ltd.; Daguang Real Estate Developing Co., Ltd.; Edupalace Inc.; Edupalace Co., Ltd.; Square-DAvalue Fund NO 1; Mastern No. 51 Yeouido PFV Co.,Ltd; Smilegate Vietnam Kairos Private Equity Fund #1; Lodestone Second Private Equity Fund; NH-DELTA Fintech Fund; NH-Soo Investment innovative growth M&A fund; EIP Investment Infrastructure No.1 PEF; NH Co-Investment Private Equity Fund; CO-OP Group(Tianjin) International Leasing Co., Ltd.; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No. 2; Attila Infra PEF No.1; Korea Growth Opportunity Private Equity Fund I; Stonebridge Rising Star Venture Fund No.1; IFFCO-Kisan Finance Ltd; NH 2 REIT Co., Ltd.; NH Agribusiness Group Inc.; NH Networks Co., Ltd.; NH Information System Co., Ltd.; Agricultural Cooperative Asset Management Co., Ltd.; NH Partners Co., Ltd.; NH Kimhae I&D Co.; NongHyup Foundation; NongHyup Hanaro Mart Inc.; Agricultural Corporation NongHyup Food Grain Inc.; Korea Agriculture Cooperative Marketing Inc.; Agricultural Cooperative Pusan Gyeongnam Marketing Inc.; Agricultural Cooperative Chungbuk Marketing Co., Ltd.; Daejeon Agricultural Products Marketing Co., Ltd.; NongHyup Logistics Service Inc.; NongHyup Chemical Co., Ltd.; NH NongHyup Trading Co., Ltd.; NongHyup-Agro Inc.; NongHyup Red Ginseng Co., Ltd.; Namhae Chemical Corporation; NongHyup Moguchon Inc.; NongHyup Feed Inc.; Nongwoo BIO Co., Ltd.; NH Heuk Sarang Co., Ltd.; NongHyup Food Inc.; Kongyoung Homeshopping Co., Ltd.; Agricultural Corporation Orion NongHyup Inc.; NH-Hay Inc.; NonghHup TMR Co., Ltd.; PT NongHyup feed Indonesia; Nisso-namhae Agro Co., Ltd.; Korea NongHyup International; NongHyup America Inc.; NH Sanghai Trade Co., Ltd.; Sanglim Agricultural Co., Ltd.; Beijing Shinong Seed Co., Ltd.; Nongwoo Seed America Inc.; PT Koreana Seed Indonesia; Nongwoo Seed INDIA PVT. Ltd.; Beijing Shinong International Trading Limited.; Nongwoo Seed Myanmar Co., Ltd.; Tolya Tohum Tarim Sanayi Ticaret Anonim Sirketi; Daewoo Logistics Corp.; HND Logistics Co., Ltd.; and Gwangyang International Container Terminal
Others (*1)	NH 3 REIT Co., Ltd. and NH Prime REIT Co., Ltd

(*1) The companies in conglomerate group, except for the parent company, subsidiaries, jointly controlled entities, associates and other related parties, are included in the others category.

37. Related-party transactions (cont'd)

Details of related-party transactions of the Group as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

	March 31, 2020							
Company	Receivables	Derivative assets	Allowances	Other assets (*)	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Ultimate parent company:								
NACF	₩ 1,970	₩ 205,400	₩ 1	₩ 11,996	₩ 824,107	₩ 63,439	₩ -	₩ 11,362
Parent company:								
NH Financial Group Inc.	82	-	5	-	115	-	-	-
Associates:								
Korea Credit Bureau Co., Ltd.	-	-	-	-	109	-	-	-
Kyunggi-DSC Superman Investment Fund No. 1	-	-	-	-	5,008	-	-	4
NH Agri-Biz Value Creative 1st PEF	59	-	-	-	-	-	-	-
NH-AJU Digital Fund	-	-	-	-	1,224	-	-	-
NH-NAU Agro Food 1st Private Equity Fund	114	-	-	-	-	-	-	-
2012 Sunlight, Co., Ltd.	882	-	-	-	-	-	-	-
Yujinmplus Co., Ltd.	1,076	-	-	-	-	-	-	-
Seasons Shipping Co., Ltd.	1,140	-	-	-	-	-	-	-
Inkordan Trading Co., Ltd.	1,710	-	-	-	-	-	-	-
Other related parties:								
NH Life Insurance Co., Ltd.	1,219	192,529	-	3,687	30,457	3,249	-	7,869
NH Property and Casualty Insurance Co., Ltd.	716	19,055	-	-	14,879	-	-	3
NH Investment & Securities Co., Ltd.	6,067	4,510	1	186	360,246	23,056	69,999	6,242
NH Nonghyup Capital Co., Ltd.	2,654	-	1	-	349,402	-	-	4
NH Savings Bank Co., Ltd.	109	-	7	-	-	-	-	-
NH REITs Management Co., Ltd.	16	-	-	-	232	-	-	-
NH Venture Investment Co., Ltd.	14	-	1	-	8,732	-	-	18
NH Futures Co., Ltd.	73	-	-	-	16,780	-	-	33
NH- Amundi Asset Management Co., Ltd.	118	-	10	-	86,065	-	-	695
Yeouido munhwa broadcasting PFV	37,062	-	-	-	322	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	1,713	-	-	1
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	1,845	-	-	11
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	3,719	-	-	2
NH Special Purpose Acquisition 15 Co., Ltd.	-	-	-	-	2,749	-	-	13
Stassets DA value Investment Association No. 2	-	-	-	-	21	-	-	-
Stassets DA value Investment Association No. 3	-	-	-	-	21	-	-	-
Ascendo New Generation Healthcare Investment	-	-	-	-	210	-	-	-
NH-AJU KOSDAQ SCALEUP FUND	-	-	-	-	21,495	-	-	1
Square-DAvalue Fund No 1	-	-	-	-	219	-	-	1
MK Ventures-K Clavis Growth capital Venture Fund 1	-	-	-	-	240	-	-	-
Smilegate Vietnam Kairos Private Equity Fund #1	-	-	-	-	13	-	-	-
NH-DELTA Fintech Fund	-	-	-	-	310	-	-	-
NH-Soo Investment innovative growth M&A fund	-	-	-	-	20,395	-	-	2

37. Related-party transactions (cont'd)

	March 31, 2020							
Company	Receivables	Derivative assets	Allowances	Other assets (*)	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Other related parties:								
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No. 1	₩ -	₩ -	₩ -	₩ -	₩ 3,304	₩ -	₩ -	₩ 3
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No. 2	-	-	-	-	5,304	-	-	6
Korea Growth Opportunity Private Equity Fund I	-	-	-	-	1,418	-	-	-
NH Agribusiness Group Inc.	577,284	-	164	1,311	104,552	-	-	1,342
NH Networks Co., Ltd.	10,458	-	30	19,156	1,995	-	-	20,516
NH Information System Co., Ltd.	2,728	-	1	-	24,719	-	-	2,195
Agricultural Cooperative Asset Management Co., Ltd.	155,953	-	51	-	606	-	-	391
NH Partners Co., Ltd.	108	-	-	-	755	-	-	1,670
NH KIMHAE I&D CO.	-	-	-	-	442	-	-	-
Nonghyup Foundation	11	-	-	-	8,388	-	-	93
Nonghyup Hanaro Mart Inc.	104,425	-	34	146	1,315	-	-	7,312
Agricultural Corporation Nonghyup Food Grain Inc.	33,428	-	157	-	826	-	-	-
Korea Agriculture Cooperative Marketing Inc.	175	-	-	-	9,284	-	-	2,868
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	22	-	-	-	3,101	-	-	2,719
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	27	-	-	-	429	-	-	640
Daejeon Agricultural Products Marketing Co., Ltd.	33	-	-	-	444	-	-	-
Nonghyup Logistics Service Inc.	15,282	-	1	889	2,183	-	-	2,852
Nonghyup Chemical Co., Ltd.	133,397	-	65	-	384	118	-	-
NH Nonghyup Trading Co., Ltd.	25,397	327	139	-	1,885	94	-	-
Nonghyup-Agro Inc.	18	-	-	-	302	-	-	-
Nonghyup Red Ginseng Co., Ltd.	19,734	-	156	-	3,641	-	-	-
Namhae Chemical Corporation	95,953	42	91	-	24,046	434	-	32
Nonghyup Moguchon Inc.	67,304	-	271	-	1,747	-	-	-
Nonghyup Feed Inc.	297,038	489	485	-	988	8,484	-	-
Nongwoo BIO Co., Ltd.	14,505	23	5	-	1,412	-	-	-
NH Heuk Sarang Co., Ltd.	25	-	-	-	4	-	-	-
NongHyup Food Inc.	10	-	1	-	73	-	-	-
Kongyoung Homeshopping Co., Ltd.	31	-	-	-	278	-	-	-
Agricultural Corporation Orion Nonghyup Inc.	6,143	-	1	-	1,170	-	-	-
Nisso-namhae Agro Co., Ltd.	9	-	-	-	16,437	-	-	-
Sanglim Agricultural Co., Ltd.	4,388	-	6	-	590	-	-	-
Other:								
NH 3 REIT Co., Ltd.	30,010	-	1	-	-	-	-	-
NH Prime REIT Co., Ltd	-	-	-	-	2,544	-	-	1

(*) Other assets and other liabilities include right-of-use assets and lease liabilities

37. Related-party transactions (cont'd)

	December 31, 2019							
Company	Receivables	Derivative assets	Allowances	Other assets (*)	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Ultimate parent company:								
NACF	₩ 83,637	₩ 13,330	₩ 25	₩ 2,495	₩ 2,495,930	₩ 124,622	₩ -	₩ 2,507
Parent company:								
NH Financial Group Inc.	306	-	20	-	150	-	-	-
Associates:								
Korea Credit Bureau Co., Ltd.	-	-	-	-	5	-	-	-
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	-	5,264	-	-	5
NH Agri-Biz Value Creative 1st PEF	60	-	-	-	-	-	-	-
NH-AJU Digital Fund	-	-	-	-	811	-	-	-
NH-NAU Agro Food 1st Private Equity Fund	116	-	-	-	-	-	-	-
2012 Sunlight, Co., Ltd.	895	-	-	-	-	-	-	-
Yujinmplus Co., Ltd.	1,076	-	-	-	-	-	-	-
Seasons Shipping Co., Ltd.	1,140	-	-	-	-	-	-	-
Inkordan Trading Co., Ltd.	1,710	-	-	-	-	-	-	-
Other related parties:								
NH Life Insurance Co., Ltd.	2,034	47,414	1	4,168	26,836	63,016	-	14,967
NH Property and Casualty Insurance Co., Ltd.	1,224	2,540	1	-	13,983	7,200	-	-
NH Investment & Securities Co., Ltd.	5,517	3,411	1	223	560,876	11,311	69,999	15,966
NH Nonghyup Capital Co., Ltd.	6,007	-	3	-	12,146	-	-	-
NH Savings Bank Co., Ltd.	142	-	9	-	-	-	-	-
NH REITs Management Co., Ltd.	16	-	-	-	32	-	-	-
NH Venture Investment Co., Ltd.	9	-	1	-	9,224	-	-	-
NH Futures Co., Ltd.	110	-	-	229	68,876	-	-	69
NH- Amundi Asset Management Co., Ltd.	215	-	19	-	104,280	-	-	508
Yeouido munhwa broadcasting PFV	36,889	-	-	-	-	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	1,706	-	-	22
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	1,857	-	-	4
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	3,682	-	-	45
NH Special Purpose Acquisition 15 Co., Ltd.	-	-	-	-	2,765	-	-	6
Stassets DA value Investment Association No.2	-	-	-	-	22	-	-	-
Stassets DA value Investment Association No. 3	-	-	-	-	22	-	-	-
Ascendo New Generation Healthcare Investment	-	-	-	-	222	-	-	-
NH-AJU KOSDAQ SCALEUP FUND	-	-	-	-	21,818	-	-	1
Square-DAvalue Fund NO 1	-	-	-	-	220	-	-	-
MK Ventures-K Clavis Growth capital Venture Fund 1	-	-	-	-	241	-	-	-
Smilegate Vietnam Kairos Private Equity Fund #1	-	-	-	-	85	-	-	-
NH-Soo Investment innovative growth M&A fund	-	-	-	-	20,686	-	-	3

37. Related-party transactions (cont'd)

	December 31, 2019							
Company	Receivables	Derivative assets	Allowances	Other assets (*)	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Other related parties:								
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1	₩ -	₩ -	₩ -	₩ -	₩ 3,940	₩ -	₩ -	₩ 2
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2	-	-	-	-	5,200	-	-	2
Korea Growth Opportunity Private Equity Fund I	-	-	-	-	1,488	-	-	-
NH Agribusiness Group Inc.	655,216	-	187	159	81,761	-	-	165
NH Networks Co., Ltd.	10,898	-	31	20,785	34,593	-	-	21,279
NH Information System Co., Ltd.	2,944	-	1	-	47,466	-	-	85
Agricultural Cooperative Asset Management Co., Ltd.	159,878	-	52	-	586	-	-	440
NH Partners Co., Ltd.	188	-	-	-	15,165	-	-	291
NH KIMHAE I&D CO.	-	-	-	-	766	-	-	-
Nonghyup Foundation	22	-	-	27	8,715	-	-	84
Nonghyup Hanaro Mart Inc.	136,174	-	44	62	1,666	-	-	8,058
Agricultural Corporation Nonghyup Food Grain Inc.	33,327	-	156	-	507	-	-	-
Korea Agriculture Cooperative Marketing Inc.	268	-	-	-	8,539	-	-	2,572
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	84	-	-	-	3,005	-	-	2,707
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	229	-	-	-	19	-	-	623
Daejeon Agricultural Products Marketing Co., Ltd.	20	-	-	-	450	-	-	-
Nonghyup Logistics Service Inc.	15,792	-	-	2,231	3,483	-	-	3,910
Nonghyup Chemical Co., Ltd.	74,575	239	35	-	1,048	4	-	-
NH Nonghyup Trading Co., Ltd.	19,553	173	107	-	554	155	-	-
Nonghyup-Agro Inc.	18	-	-	-	85	-	-	-
Nonghyup Red Ginseng Co., Ltd.	19,742	-	157	-	291	-	-	-
Namhae Chemical Corporation	39,884	82	38	-	11,854	1	-	256
Nonghyup Moguchon Inc.	63,191	-	261	-	1,472	-	-	-
Nonghyup Feed Inc.	360,306	3,815	589	-	91,957	35	-	-
Nongwoo BIO Co., Ltd.	14,468	-	7	-	2,284	-	-	-
NH Heuk Sarang Co., Ltd.	22	-	-	-	10	-	-	-
NongHyup Food Inc.	25	-	2	-	6,954	-	-	-
Kongyoung Homeshopping Co., Ltd.	55	-	-	-	228	-	-	-
Agricultural Corporation Orion Nonghyup Inc.	6,108	-	1	-	100	-	-	-
Nisso-namhae Agro Co., Ltd.	20	-	-	-	15,636	-	-	1
Sanglim Agricultural Co., Ltd.	3,280	-	2	-	764	-	-	-

(*) Other assets and other liabilities include right-of-use assets and lease liabilities

37. Related-party transactions (cont'd)

Significant transactions with related parties for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

	For the three months ended March 31, 2020						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 1,248	₩ 2	₩ 338,913	₩ (24)	₩ 256	₩ -	₩ 158,292
Parent company:							
NH Financial Group Inc.	-	-	290	(14)	-	-	-
Associates:							
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	-	13	-	-
NH Agri-Biz Value Creative 1st PEF	-	59	-	-	-	-	-
NH-AJU Digital Fund	-	-	-	-	2	-	-
NH-NAU Agro Food 1st Private Equity Fund	-	114	-	-	-	-	-
2012 Sunlight, Co., Ltd.	-	-	12	-	-	-	-
Other related parties:							
NH Life Insurance Co., Ltd.	1	1,674	285,257	-	1	-	4,093
NH Property and Casualty Insurance Co., Ltd.	-	763	27,588	-	3	-	22,108
NH Investment & Securities Co., Ltd.	42	7	12,147	-	1,250	11	28,718
NH Nonghyup Capital Co., Ltd.	-	29	-	(1)	4	-	42
NH Savings Bank Co., Ltd.	-	25	6	(3)	-	-	-
NH Venture Investment Co., Ltd.	-	-	-	-	19	-	-
NH Futures Co., Ltd.	-	11	-	-	27	7	-
NH- Amundi Asset Management Co., Ltd.	-	1	-	(8)	355	247	-
Yeouido munhwa broadcasting PFV	366	-	-	-	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	4	-	-
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	6	-	-
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	11	-	-
NH Special Purpose Acquisition 15 Co., Ltd.	-	-	-	-	7	-	-
NH-AJU KOSDAQ SCALEUP FUND	-	-	-	-	26	-	-
Square-DAvalue Fund NO 1	-	-	-	-	1	-	-
Smilegate Vietnam Kairos Private Equity Fund #1	-	-	-	-	1	-	-
NH-DELTA Fintech Fund	-	-	-	-	1	-	-
NH-Soo Investment innovative growth M&A fund	-	-	-	-	54	-	-
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1	-	-	-	-	7	-	-
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2	-	-	-	-	13	-	-
NH Agribusiness Group Inc.	3,359	-	139	(22)	10	-	466

37. Related-party transactions (cont'd)

	For the three months ended March 31, 2020						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
NH Networks Co., Ltd.	₩ 92	₩ -	₩ 38	₩ (1)	₩ 1	₩ -	₩ 2,795
NH Information System Co., Ltd.	-	-	943	-	42	-	16,600
Agricultural Cooperative Asset Management Co., Ltd.	1,014	-	-	(1)	2	1,220	-
NH Partners Co., Ltd.	-	-	-	-	-	-	9,247
Nonghyup Foundation	-	-	-	-	44	-	28
Nonghyup Hanaro Mart Inc.	519	-	107	(10)	-	282	272
Agricultural Corporation Nonghyup Food Grain Inc.	36	2	38	-	-	-	8
Korea Agriculture Cooperative Marketing Inc.	-	6	304	-	26	-	21
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	-	-	12	-	6
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	2	7	-	-	-	4	44
Daejeon Agricultural Products Marketing Co., Ltd.	-	2	-	-	-	2	-
Nonghyup Logistics Service Inc.	142	5	138	-	5	-	6,941
Nonghyup Chemical Co., Ltd.	626	55	-	30	1	-	173
NH Nonghyup Trading Co., Ltd.	180	44	377	32	1	-	97
Nonghyup Red Ginseng Co., Ltd.	132	-	-	(1)	-	-	20
Namhae Chemical Corporation	19	137	42	53	59	-	434
Nonghyup Feed Inc.	104	424	489	(104)	2	-	12,299
Nongwoo BIO Co., Ltd.	111	-	23	(2)	1	-	-
NongHyup Food Inc.	-	-	-	(1)	-	-	-
Agricultural Corporation Orion Nonghyup Inc.	38	2	-	-	-	-	-
NonghHup TMR Co., Ltd.	-	1	-	-	-	-	-
Nisso-namhae Agro Co., Ltd.	-	-	-	-	15	-	-
Sanglim Agricultural Co., Ltd.	32	-	-	4	-	-	-
Other:							
NH 3 REIT Co., Ltd.	78	-	-	-	-	-	-
NH Prime REIT Co., Ltd	-	-	-	-	2	-	-

37. Related-party transactions (cont'd)

	For the three months ended March 31, 2019						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 209	₩ 1	₩ 122,520	₩ 7	₩ 400	₩ -	₩ 82,577
Parent company:							
NH Financial Group Inc.	-	-	242	(7)	-	-	-
Associates:							
Korea Credit Bureau Co., Ltd.	-	-	-	-	5	-	182
Kyunggi-DSC Superman Investment Fund No. 1	-	-	-	-	18	-	-
NH Agri-Biz Value Creative 1st PEF	-	59	-	-	-	-	-
Other related parties:							
NH Life Insurance Co., Ltd.	1	2,331	19,314	-	2	-	510
NH Property and Casualty Insurance Co., Ltd.	1	1,017	11,918	-	3	-	19,987
NH Investment & Securities Co., Ltd.	17	12	4,707	(13)	2,977	14	20,790
NH Nonghyup Capital Co., Ltd.	-	45	-	(1)	2	-	122
NH Savings Bank Co., Ltd.	-	9	-	(9)	-	-	-
NH Futures Co., Ltd.	61	9	-	(31)	28	125	-
NH- Amundi Asset Management Co., Ltd.	-	-	-	-	420	-	344
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	-	7	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	-	7	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	4	-	-
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	8	-	-
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	5	-	-
Ascendo New Generation Healthcare Investment	-	-	-	-	1	-	-
NH Agribusiness Group Inc.	4,427	-	144	(9)	8	-	420
NH Networks Co., Ltd.	-	-	38	-	1	-	7,466
NH Information System Co., Ltd.	-	-	919	1	78	-	15,125
Agricultural Cooperative Asset Management Co., Ltd.	1,116	-	43	(10)	2	1,045	-
NH Partners Co., Ltd.	-	11	36	-	7	-	8,337
Nonghyup Foundation	-	-	-	(1)	296	-	39
Nonghyup Hanaro Mart Inc.	259	14	91	3	1	-	358
Agricultural Corporation Nonghyup Food Grain Inc.	43	-	33	-	-	-	1
Korea Agriculture Cooperative Marketing Inc.	-	8	311	-	12	-	20
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	44	-	10	-	10
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	13	7	-	(2)	-	-	-
Daejeon Agricultural Products Marketing Co., Ltd.	-	2	-	(1)	-	2	-
Nonghyup Logistics Service Inc.	93	1	138	-	4	-	6,496
Nonghyup Chemical Co., Ltd.	737	67	-	36	1	-	-
NH Nonghyup Trading Co., Ltd.	172	30	185	9	2	-	107
Nonghyup-Agro Inc.	-	-	-	-	4	-	-

37. Related-party transactions (cont'd)

Company	For the three months ended March 31, 2019						
	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
Nonghyup Red Ginseng Co., Ltd.	₩ 129	₩ -	₩ 4	₩ (4)	₩ -	₩ -	₩ 13
Namhae Chemical Corporation	465	118	-	71	194	-	65
Nonghyup Moguchon Inc.	342	5	86	-	-	-	48
Nonghyup Feed Inc.	130	186	-	(75)	3	-	2,966
Nongwoo BIO Co., Ltd.	6	-	-	5	5	-	3
NongHyup Food Inc.	-	1	-	(1)	-	-	-
Agricultural Corporation Orion Nonghyup Inc.	9	1	-	1	-	-	-
Nonghyup TMR Co., Ltd.	-	1	-	-	-	-	-
Nisso-namhae Agro Co., Ltd.	-	-	-	-	18	-	-
Sanglim Agricultural Co., Ltd.	22	1	-	2	-	-	-

37. Related-party transactions (cont'd)

The Group's acceptances, guarantees and unused credit limits with related parties as of March 31, 2020, and December 31, 2019, are summarized as follows (Korean won in millions):

	March 31, 2020	
Classification	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 2,321,636	NACF
Unused credit limit in Korean won	720	NH Financial Group Inc.
Unused credit limit in Korean won	80,329	NH Life Insurance Co., Ltd
Unused credit limit in Korean won	32,827	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	445,853	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	19,342	NH Nonghyup Capital Co., Ltd.
Unused credit limit in Korean won	547	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	54	NH REITs Management Co., Ltd.
Unused credit limit in Korean won	86	NH Venture Investment Co., Ltd.
Unused credit limit in Korean won	227	NH Futures Co., Ltd.
Unused credit limit in Korean won	882	NH-Amundi Asset Management Co., Ltd.
Unused credit limit in Korean won	493,671	NH Agribusiness Group Inc.
Unused credit limit in Korean won	29,638	NH Networks Co., Ltd.
Unused credit limit in Korean won	1,099	NH Information System Co., Ltd.
Unused credit limit in Korean won	17,171	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	10,292	NH Partners Co., Ltd.
Unused credit limit in Korean won	89	Nonghyup Foundation
Unused credit limit in Korean won	101,483	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	195	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	10,867	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	459	Agricultural Cooperative Pusan Gyeongnam Marketing Inc.
Unused credit limit in Korean won	5,073	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	167	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	4,220	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	141,994	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	13,258	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	4,227	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	2,287	NH Nonghyup Trading Co., Ltd.
Unused credit limit in foreign currencies	10,499	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in Korean won	4,438	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in foreign currencies	18,948	NH Nonghyup Trading Co., Ltd.
Unused credit limit in Korean won	62	Nonghyup-Agro Inc.
Unused credit limit in Korean won	2,096	Nonghyup Red Ginseng Co., Ltd.
Unused credit limit in Korean won	68,761	Namhae Chemical Corporation
Unused credit limit in foreign currencies	276,903	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,384	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	21,136	Namhae Chemical Corporation
Unused credit limit in Korean won	18,539	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	370	Nonghyup Moguchon Inc.
Acceptances and guarantees in foreign currencies	248	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	46,214	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	195,877	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	174,117	Nonghyup Feed Inc.
Unused credit limit in Korean won	11,196	Nongwoo BIO Co., Ltd.
Unused credit limit in Korean won	335	NH Heuk Sarang Co., Ltd.
Unused credit limit in Korean won	90	NongHyup Food Inc.
Unused credit limit in Korean won	169	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	3,772	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in Korean won	31	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	272	Sanglim Agricultural Co., Ltd.

37. Related-party transactions (cont'd)

	December 31, 2019	
Classification	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 2,238,563	NACF
Unused credit limit in Korean won	503	NH Financial Group Inc.
Unused credit limit in Korean won	83,246	NH Life Insurance Co., Ltd
Unused credit limit in Korean won	32,276	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	445,931	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	15,956	NH Nonghyup Capital Co., Ltd.
Unused credit limit in Korean won	508	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	54	NH REITs Management Co., Ltd.
Unused credit limit in Korean won	91	NH Venture Investment Co., Ltd.
Unused credit limit in Korean won	201	NH Futures Co., Ltd.
Unused credit limit in Korean won	785	NH-Amundi Asset Management Co., Ltd.
Unused credit limit in Korean won	430,158	NH Agribusiness Group Inc.
Acceptances and guarantees in Korean won	729	NH Agribusiness Group Inc.
Unused credit limit in Korean won	29,167	NH Networks Co., Ltd.
Unused credit limit in Korean won	856	NH Information System Co., Ltd.
Unused credit limit in Korean won	13,186	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	8,774	NH Partners Co., Ltd.
Acceptances and guarantees in Korean won	1,438	NH Partners Co., Ltd.
Unused credit limit in Korean won	78	Nonghyup Foundation
Unused credit limit in Korean won	69,640	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	193	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	10,867	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	416	Agricultural Cooperative Pusan Gyeongnam Marketing Inc.
Unused credit limit in Korean won	4,871	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	180	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	4,602	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	159,418	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	13,501	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	3,587	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	2,563	NH Nonghyup Trading Co., Ltd.
Unused credit limit in foreign currencies	16,368	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in Korean won	4,438	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in foreign currencies	11,964	NH Nonghyup Trading Co., Ltd.
Unused credit limit in Korean won	62	Nonghyup-Agro Inc.
Unused credit limit in Korean won	2,061	Nonghyup Red Ginseng Co., Ltd.
Unused credit limit in Korean won	160,224	Namhae Chemical Corporation
Unused credit limit in foreign currencies	211,352	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,683	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	36,548	Namhae Chemical Corporation
Unused credit limit in Korean won	8,707	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	579	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	45,989	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	174,142	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	101,429	Nonghyup Feed Inc.
Unused credit limit in Korean won	11,232	Nongwoo BIO Co., Ltd.
Unused credit limit in Korean won	338	NH Heuk Sarang Co., Ltd.
Unused credit limit in Korean won	75	NongHyup Food Inc.
Unused credit limit in Korean won	145	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	3,275	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in foreign currencies	1,158	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in Korean won	20	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	894	Sanglim Agricultural Co., Ltd.

37. Related-party transactions (cont'd)

Details of commitments related to derivative instruments with related parties as of March 31, 2020, and December 31, 2019, are summarized as follows (Korean won in millions):

Company	Classification	March 31, 2020	December 31, 2019
NACF	Open interest	₩ 7,266,040	₩ 7,318,082
NH Life Insurance Co., Ltd.	Open interest	4,629,953	5,256,956
NH Property and Casualty Insurance Co., Ltd.	Open interest	426,926	489,866
NH Investment & Securities Co., Ltd.	Open interest	851,153	868,948
Nonghyup Chemical Co., Ltd.	Open interest	3,066	16,627
NH Nonghyup Trading Co., Ltd.	Open interest	13,828	23,917
Namhae Chemical Corporation	Open interest	51,349	13,894
Nonghyup Feed Inc.	Open interest	231,806	207,849
Nongwoo BIO Co., Ltd.	Open interest	2,567	-

Details of fixed asset transactions with related parties for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020		For the three months ended March 31, 2019	
	Purchase of tangible assets	Purchase of intangible assets	Purchase of tangible assets	Purchase of intangible assets
NH Networks Co., Ltd.	₩ 5,812	₩ -	₩ 2,903	₩ -
NH Information System Co., Ltd.	-	2,186	-	599

Details of the collateral provided from related parties as of March 31, 2020, are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NACF	Securities	₩ 1,120,000
NH Property and Casualty Insurance Co., Ltd.	Securities	52,733
NH Life Insurance Co., Ltd.	Securities	110,000

Details of the collateral provided to related parties as of March 31, 2020, are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NH Investment & Securities Co., Ltd.	Securities	₩ 18,863
NH Futures Co., Ltd.	Securities	14,260
NH-Amundi Asset Management Co., Ltd.	Securities	4,031

The key management compensations for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification	For the three months ended March 31, 2020	For the three months ended March 31, 2019
Short-term employee benefits	₩ 657	₩ 625
Retirement expenses	395	459
	₩ 1,052	₩ 1,084

38. COMMITMENTS AND CONTINGENCIES:

Details of agreements that the Group has made as of March 31, 2020, and December 31, 2019, are as follows (Korean won in millions):

Classification	March 31, 2020	December 31, 2019
Loan commitment	₩ 88,245,118	₩ 84,458,368
Credit guarantee (*1)	1,939,904	1,710,989
CP purchase agreement (*1)	635,846	509,542
Treasury purchase agreement	1,165,289	1,186,318
	₩ 91,986,157	₩ 87,865,217

(*1) As of March 31, 2020, the Group provided the credit line with the limit of ₩1,939,904 million and made the commercial paper purchase agreement with the limit of ₩635,846 million as collaterals to repay the principals and interests of debentures and commercial papers issued by NH KIWOOM 1ST LLC and 40 other SPEs.

The Group made five investment commitments amounting to ₩122,500 million as of March 31. 2020.

The Group is involved in various pending legal proceedings arising in the normal course of business. As of March 31, 2020, the Group is named as a plaintiff in 135 cases with related aggregate claims amounting to ₩58,820 million, and as a defendant in 136 cases with related aggregate claims amounting to ₩52,366 million. Accordingly, the Group accrued for a litigation-related liability of ₩25,235 million in other liabilities.

Except for accrued litigation-related liabilities, the Group believes that the outcome of litigations will not have a material impact on the separate financial statements.

39. CONSOLIDATED STATEMENT OF CASH FLOWS:

39.1 Cash and cash equivalents

Cash and cash equivalents in the interim condensed consolidated statement of cash flows consist of cash and due from banks (excluding restricted due from banks) from the interim condensed consolidated statements of financial position. Cash and cash equivalents as of March 31, 2020, and December 31,2019, are adjusted as follows (Korean won in millions):

Classification (*1)		March 31, 2020		December 31, 2019
Cash and due from banks	₩	4,555,445	₩	5,949,923
Less: restricted due from banks (Refer to Note 6(4))		(1,136,011)		(2,244,898)
Less: due from banks with a maturity of three months or more at acquisition		(77,536)		(70,000)
	₩	3,341,898	₩	3,635,025

(*1) Allowance for expected credit losses is not included.

39.2 Non-cash transactions

Significant non-cash transactions not included in the interim condensed consolidated statements of cash flows for the three months ended March 31, 2020 and 2019, are as follows (Korean won in millions):

Classification		For the three months ended March 31, 2020		For the three months ended March 31, 2019
Change in gain (loss) on valuation of financial assets at FVTOCI	₩	(11,258)	₩	50,388
Transfer to investment properties from tangible assets		-		6,002
Transfer to tangible assets from investment properties		4,374		-
Recognition of right-of-use assets and lease liabilities		29,780		36,587

Independent auditors' report

English Translation of a Report Originally Issued in Korean on March 16, 2020

The Shareholders and Board of Directors
NongHyup Bank

Opinion

We have audited the accompanying consolidated financial statements of NongHyup Bank (the "Bank") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2019, and the consolidated statements of profit or loss and other comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows, all expressed in Korean won, for the years ended December 31, 2019, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2019, and its consolidated financial performance and its consolidated cash flows for the years ended December 31, 2019, in accordance with Korean International Financial Reporting Standards.

Basis for opinion

We conducted our audits in accordance with Korean Auditing Standards (KGAAS). Our responsibilities under those standards are further described in the Auditors' 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 that are relevant to our audits of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Auditors' emphasis-of-matter paragraphs on prior error correction

As a matter that does not affect audit opinions, users of this audit report should pay attention to the following: As described in Note 41 of the consolidated financial statements, the Group recreated the consolidated financial statements for the previous fiscal year reflecting the above-mentioned mistakes. As mentioned in Note 41 of the consolidated financial statements, these errors are related to the recognition of earnings. As of the end of the previous year, they had no impact on assets, liabilities, capital and net profit, and operating income and operating expenses decreased by ₩128,100 million.

The main steps we took to conclude that the above corrections exist are as follows:

- Reviewing revenue recognition criteria
- Discuss whether to have control over structured entities

On the other hand, we communicated with the Bank and the previous auditor. The previous auditor did not agree to reissue the previous year's audit report because accounting for group earnings recognition and a breach of the consolidated scope of the consolidated structured company are not quantitatively significant.

Other matters paragraphs

The Bank's consolidated financial statements of the consolidated companies for the reporting period ended December 31, 2018, were audited by the previous auditors, and the auditors' audit report dated March 7, 2019, expressed an unqualified opinion. On the other hand, the consolidated financial statements in which the auditors expressed an unqualified opinion were those before the adjustments described in Note 41 of the consolidated financial statements, and the consolidated financial statements for the year ended December 31, 2018, compared with those in the consolidated financial statements reflect those adjustments.

In conducting an audit of the consolidated financial statements for 2019, we found the adjustments described in Note 41 of the consolidated financial statements and the Group reflected it in the consolidated financial statements for the reporting period ended December 31, 2018. We have not concluded any contracts for auditing or reviewing, otherwise contracting on the Bank's 2018 consolidated financial statements, including those adjustments.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Korean International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of the 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, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditors' 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 auditors' 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 KGAAS 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 Auditing Standards (KGAAS), 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 Group'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 auditors' 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 auditors' 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's 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 audits and significant audit findings, including any significant deficiencies in internal control that we identify during our audits.

/s/ Deloitte Anjin LLC

March 16, 2020

Notice to Readers

This audit report is effective as of March 16, 2020, the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditors' report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

NongHyup Bank and its subsidiaries
Consolidated statements of financial position
as of December 31, 2019 and 2018

(Korean won in millions)

	Notes	December 31, 2019	December 31, 2018
Assets			
Cash and due from banks	5, 6, 35, 36, 39	₩ 5,946,042	₩ 6,194,718
Financial assets at fair value through profit or loss ("FVTPL")	5, 7, 35, 36	9,523,943	10,152,290
Derivative assets	5, 23, 35, 36	535,729	464,700
Financial assets at fair value through other comprehensive income ("FVTOCI")	5, 8, 35, 36	21,930,870	20,073,081
Securities at amortized cost	5, 9, 35, 36	12,441,531	9,336,103
Loans at amortized cost	5, 10, 35, 36	241,224,080	232,595,342
Investments in subsidiaries and associates	11	102,758	98,194
Tangible assets	12, 15	2,826,735	2,675,605
Investment properties	13	589,640	581,279
Intangible assets	14	437,548	396,943
Deferred income tax assets	27	513,828	579,121
Other assets	16, 35, 36	111,643	103,252
Non-current assets classified as held for sale	13, 35	15	15
Total assets		**₩ 296,184,362**	**₩ 283,250,643**
Liabilities			
Deposits	17, 18, 35, 36	₩ 236,384,433	₩ 224,230,411
Financial liabilities at FVTPL	17, 35, 36	13,342	13,276
Derivative liabilities	17, 23, 35, 36	510,654	521,750
Borrowings	17, 19, 35, 36	11,171,538	11,283,346
Debentures	17, 20, 35, 36	15,819,070	16,828,002
Provisions	21, 38	360,787	462,580
Current income tax liabilities		276,946	161,480
Net defined benefit liabilities	24	470,362	375,165
Other liabilities	17, 22, 35, 36	14,311,871	13,439,224
Share capital repayable on demand		23	22
Total liabilities		**279,319,026**	**267,315,256**
Equity			
Controlling interests			
Capital stock	25	2,162,191	2,162,191
Other paid-in capital	25	9,848,422	9,848,422
Retained earnings	25	5,573,782	4,573,397
(Regulatory reserve for bad debts as of December 31, 2019 and 2018, is ₩1,742,296 million and ₩1,629,809 million, respectively. Regulatory reserve for bad debts to be reserved as of December 31, 2019 and 2018, is ₩221,339 million and ₩112,487 million, respectively. Planned provision of regulatory reserve for bad debts as of December 31, 2019 and 2018, is ₩221,339 million and ₩112,487 million, respectively.)			
Other components of equity	25	(719,059)	(648,623)
		16,865,336	15,935,387
Non-controlling interests		-	-
Total equity		**16,865,336**	**15,935,387**
Total liabilities and equity		**₩ 296,184,362**	**₩ 283,250,643**

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of profit or loss and other comprehensive income
for the years ended December 31, 2019 and 2018

(Korean won in millions)

	Notes	For the year ended December 31, 2019	For the year ended December 31, 2018
Net interest income	4, 28		
Interest income			
Interest income calculated using the effective interest method		₩ 8,738,628	₩ 8,127,622
Interest income on financial instruments at FVTPL		124,255	127,347
		8,862,883	8,254,969
Interest expenses		3,695,688	3,169,275
		5,167,195	5,085,694
Net commission income	4,29		
Commission income		1,119,943	1,097,712
Commission expenses		435,013	437,792
		684,930	659,920
Gain (loss) on financial instruments at FVTPL, net	28		
Gain on financial instruments at FVTPL		1,898,593	2,058,655
Loss on financial instruments at FVTPL		2,082,937	1,867,063
		(184,344)	191,592
Gain (loss) on financial assets at FVTOCI, net	28		
Gain on financial assets at FVTOCI		21,858	21,784
Loss on financial assets at FVTOCI		-	22,070
		21,858	(286)
Gain (loss) on disposal of financial assets at amortized cost, net	28		
Gain on disposal of financial assets at amortized cost		6,075	4,255
Loss on disposal of financial assets at amortized cost		35,884	22,046
		(29,809)	(17,791)
Other operating expenses, net	30		
Other operating income		1,244,036	821,612
Other operating expenses		1,312,655	1,239,291
		(68,619)	(417,679)
Operating income before expected credit losses (“ECLs”) and general and administrative expenses		5,591,211	5,501,450
Transfer in allowance for ECLs	4,21,28	189,189	585,482
Operating income before general and administrative expenses		₩ 5,402,022	₩ 4,915,968

(Continued)

NongHyup Bank and its subsidiaries
Consolidated statements of profit or loss and other comprehensive income (cont'd)
for the years ended December 31, 2019 and 2018

(Korean won in millions)

	Notes	For the year ended December 31, 2019	For the year ended December 31, 2018
General and administrative expenses			
Employee benefits	31	₩ 1,969,905	₩ 1,984,785
Depreciation and amortization expenses	12, 14, 15	402,995	295,634
Other selling and administrative expenses	32	608,300	651,434
		2,981,200	2,931,853
Operating income		2,420,822	1,984,115
Gain on valuation of equity method investments, net	11	5,426	8,008
Other expenses, net	33	(328,704)	(328,568)
Income before income tax expenses		2,097,544	1,663,555
Income tax expenses	4, 27	580,469	440,986
Net income	25	1,517,075	1,222,569
(Net income after the provision of regulatory reserve for bad debts for the years ended December 31, 2019 and 2018, is ₩1,295,736 million and ₩1,137,279 million, respectively)			
Controlling interests		1,517,075	1,222,569
Non-controlling interests		-	-
		1,517,075	1,222,569
Other comprehensive income (loss)			
Items not subsequently reclassified to profit or loss			
Remeasurements of net defined benefit liabilities	24, 25	(72,030)	(61,168)
Gain (loss) on equity securities at FVTOCI	25	(60,459)	(27,474)
		(132,489)	(88,642)
Items subsequently reclassified to profit or loss			
Gain on valuation of debt securities at FVTOCI	25	53,420	84,040
Exchange differences on translation of foreign operations	25	5,543	1,676
Gain (loss) on valuation of investments in associates	11, 25	93	(24)
		59,056	85,692
		(73,433)	(2,950)
Total comprehensive income			
Controlling interests		1,443,642	1,219,619
Non-controlling interests		-	-
		₩ 1,443,642	₩ 1,219,619
Earnings per share	34		
Basic earnings and diluted earnings per share ("EPS") (Korean won)		₩ 3,469	₩ 2,806

(Concluded)

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2019 and 2018

(Korean won in millions)

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2018	₩ 2,132,779	₩ 9,331,349	₩ (3,019)	₩ 349,648	₩ 3,283,817	₩ (443,178)	₩ 14,651,396	-	₩ 14,651,396
Effect of adoption of new accounting standards	-	-	-	-	165,347	(233,671)	(68,324)	-	(68,324)
Balance as of January 1, 2018, under K-IFRS 1109	2,132,779	9,331,349	(3,019)	349,648	3,449,164	(676,849)	14,583,072	-	14,583,072
Issuance of capital stock	29,412	170,444	-	-	-	-	199,856	-	199,856
Changes due to consolidated tax	-	-	-	-	139,920	-	139,920	-	139,920
Total comprehensive income									
Net income	-	-	-	-	1,222,569	-	1,222,569	-	1,222,569
Other comprehensive income (loss)									
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(61,168)	(61,168)	-	(61,168)
Gain on valuation of debt securities at FVTOCI	-	-	-	-	-	84,040	84,040	-	84,040
Gain (loss) on valuation of equity securities at FVTOCI	-	-	-	-	(31,176)	3,702	(27,474)	-	(27,474)
Exchange differences on translation of foreign operations	-	-	-	-	-	1,676	1,676	-	1,676
Loss on valuation of investments in associates	-	-	-	-	-	(24)	(24)	-	(24)
Dividends on hybrid equity securities	-	-	-	-	(17,080)	-	(17,080)	-	(17,080)
Dividends	-	-	-	-	(190,000)	-	(190,000)	-	(190,000)
Balance as of December 31, 2018	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 4,573,397	₩ (648,623)	₩ 15,935,387	-	₩ 15,935,387

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2019	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 4,573,397	₩ (648,623)	₩ 15,935,387	-	₩ 15,935,387
Changes due to consolidated tax	-	-	-	-	103,387	-	103,387	-	103,387
Total comprehensive income									
Net income	-	-	-	-	1,517,075	-	1,517,075	-	1,517,075
Other comprehensive income (loss)									
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(72,030)	(72,030)	-	(72,030)
Gain on valuation of debt securities at FVTOCI	-	-	-	-	-	53,420	53,420	-	53,420
Gain (loss) on valuation of equity securities at FVTOCI	-	-	-	-	(2,997)	(57,462)	(60,459)	-	(60,459)
Exchange differences on translation of foreign operations	-	-	-	-	-	5,543	5,543	-	5,543
Loss on valuation of investments in associates	-	-	-	-	-	93	93	-	93
Dividends on hybrid equity securities	-	-	-	-	(17,080)	-	(17,080)	-	(17,080)
Dividends	-	-	-	-	(600,000)	-	(600,000)	-	(600,000)
Balance as of December 31, 2019	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 5,573,782	₩ (719,059)	₩ 16,865,336	-	₩ 16,865,336

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2019 and 2018

(Korean won in millions)

	Note	For the year ended December 31, 2019	For the year ended December 31, 2018
Operating activities			
Income before income tax expenses		₩ 2,097,544	₩ 1,663,555
Adjustments to reconcile income before income tax expenses to net cash provided by operating activities:			
Net interest income		(5,167,195)	(5,085,694)
Dividend income		(9,749)	(12,540)
Gain related to financial assets at FVTPL		(169,192)	(64,872)
Loss (gain) on valuation of trading derivatives		(4,965)	30,667
Gain on valuation of hedging derivatives		(43,505)	(687)
Loss on fair value hedge		42,662	2,449
Loss (gain) related to financial assets at FVTOCI		(16,159)	8,747
Loss on disposal of financial assets at amortized cost		29,809	17,791
Loss (gain) on disposal of investments in associates		180	(210)
Gain on valuation of equity method investments		(5,426)	(8,008)
Depreciation and amortization		407,888	300,277
Impairment loss on intangible assets		7,207	406
Gain on disposal of assets		(2,008)	(383)
Allowance for ECL		189,189	585,482
Other provisions		(18,439)	12,907
Retirement expenses of net defined benefit liabilities		193,499	201,491
Loss (gain) on transaction of foreign exchange		(33,036)	(111,497)
Others		88,971	(84,679)
		(4,510,269)	(4,208,353)
Changes in operating assets and liabilities:			
Due from banks		585	2,659,047
Derivative assets		431,295	544,103
Financial assets at FVTPL		253,939	(236,974)
Loans at amortized cost		(9,379,387)	(14,240,214)
Other assets		(113)	(19,265)
Deposits		12,617,017	18,411,620
Derivative liabilities		(464,803)	(479,784)
Financial liabilities at FVTPL		-	(38,582)
Defined benefit liabilities		(135,949)	(187,868)
Plan assets		(61,653)	(47,196)
Provisions		(27,799)	(11,607)
Other liabilities		1,021,336	(933,334)
		4,254,468	5,419,946
Cash provided by operating activities:			
Cash received for interest		9,046,370	8,312,912
Cash received for dividend		7,481	12,540
		9,053,851	8,325,452
Cash used in operating activities:			
Payment of interest expenses		(3,394,738)	(2,864,533)
Payment of income tax		(266,434)	(246,912)
		(3,661,172)	(3,111,445)
Net cash provided by operating activities		₩ 7,234,422	₩ 8,089,155

(Continued)

NongHyup Bank and its subsidiaries
Consolidated statements of cash flows (cont'd)
for the years ended December 31, 2019 and 2018

(Korean won in millions)

	Note	For the year ended December 31, 2019	For the year ended December 31, 2018
Investing activities			
Cash flows provided by investing activities:			
Disposal of financial assets at FVTPL		₩ 18,215,462	₩ 23,036,132
Disposal and redemption of financial assets at FVTOCI		14,978,857	20,045,835
Disposal and redemption of securities at amortized cost		1,624,962	914,309
Disposal of tangible assets		9,495	6,838
Disposal of intangible assets		1,146	1,495
Disposal of investment properties		100	329
Disposal of investments in associates		16,394	12,701
Dividend of investments in associates		2,268	5,294
		34,848,684	44,022,933
Cash flows used in investing activities:			
Purchase of financial assets at FVTPL		17,868,936	24,252,401
Purchase of financial assets at FVTOCI		16,692,491	21,603,916
Purchase of securities at amortized cost		4,716,824	2,009,376
Proceeds from business acquisition, net		-	11,223
Purchase of equity method investments in associates		17,852	39,401
Purchase of tangible assets		219,735	200,706
Purchase of intangible assets		187,283	149,693
Purchase of investment properties		4,594	4,850
Purchase of right-of-use assets		9,996	-
Increase of guarantees		4	-
		(39,717,715)	(48,271,566)
Net cash used in investing activities		₩ (4,869,031)	₩ (4,248,633)
Financing activities			
Cash flows provided by financing activities:			
Issuance of capital stock		₩ -	₩ 199,856
Increase in debentures		5,105,079	7,330,662
Increase in borrowings from trust accounts, net		-	463,418
		5,105,079	7,993,936
Cash flows used in financing activities:			
Decrease in borrowings, net		176,923	1,038,608
Decrease in debentures		6,266,224	9,596,321
Dividends		617,080	207,080
Decrease in borrowings from trust accounts, net		600,670	-
Decrease in lease liabilities		72,219	-
		(7,733,116)	(10,842,009)
Net cash provided by (used in) financing activities		₩ (2,628,037)	₩ (2,848,073)
Net increase in cash and cash equivalents		(262,646)	992,449
Cash and cash equivalents at the beginning of the year		3,884,266	2,882,412
Effect of exchange rate changes on cash and cash equivalents		13,405	9,405
Cash and cash equivalents at the end of the year	39	₩ 3,635,025	₩ 3,884,266

The accompanying notes are an integral part of the consolidated financial statements.

1. CORPORATE INFORMATION:

1.1 NongHyup Bank as the parent company

NongHyup Bank (the “Bank”) was established by the split-off of the Credit and Banking Business from the National Agricultural Cooperative Federation (the “NACF”) on March 2, 2012. The Bank’s headquarters is located at 120 Tongil-ro, Jung-gu in Seoul.

As of December 31, 2019, the Bank’s capital stock amounts to ₩2,162,191 million with 432,438,179 shares of common stock outstanding, which are wholly owned by NongHyup Financial Group. As of December 31, 2019, the Bank operates 157 regional offices, 684 branches, 294 branch offices, and six overseas branches and offices.

1.2 Scope and principles of consolidation

The Bank’s consolidated subsidiaries as of December 31, 2019 and 2018, are as follows:

	December 31, 2019			
Subsidiaries	Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small business loan	Myanmar	100.00	December 31, 2019
NongHyup Finance Cambodia Co., Ltd.	Small business loan	Cambodia	100.00	December 31, 2019
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	December 31, 2019
KAMCO Value Recreation 4th Securitization Specialty Ltd.(*2)	Asset securitization business	Korea	15.00	December 31, 2019
New Ari Second Co., Ltd. and seven other special-purpose entities (SPEs)	Asset securitization business	Korea	-	December 31, 2019
Mirae Asset (NH Securities) Dividend Premium Privately Placed Balanced Investment Trust 10th and 29 others (*2 and *3)	Beneficiary certificate	Korea	100.00	December 31, 2019
IBK Private Securities Fund 13 (Bond Balanced) and others (*2 and *4)	Beneficiary certificate	Korea	99.98	December 31, 2019

(*1) The Bank controls the trust because it has power over the trust to determine the operational performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has the ability to use power over the investee to affect the performance result.
(*3) The name of the subsidiary changed from Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th to Mirae Asset (NH Securities) Dividend Premium Privately Placed Balanced Investment Trust 10th.
(*4) The name of the subsidiary changed from Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23rd to IBK Private Securities Fund 13 (Bond Balanced).

1. CORPORATE INFORMATION (CONT'D):

1.2 Scope and principles of consolidation (cont'd)

	December 31, 2018			
Subsidiaries	Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small business loan	Myanmar	100.00	December 31, 2018
NongHyup Finance Cambodia Co., Ltd.	Small business loan	Cambodia	100.00	December 31, 2018
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	December 31, 2018
KAMCO Value Recreation 4th Securitization Specialty Ltd.(*2)	Asset securitization business	Korea	15.00	December 31, 2018
Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th and 29 others (*2 and *3)	Beneficiary certificate	Korea	100.00	December 31, 2018
Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23rd and others (*2 and *4)	Beneficiary certificate	Korea	99.98	December 31, 2018

(*1) The Bank controls the trust because it has power over the trust to determine the operational performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has the ability to use power over the investee to affect the performance result.
(*3) The name of the subsidiary changed from NH-CA (NH Securities) Privately-Placed Securities Investment Trust 12-5th to Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th.
(*4) The name of the subsidiary changed from Eugene (NH Securities) Zarang Privately-Placed Securities Investment 70th to Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23rd.

The Bank and its subsidiaries (collectively referred to as the "Group") include the structured entities, to which Korean International Financial Reporting Standards ("K-IFRS") 1110 and K-IFRS 1112 are applicable, in the consolidation scope and control the structured entity when the Group has power over the entity, exposure to variable returns from its involvement with the entity and the ability to use power over the entity to affect the amount of those returns.

1. CORPORATE INFORMATION (CONT'D):

1.3 Summary of financial information of subsidiaries

A summary of financial information of subsidiaries in consolidation as of and for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019					
Subsidiaries	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 24,702	₩ 1,928	₩ 22,774	₩ 5,187	₩ 304	₩ 1,978
NongHyup Finance Cambodia Co., Ltd.	36,902	28,346	8,556	6,651	1,424	1,660
Personal pension trust and 10 other trusts	3,658,401	3,658,401	-	92,053	-	-
KAMCO Value Recreation 4th Securitization Specialty Ltd.	267	106,007	(105,740)	1	(22,146)	(22,146)
New Ari Second Co., Ltd. and seven others	468,845	471,495	(2,650)	13,125	(97)	(97)
Consolidated beneficiary certificate	2,027,876	426,602	1,601,274	79,940	43,084	43,084

	December 31, 2018					
Subsidiaries	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 21,662	₩ 866	₩ 20,796	₩ 3,828	₩ 572	₩ (529)
NongHyup Finance Cambodia Co., Ltd.	22,057	15,161	6,896	1,693	(180)	(241)
Personal pension trust and 10 other trusts	3,631,343	3,631,343	-	103,735	-	-
KAMCO Value Recreation 4th Securitization Specialty Ltd.	271	83,864	(83,593)	-	(4,505)	(4,505)
Consolidated beneficiary certificate	2,379,701	784,637	1,595,064	636	22,175	22,175

1. CORPORATE INFORMATION (CONT'D):

1.4 Consolidated structured entities

Characteristics and intentions of contractual commitments offered by the Group to consolidated structured entities are as follows:

Entity	Characteristics	Purpose
KAMCO Value Recreation 4th Securitization Specialty Ltd.	The Group has purchased subordinated bonds amounting to ₩42,165 million issued by its subsidiary, KAMCO Value Recreation 4th Securitization Specialty Ltd.	Credit risk mitigation of liquidation plan
New Ari Second Co., Ltd. and seven other SPEs	The Group offers the ABCP purchase agreement with the limit of ₩476,200 million to SPEs.	Credit risk mitigation of liquidation plan
Eleven trusts, including personal pension trust	The Group offers principal and interest conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case of the operation result of trust account standing below the principal.	Credit risk mitigation on financial management of trust account

1.5 Changes in subsidiaries

New Ari Second Co., Ltd. and seven other SPEs became subsidiaries during the year ended December 31, 2019.

1.6 Unconsolidated structured entities

A structured entity is designed such that voting rights or similar rights are not the dominant factor in deciding who controls the entity, and the Group is accordingly involved in the structured entity through project financing, asset-backed securitization, investment fund contracts and others as of December 31, 2019. Of the structured entities, the interests and the nature of the risks of unconsolidated structured entities, for which the Group does not have control, are as follows.

1.6.1 Asset-backed securitization

The unconsolidated structured entity, whose objective is the securitization of assets, issues asset-backed securities based on the securitized assets and pays the redemption proceeds on such asset-backed securities with profits from the management, operation and sales of the securitized assets. The Group is liable for the risks associated with the issuance of asset-backed securities through the purchase of subordinated bonds, execution of asset-backed securities purchase agreements and granting of credit, and thus recognizes the related interest income and commission income.

1.6.2 Investment funds

Non-consolidated structured entities, which are classified as investment funds, include investment trusts and private equity funds. The structure of an investment trust is formed by funding from various investors, engaging a manager in the trust to operate and distributing proceeds from investments to the investors according to the trust agreements. The structure of a private equity fund is normally established by distributing profit from investment fund of equity securities in order to acquire ownership interests in a target group and implement financial and operational restructuring. The Group recognizes gain and loss on valuation of investments in relation to its interest in investment funds. It is exposed to loss of principals when the value of investment fund decreases.

1. CORPORATE INFORMATION (CONT'D):

1.6 Unconsolidated structured entities (cont'd)

1.6.3 Project financing

Project financing is the main financing method for large-scale risky project, where investors will make investment decisions based on the project economic feasibility, instead of the credit rating of the principal party driving the project or the physical collateral involved, and will receive the profits that occur upon project progression. For effective implementation of the project financing, structured entities will be established as SPEs, funded through investment or lending institutions and participating entities. Structured entities for project financing include investment companies for real estate project financing, business infrastructure enforcement corporations, and special-purpose companies for acquisition of ships and airlines. The Group has an influence on the structured entities' investment, loans and granting of credit, and thus recognizes the related interest income, gain and loss on valuation of equity investments and dividend income. Although the entities that provide financial support in the form of funding guarantees, bonds and senior credit facilities exist, the Group may still be exposed to risk of loss resulting from failure of return on capital investment or discontinuation of the project, joint liabilities on guarantees, etc.

Total asset size of the unconsolidated structured entities, book value for the line items as recognized in the consolidated financial statements, maximum exposure to loss and loss incurred for the years ended December 31, 2019 and 2018, are as follows. The maximum exposure to loss includes investment amounts recognized in the consolidated financial statements and the amounts which are determined in the future by meeting certain condition based on the agreements of purchase, granting credit, etc. (Korean won in millions):

	December 31, 2019			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 55,297,400	₩ 28,825,621	₩ 59,169,784	₩ 143,292,805
Recognized assets related to unconsolidated structured entities:				
Loans	316,024	-	1,532,751	1,848,775
Securities	4,464,125	3,289,243	19,358	7,772,726
	4,780,149	3,289,243	1,552,109	9,621,501
Recognized liabilities related to unconsolidated structured entities	11,476	-	-	11,476
Loss on unconsolidated structured entity	-	304	58,965	59,269
Maximum exposure to loss:				
Commitments and guarantees	2,220,531	-	-	2,220,531
Securities (including derivatives)	4,464,125	3,289,243	19,358	7,772,726
Loans	316,024	-	1,532,751	1,848,775
	₩ 7,000,680	₩ 3,289,243	₩ 1,552,109	₩ 11,842,032

1. CORPORATE INFORMATION (CONT'D):

1.6 Unconsolidated structured entities (cont'd)

1.6.3 Project financing (cont'd)

	December 31, 2018			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 63,167,067	₩ 25,650,969	₩ 29,503,996	₩ 118,322,032
Recognized assets related to unconsolidated structured entities:				
Loans	907,108	-	1,468,127	2,375,235
Securities	4,508,577	3,157,037	177	7,665,791
	5,415,685	3,157,037	1,468,304	10,041,026
Recognized liabilities related to unconsolidated structured entities	5,347	-	-	5,347
Loss on unconsolidated structured entity	100	26	-	126
Maximum exposure to loss:				
Commitments and guarantees	1,828,032	-	375	1,828,407
Securities (including derivatives)	4,508,577	3,157,037	177	7,665,791
Loans	907,108	-	1,468,127	2,375,235
	₩ 7,243,717	₩ 3,157,037	₩ 1,468,679	₩ 11,869,433

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES:

2.1 Basis of preparation

The Group's consolidated financial statements are prepared in accordance with the K-IFRS since the Group was established on March 2, 2012. The Board of Directors approved the accompanying consolidated financial statements on February 14, 2020.

The significant accounting policies are set out below, and the accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2018, except for the new and amended standards adopted as explained below.

The accompanying consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditors' report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The accompanying consolidated financial statements have been prepared on the historical cost basis except for certain non-current assets and financial assets that are measured at revalued amounts or fair values at the end of the reporting period, as explained in the accounting policies below. Historical cost is generally based on the fair value of the cost of acquiring asset.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.2 Changes in significant accounting policies and disclosures

The nature and the impact of each new standard, amendments and enactments are described below:

Enactments of K-IFRS 1116, *Leases*

K-IFRS 1116, *Leases*, the new standard, replaces K-IFRS 1017, *Leases*. Under the new standard, with the implementation of a single lease model, the lessee is required to recognize assets and liabilities for all leases with a lease term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset and a lease liability representing its obligation to make lease payments.

With the application of K-IFRS 1116, the Group has changed its accounting policy. The Group has applied K-IFRS 1116 retrospectively, as permitted under the transitional provisions in the standard and recognized the cumulative impact of initially applying the standard as of January 1, 2019, the date of initial application. The Group has not restated comparative financial statements for the year ended December 31, 2018.

When the Group applied K-IFRS 1116, it applied the following practical expedient:

- Impairment review of right-of-use assets using previously recognized onerous lease provision
- Exclusion of initial direct costs in measuring right-of-use assets
- Use of hindsight in determining the lease term if the contract contains options to extend or terminate the lease

The Group had no onerous lease at the date of initial application. Additionally, the Group did not reassess whether a contract is, or contains, a lease at the date of initial application. Instead, the Group applied K-IFRS 1116 to contracts that were previously identified as leases applying K-IFRS 1017 *Leases* and K-IFRS 2104 *Determining whether an Arrangement contains a Lease*.

The effects of the application of K-IFRS 1116 are as follows (Korean won in millions):

Classification		January 1, 2019
Right-of-use assets (*1)	₩	127,311
Lease liabilities (*1)(*2):		
Operating lease commitments as of December 31, 2018	₩	126,063
Discounted amount using the lessee's incremental borrowing rate at the date of initial application		122,331
Value-added tax		(10,507)
Lease liabilities recognized as of the date of initial application	₩	111,824

(*1) Right-of-use assets and lease liabilities are included in tangible assets and other liabilities, respectively.
(*2) The Group discounted lease liabilities using the incremental borrowing rate of the Group as of January 1, 2019, when measuring lease liabilities for leases that were classified as operating leases in accordance with K-IFRS 1017. The incremental borrowing rate applied is 1.82% to 2.19%.

The same amounts of the right-of-use assets and the lease liabilities were recognized and additional adjustments were recognized due to the amount of any prepaid or accrued lease payments relating to that lease recognized in the statement of financial position immediately before the date of initial application. Accordingly, tangible assets increased by ₩127,311 million and prepaid expenses decreased by ₩15,487 million on January 1, 2019. There was no effect on retained earnings due to the application of K-IFRS 1116.

On December 16, 2019, the International Financial Reporting Standards ("IFRS") Interpretations Committee decided that when the lessee and the lessor each has the right to terminate the lease without permission from the other party, the enforceable period is determined considering the economic disadvantage relating to the termination of lease contract. In accordance with the decision, the Group is analyzing the effects on the consolidated financial statements when the accounting policy on the enforceable period is changed and will reflect the effects after the analysis.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.2 Changes in significant accounting policies and disclosures (cont'd)

Enactments of K-IFRS 1109, *Financial Instruments*
Under amendments to K-IFRS 1109, a financial instrument that has prepayment features with negative compensation can be measured at amortized cost, and when financial liabilities measured at amortized cost modify the terms of the contract, but are not derecognized, the entity recognizes modification gains or losses in profit or loss. The amendments are effective for periods beginning on or after January 1, 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to K-IFRS 1028, *Long-Term Interests in Associates and Joint Ventures*
The amendments clarify that an entity applies K-IFRS 1109 to long-term interests in an associate or joint venture to which the equity method is not applied, but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the ECL model in K-IFRS 1109 applies to such long-term interests. The amendments will not have a material impact on the Group's consolidated financial statements.

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Amendments to K-IFRS 1012, *Income Taxes*
K-IFRS 1012.57A applies to all income tax consequences of dividends and the amendments apply that an entity recognizes the income tax consequences of dividends in profit or loss, other comprehensive income ("OCI") or equity according to where the entity originally recognized those past transactions or events. These amendments have no impact on the consolidated financial statements of the Group.

K-IFRS 1023, *Borrowing Costs*
The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to K-IFRS 1103, *Business Combinations*
The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to K-IFRS 1111, *Joint Arrangements*
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 as defined in K-IFRS 1103. The amendments clarify that the previously held interests in that joint operation are not remeasured. These amendments have no impact on the consolidated financial statements of the Group.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.2 Changes in significant accounting policies and disclosures (cont'd)

Amendments to K-IFRS 1019, *Employee Benefits Plan Amendment, Curtailment or Settlement*
The amendments clarify that the past service cost (or of the gain or loss on settlement) is calculated by measuring the defined benefit liability (asset) using updated assumptions and comparing benefits offered and plan assets before and after the plan amendment (or curtailment or settlement) but ignoring the effect of the asset ceiling (that may arise when the defined benefit plan is in a surplus position). K-IFRS 1019 19 is now clear that the change in the effect of the asset ceiling that may result from the plan amendment (or curtailment or settlement) is determined in a second step and is recognized in the normal manner in other comprehensive income.

The paragraphs that relate to measuring the current service cost and the net interest on the net defined benefit liability (asset) have also been amended. The Group will now be required to use the updated assumptions from this remeasurement to determine current service cost and net interest for the remainder of the reporting period after the change to the plan. In the case of the net interest, the amendments make it clear that for the period post plan amendment, the net interest is calculated by multiplying the net defined benefit liability (asset) as remeasured under K-IFRS 1019:99 with the discount rate used in the remeasurement (also taking into account the effect of contributions and benefit payments on the net defined benefit liability (asset)). These amendments have no impact on the consolidated financial statements of the Group.

Amendments to K-IFRS 1115, *Revenue from Contracts with Customers*
This amendment relates to prevent the revision of meaning 'contract' referred in K-IFRS 1115 paragraph 129.1 to 'individual contract' in relation to 'additional disclosure of contracts based on contract costs incurred to date', so that even if application of K-IFRS 1115 is adopted, the range of disclosure has not been reduced. In addition, K-IFRS 1115 does not distinguish the types of contracts that the service contracts that did not qualify for the application of K-IFRS 1011 in paragraph 45.1 can be qualified in K-IFRS 1115 paragraph 129.1 and it is to clarify that the range of the contracts subject to make disclosure in accordance with paragraph 129.1 can be expanded compared to the previous standard. These amendments have no impact on the consolidated financial statements of the Group.

Enactment to Interpretation of Korean IFRS 2123 *Uncertainty over Income Tax Treatments*
The interpretation sets out how to determine the accounting tax position when there is an uncertainty over income tax treatments. The interpretation requires the Group to:

- Determine whether uncertain tax positions are assessed separately or as a group; and
- Assess whether it is probable that a tax authority will accept an uncertain tax treatment used, or proposed to be used, by an entity in its income tax filings:
  - If yes, the Group should determine its accounting tax position consistently with the tax treatment used or planned to be used in its income tax filings.
  - If no, the Group should reflect the effect of uncertainty in determining its accounting tax position using either the most likely amount or the expected value method.

The interpretation will not have a material impact on the Group's consolidated financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.3 Standards issued but not yet effective

The standards and interpretations that are issued, but not effective, until the issuance day of the Group's consolidated financial statements are as follows:

Amendments to K-IFRS 1103, *Business Combinations - Definition of a Business*
The amendments clarify that while businesses usually have outputs, outputs are not required for an integrated set of activities and assets to qualify as a business. To be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. Additional guidance is provided that helps to determine whether a substantive process has been acquired.

The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar assets.

The amendments are applied prospectively to all business combinations and asset acquisitions for which the acquisition date is on or after the first annual reporting period beginning on or after January 1, 2020, with early application permitted. The amendments will not have a material impact on the Group's financial statements.

Amendments to References to the Conceptual Framework in K-IFRS Standards
Together with the revised conceptual framework, which became effective upon publication on December 21, 2018, the International Accounting Standards Board (IASB) has also issued amendments to references to the conceptual framework in IFRS. The document contains amendments to K-IFRS 1102, K-IFRS 1103, K-IFRS 1106, K-IFRS 1114, K-IFRS 1001, K-IFRS 1008, K-IFRS 1034, K-IFRS 1037, K-IFRS 1038, K-IFRS 2112, K-IFRS 2119, K-IFRS 2120, K-IFRS 2122, and K-IFRS 2032.

Not all amendments, however, update those pronouncements with regard to references to and quotes from the framework so that they refer to the revised conceptual framework. Some pronouncements are only updated to indicate which version of the framework they are referencing to (the IASC Framework adopted by the IASB in 2007, the IASB Framework of 2010, or the new revised framework of 2018) or to indicate that definitions in the standard have not been updated with the new definitions developed in the revised conceptual framework.

The amendments, where they actually are updates, are effective for annual periods beginning on or after January 1, 2020, with early application permitted. The amendments will not have a material impact on the Group's financial statements.

Amendments to K-IFRS 1109, *Financial Instruments*, and 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 regard 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 the 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 amendments will not have a material impact on the Group's financial statements.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies

The significant accounting policies that the Group adopts in preparing the consolidated financial statements are as follows.

2.4.1 Consolidation

The consolidated financial statements incorporate the financial statements of the Group and entities (including structured entities) controlled by the Group (and its subsidiaries). Control is achieved where the Group 1) has the power over the investee; 2) is exposed, or has rights, to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- The size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- Potential voting rights held by the Group, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Income and expenses of subsidiaries that are acquired or disposed of during the year are included in the consolidated statements of profit or loss and other comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. The carrying amount of non-controlling interests is adjusted to reflect their proportional share of changes in equity subsequent to the initial recognition. Total comprehensive income of subsidiaries is attributed to the owners of the Group and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

If a subsidiary uses accounting policies other than those adopted in the consolidated financial statements for transactions and events in similar circumstances, appropriate adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with those used by the Group.

All intragroup balances and transactions, income and expenses are fully eliminated in consolidation.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the controlling interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Group.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in other comprehensive income and accumulated in equity, the amounts previously recognized in other comprehensive income and accumulated in equity are accounted for as if the Group had directly disposed of the relevant assets (i.e., reclassified to profit or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under K-IFRS 1109 or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.2 Business combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:
- Deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with K-IFRS 1012 Income Taxes and K-IFRS 1019, respectively;
- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with K-IFRS 1102 Share-Based Payment at the acquisition date; and
- Assets (or disposal groups) that are classified as held for sale in accordance with K-IFRS 1105 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any), over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another K-IFRS.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement-period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement-period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement-period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with K-IFRS 1109 *Financial Instruments,* as appropriate, with the corresponding gain or loss being recognized in profit or loss or other comprehensive income or loss. If K-IFRS 1109 is not applied to contingent consideration, the Group applies another K-IFRS to measure.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.2 Business combination (cont'd)

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

2.4.3 Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not having control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case, it is accounted for in accordance with K-IFRS 1105. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

Upon disposal of an associate or a joint venture that results in the Group losing significant influence over that associate or joint venture, any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset in accordance with K-IFRS 1109. The difference between the previous carrying amount of the associate or joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate or joint venture on the same basis it would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as reclassification adjustment) when it loses significant influence over that associate or joint venture.

When the Group reduces its ownership interest in an associate or a joint venture but continues to use the equity method, it reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income related to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities. In addition, the Group applies K-IFRS 1105*, Non-current Assets Held for Sale and Discontinued Operations*, to a portion of investment in an associate or a joint venture that meets the criteria to be classified as held for sale.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.3 Investments in associates (cont'd)

The requirements of K-IFRS 1109 are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with K-IFRS 1036 by comparing its recoverable amount (higher of value in use and fair value, less costs to sell) with its carrying amount, and any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with K-IFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

When the Group transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

The Group applies K-IFRS 1109, including the impairment requirements, to long-term interests in an associate or joint venture to which the equity method is not applied and which form part of the net investment in the investee. Furthermore, in applying K-IFRS 1109 to long-term interests, the Group does not take into account adjustments to their carrying amount required by K-IFRS 1028 (i.e., adjustments to the carrying amount of long-term interests arising from the allocation of losses of the investee or assessment of impairment in accordance with K-IFRS 1028).

2.4.4 Goodwill

Goodwill arising from business combination is measured at cost, less any accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units ("CGUs") (or groups of CGUs) expected to benefit from the synergies of the combination.

CGUs to which goodwill has been allocated are tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the CGU is less than the carrying amount of the unit, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the 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. On disposal of a CGU, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

2.4.5 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and their fair value.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.6 Revenue recognition

Under K-IFRS 1115, revenue is recognized by applying a five-stage revenue recognition model ((1) Identify a contract with a customer. → (2) Identify the performance obligations in the contract. → (3) Determine the transaction price → (4) Allocate the transaction price to the separate performance obligations in the contract. → (5) Recognize revenue when the entity satisfies a performance obligation) to its all contracts with customers.

1) Dividend and interest income

Dividend income from investments is recognized when the shareholders' right to receive payment has been established.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

2) Commission income

According to the imposition purpose of the commission and related accounting standards for financial assets, commission income is classified and accounted for as follows:

Classification	Details
Commission composing effective revenues of the financial instruments	Accounted for as an adjustment to the effective interest rate
Commission by rendering services	Recognized revenue when the services are provided
Commission by performing significant activities	Recognized revenue when significant activities have been completed

3) Customer loyalty program

The Group provides its customers with incentives to buy goods or services by providing awards called (customer loyalty programs) and allocates the fair value of the consideration received or receivable between the award credits granted and the other components of the revenue transaction. The Group supplies the awards, such as discounted payments or free gifts. The consideration allocated to the award credits is measured by reference to their fair value, i.e., the amount for which the award credits could be sold separately. The fair value of the consideration allocated to the award credits is estimated by taking into account expected redemption rates, etc., and recognized as deferred revenue until the Group fulfills its obligations to deliver awards to customers.

The amount of revenue recognized is to be based on the number of award credits that have been redeemed in exchange for awards, relative to the total number expected to be redeemed. If a third party supplies the awards, the Group shall assess whether it is collecting the consideration allocated to the award credits on its own account (as the principal in the transaction) or on behalf of the third party (as agent for the third party). The amount of revenue recognized shall be the net amount retained on its own account.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.7 Foreign currencies

In preparing the Group's consolidated financial statements, transactions in currencies other than the Group's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are recognized in net income in the period in which they arise, except for:

- Exchange differences on foreign currency borrowings related to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks (see Note 2.4.17 above for hedging accounting policies); and
- Exchange differences on monetary items receivable from or payable to a foreign operation for which, in the foreseeable future, settlement is neither planned nor likely to occur (therefore, forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to net income on disposal or partial disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case, the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

2.4.8 Retirement benefit costs and termination benefits

The Group operates defined benefit retirement benefit plans. For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with an independent actuary being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, of the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods. Past service costs are recognized in profit or loss on the earlier of the date of the plan amendment or curtailment, and the date that the Group recognizes restructuring-related costs. Net interest is calculated by applying the discount rate to the defined benefit pension plans or asset. Defined benefit costs are composed of service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income) and remeasurement.

The Group presents the service cost and net interest expense (income) components in profit or loss, and the remeasurement component in other comprehensive income.

The retirement benefit obligation recognized in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognized at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the Group recognizes any related restructuring costs.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.9 Income tax

Income tax consists of current tax and deferred tax.

1) Current tax

The current tax payable is based on taxable profit for the year. Taxable profit differs from profit in the consolidated statements of profit or loss and other comprehensive income because taxable profit excludes items taxable or deductible for different tax years or not taxable or deductible permanently. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured using the tax rates that are expected to be applied in the period in which the liability is settled or the asset realized, 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 assets reflects 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 shall offset deferred tax assets and deferred tax liabilities if, and only if, it has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and the deferred 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 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 tax liabilities or assets are expected to be settled or recovered.

If a deferred tax liability or asset arises from investment property that is measured using the fair value model in K-IFRS 1040 *Investment Property*, there is a rebuttable presumption that the carrying amount of the investment property will be recovered through sale. Accordingly, unless the presumption is rebutted, the measurement of the deferred tax liability or deferred tax asset shall reflect the tax consequences of recovering the carrying amount of the investment property entirely through sale. This presumption is rebutted if the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment property over time, rather than through sale.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.9 Income tax (cont'd)

3) Recognition of current and deferred taxes for the year

Current and deferred taxes are recognized in net income, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2.4.10 Tangible assets

Tangible assets are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of tangible assets is directly attributable to their purchase or construction, which includes any cost directly attributable to bringing the asset to the location and the condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the assets and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of an asset or as an asset separately if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. The carrying amount of those parts that are replaced is derecognized. Routine maintenance and repairs are expensed as incurred.

The Group does not depreciate land. Depreciation expense is computed using the straight-line method, and the estimated useful lives of the assets are as follows:

Classification	Estimated useful life
Buildings	10–60 years
Leasehold improvements	4–5 years
Furniture and equipment	4 years

Each part of property and equipment with a cost that is significant in relation to the total cost is depreciated separately.

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual instalments. When loans or similar assistance are provided by the government or related institutions, with an interest rate below the current applicable market rate, the effect of this preferential interest is regarded as a government grant.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.11 Government grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual instalments. When loans or similar assistance are provided by the government or related institutions, with an interest rate below the current applicable market rate, the effect of this preferential interest is regarded as a government grants.

2.4.12 Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. The carrying amount of parts that are replaced is derecognized due to subsequent expenditure. Routine maintenance and repairs are expensed as incurred.

While land is not depreciated, all other investment properties are depreciated based on the respective assets' estimated useful lives of 10 to 60 years using the straight-line method.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

An investment property is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of investment properties, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in net income in the period in which the asset is derecognized.

2.4.13 Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

2) Internally generated intangible assets - research and development cost

Expenditure on research activities is recognized as an expense in the period in which it is incurred.
An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.13 Intangible assets (cont'd)

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally generated intangible asset can be recognized, development expenditure is recognized in net income in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses.

3) Derecognition of intangible assets

An intangible asset is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in net income in the period in which the asset is derecognized.

2.4.14 Lease

1) The Group as lessee

At the commencement date, the Group assesses whether the lessee is reasonably certain to exercise an option to extend the lease or to purchase the underlying asset, or not to exercise an option to terminate the lease. For a contract that contains a lease component and one or more additional lease or non-lease components, a lessee shall allocate the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components. Lease contracts are negotiated individually by lessors and contain a wide range of different terms and conditions. The lease contracts do not impose any covenants, but leased assets may not be used as security for borrowing purposes. The Group recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee.

An entity shall determine the lease term as the non-cancelable period of a lease, together with both periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. A lease is no longer enforceable when the lessee and the lessor each has the right to terminate the lease without permission from the other party with no more than an insignificant penalty.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments (including in-substance fixed payments), less any lease incentives receivable;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- The amount expected to be payable by the lessee under residual value guarantees;
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

Lease payments are discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.14 Lease (cont'd)

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The right-of-use asset is measured at its cost, less subsequent accumulated depreciation and accumulated impairment loss, with adjustments reflected arising from remeasurements of the lease liability. The costs of the right-of-use asset comprise the amount of the initial measurement of the lease liability, any initial direct costs incurred by the lessee and any lease payments made at or before the commencement date, less any lease incentive received.

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis from the commencement date of the lease. If the lease transfers ownership of the underlying asset to the lessee by the end of the lease term or if the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the lessee shall depreciate the right-of-use asset from the commencement date to the end of the useful life of the underlying asset.

The Group applies the recognition exemption for leases of low-value assets (e.g., office supplies and information technology (IT) equipment) and short-term leases (i.e., leases with a lease term of 12 months or less). In these cases, lease payments are charged to profit or loss on a straight-line basis over the period of lease.

2) The Group as lessor

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

2.4.15 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to, except for goodwill, determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual CGUs, or otherwise, they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value, less costs to sell, and value in use. If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or the CGU) is reduced to its recoverable amount and the reduced amount is recognized in net income.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the CGU) in prior years. A reversal of an impairment loss is recognized immediately in net income.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.16 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation and the amount of the obligation is reliably estimated.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

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.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

The Group recognizes provisions related to unused credit card point, guarantees and litigations. In addition, provisions for decommissioning or restoration are recognized in relation to restoration of rented assets, which are utilized as the place of business under the rental agreements. Decommissioning or restoration costs are present value of expected costs of restoration using future cash outflows.

2.4.17 Financial assets

A financial asset is recognized when the Group becomes a party to the contract and at initial recognition. A financial asset, excluding a financial asset at FVTPL, is measured at its fair value, plus or minus transaction costs that are directly attributable to the acquisition of the financial asset. Otherwise, the transaction cost that is directly attributable to the acquisition of the financial asset at FVTPL is recognized in profit or loss immediately when it arises.

A regular-way purchase and sale of financial assets is recognized and derecognized at trade date. It is a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

1) Effective interest method

The effective interest rate method is used for calculating the amortized cost of a debt instrument and allocating interest income over the relevant period. The effective interest rate is the interest rate that exactly matches the present value of the estimated future cash outflows or cash inflows of a financial asset to the total carrying amount (or amortized cost) over the expected duration. Estimated cash flows should be estimated taking into account all of the terms and conditions of the financial assets and, in the case of financial assets with impaired credit on acquisition, additional ECLs should be considered.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.17 Financial assets (cont'd)

2) Financial assets at FVTPL

Financial assets at FVTPL include financial assets that are held for trading purposes, designated as financial assets at FVTPL or financial assets that are not classified as measured at FVTOCI or measured at amortized cost.

The Group has options to designate on initial recognition any financial asset as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities on different bases or recognizing the gains and losses on them on different bases.

Financial assets at FVTPL are measured at fair value and the change in value is recognized in income (loss) for the period. Dividend or interest income from financial assets at FVTPL is also recognized in income (loss) for the period.

3) Financial assets at FVTOCI

Financial assets at FVTOCI include the financial debts that is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. If the Group invests the financial equities as a 'strategic investment' issued by another entity, it designates it as financial assets at FVTOCI.

Financial assets at FVTOCI are subsequently measured at fair value. Gains and losses arising from changes in fair value are recognized and accumulated in other comprehensive income, with the exception of interest calculated using the effective interest rate method and foreign exchange gains and losses on monetary financial assets at FVTOCI, which are recognized in income (loss) for the period.

Where the financial assets at FVTOCI are disposed of or are determined to be impaired, the cumulative gains or losses previously accumulated in the other comprehensive income are recognized in income (loss) for the period; but where the financial securities designated at FVTOCI are disposed, the cumulative gains or losses previously accumulated in the other comprehensive income are not recognized in income (loss) for the period.

Fair value of monetary financial assets at FVTOCI denominated in foreign currencies is measured in foreign currencies and translated at the rates prevailing at the end of the reporting period. Gains on translation of the assets recognized in income (loss) for the period are determined based on amortized cost of the monetary assets and other gains on translation of the assets are recognized in other comprehensive income.

4) Financial assets at amortized cost

The Group measures financial assets at amortized cost if the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Subsequent to initial recognition, the Group measures the amortized cost using the effective interest rate method and deducts the loss allowance from the amortized cost. Interest income is recognized using the effective interest method. LOCs incurred from loan origination are deferred and presented as a deduction from the balance of loan, and LOF accompanying the future economic benefits that are separately identified and reconciled to the loan transaction is deferred and presented as an addition to the balance of loan. The deferred LOF/letter of credit (LOC) is amortized using the effective interest rate method with the amortization recognized as adjustments to interest revenue.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.17 Financial assets (cont'd)

5) ECLs on financial assets

For financial assets except for financial assets at FVTPL, impairment loss is calculated by the measurement of ECL at the end of the reporting period. ECL reflects an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes, the time value of money and reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

- General approach: Financial assets that are not classified as purchased or originated credit-impaired financial assets or off-balance unused credit limits
- Credit-impaired approach: Financial assets that are classified as purchased or originated credit-impaired financial assets

The method of general approach recognition of ECL is different according to whether the credit risk on that financial asset has increased significantly since initial recognition. At the reporting date, if the credit risk on a financial asset has not increased significantly since initial recognition, the Group measures the loss allowance for those financial assets at an amount equal to 12-month ECLs, and at each reporting date, it measures the loss allowance for a financial asset at an amount equal to the lifetime ECLs if the credit risk on that financial instrument has increased significantly since initial recognition. The lifetime refers to the contractual maturity over the expected life of a financial instrument. The information that the Group may use, on a financial instrument to determine whether there has been significant increase in credit risk since initial recognition, is (but not limited to) as follows:

- Significant change of credit ratings at initial recognition date or the reporting date
- Monitoring ratings by an early alert system
- Adverse or disclaimer opinion on auditors' report
- Overdue period, etc.

a. Forward-looking information
The Group uses forward-looking information on determining whether there has been an increase in credit risk or measuring ECL. The Group assumes that a statistical correlation exists between the risk component and the economic cycle and recognizes ECL reflecting forward-looking information to measure the risk component by modeling between the macroeconomic environment and the risk component. The forward-looking information used to recognize ECL reflects the analysis of risk situations, etc.

b. Measurement of ECL of financial assets at amortized cost
ECL of financial assets at amortized cost is the present value of the difference between the contractual cash flows that are due under the contract and the cash flows that are expected to be received. For financial assets that are individually significant, the Group calculates future cash flows. For financial assets that are not individually significant, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for measuring ECL.

① Allowance for ECLs by individual assessment
Allowance for losses on credit is measured by the best estimate of the cash flows that the Group expects to receive. The Group expects the cash flows by reasonable and supportable information available, considering borrower's future ability to repay the debt, including its management performance and financial position, overdue period and mortgage amount, etc.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.17 Financial assets (cont'd)

② Allowance for ECLs by collective assessment

Allowance for losses on credit is recognized by adjusting probability ECL, based on historical loss data that reflects the forward-looking information. Such approach considers elements, including loan and borrower type, credit ratings, and size of portfolio and collection period, and allowance for losses on credit by collective assessment is recognized by adjusting probability of default ("PD") and loss given default ("LGD"). And the assumptions are consistently applied so as to model the measurement of built-in loss and determine input variables based on historical loss experience and current conditions. This approach and assumptions are regularly conducted to reduce the difference between the allowance for losses for loss and the actual loss.

ECLs of financial assets at amortized cost, that is the allowance for ECLs, are deducted from the balance of loans and receivables. They are deducted from allowance for ECLs when the asset is considered unrecoverable. If it is subsequently recovered, the allowance for ECLs increases and the changes are recognized in net income.

c. ECLs on financial debts at FVTOCI

ECL on financial debts at FVTOCI is measured by using the same approach as for the financial assets at amortized cost, and the changes in allowance for losses are recognized in other comprehensive income. Where the financial debts at FVTOCI are disposed of or are repaid, allowance for losses is reclassified to net income in the current period.

6) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, it recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, it continues to recognize the financial asset and recognize a liability for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the carrying amount of the asset and the consideration received shall be recognized as a gain or loss on derecognition in net income in the current period. However, accumulated evaluation gain (loss) from financial assets at FVTOCI is not recognized in net income in the current period.

If the transfer of a part of a financial asset is qualified for derecognition, the entire carrying amount of the transferred financial asset shall, between the part that is derecognized and the part that is still recognized, be apportioned according to their respective relative fair value of that part. The difference between (1) the consideration for the part derecognized and (2) the sum of accumulated other comprehensive income and the carrying amount allocated to the part derecognized is recognized in net income in the current period. Accumulated gain (loss) recognized as other comprehensive income (loss) shall, between the part which is derecognized and the part which is still recognized, be apportioned according to its respective relative fair value of those parts.

7) Offset of financial assets and liabilities

Financial assets and liabilities shall be offset only when the Group has the legal right to set off assets and liabilities and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.18 Financial liabilities and equity instruments

1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or equity in accordance with the substance of the contractual arrangement and the definition of financial liabilities and equity instruments.

2) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

3) Financial liabilities

A financial liability is recognized when the Group becomes a party to the contract and at initial recognition. A financial liability other than financial liability at FVTPL is measured at its fair value, plus or minus transaction costs that are directly attributable to the issue of the financial liability. Otherwise, the transaction cost that is directly attributable to the issue of the financial liability at FVTPL is recognized in income (loss) for the period immediately when it arises.

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities.

a. Financial liabilities at FVTPL

Financial liabilities are classified as of FVTPL when the financial liability either is held for trading or is designated as liability at FVTPL.

A financial liability is classified as held for trading if:
- It has been issued principally for the purpose of repurchasing in the near term, or
- On initial recognition, it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- It is a derivative that is not designated as a hedging instrument and that is ineffective for hedging

A financial liability other than a financial liability held for trading may be designated as of FVTPL upon initial recognition if:
- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- In accordance with the Group's documented risk management or investment strategy, the financial liability forms a part of a group of financial assets or financial liabilities, or both, which is managed, and its performance is evaluated on a fair value basis, and information about the performance is provided internally on that basis; or
- It forms a part of a contract containing one or more embedded derivatives, and K-IFRS 1109 permits the entire combined contract to be designated as of FVTPL

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on remeasurement recognized in net income. Changes in fair value for changes in own credit risk on financial liabilities designated at FVTPL are recognized in other comprehensive income. In addition, the transaction costs incurred related to issuance upon initial recognition are recognized in net income.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.18 Financial liabilities and equity instruments (cont'd)

b. Other financial liabilities

Other financial liabilities are subsequently measured at amortized cost using the effective interest rate method, with interest expense recognized on an effective yield basis.

The effective interest rate method is used for calculating the amortized cost of a financial liability, and of allocating interest expense over the relevant period. The effective interest rate is the discounted rate used to estimate the net carrying value of future cash payment, including commission and points to be paid or received, transaction cost and other premium or discounts throughout the expected life of financial liability, or, where appropriate, a shorter period.

c. Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, its obligations are discharged, canceled or expired. The difference between the consideration paid and the carrying amount of a derecognized financial liability is recognized in net income.

4) Hybrid equity securities

Hybrid equity are classified as equity when all requirements for equity classification are satisfied in conformity with contract terms at issuance.

5) Financial guarantee contract

A financial guarantee contract refers to the contract that requires the issuer to pay the specified amounts to reimburse the holder for a loss because the specified debtor fails to make payment when due under original or revised contractual terms of debt instruments. The financial guarantee contract is measured on initial recognition at the fair value, and the fair value is amortized over the financial guarantee contract term.

After initial recognition, financial guarantee contract is measured at the higher of:
- The amount of the obligation under the contract, as determined in accordance with K-IFRS 1109 *Financial Instruments* and
- The amount initially recognized, less cumulative amortization recognized in accordance with the K-IFRS 1115, *Revenue from Contracts with Customers*

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.19 Derivative financial instruments

The Group enters into a variety of derivative contracts to manage its exposure to interest rate and foreign exchange rate risk associated with the financials instruments, including currency forward contracts, interest rate swaps and cross-currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. Derivatives used for trading purposes are recognized as financial assets and liabilities at FVTPL, and derivatives for hedging purposes are recognized as hedging-purpose derivative assets and liabilities in the consolidated financial statements at fair value.

The resulting gain or loss is recognized in net income immediately, unless the derivative is designated and effective as a hedging instrument, in which case, the timing of the recognition in net income depends on the nature of the hedge relationship. The fair value hedge or cash flow hedge accounting is applied to the derivatives when the derivatives meet the certain requirements for hedging.

A derivative with a positive fair value is recognized as a financial asset, and a derivative with a negative fair value is recognized as a financial liability.

1) Embedded derivatives

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at FVTPL.

2) Hedge accounting

At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

- There is an economic relationship between the hedged item and the hedging instrument;
- The effect of credit risk does not dominate the value changes that result from that economic relationship; and
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

3) Fair value hedges

Changes in the fair value of derivatives that are designated and qualified for fair value hedges are recognized in net income immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Hedge accounting treatment is no longer applied when the Group revokes the hedge designation; when the derivative expires or is sold, terminated or exercised; or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to net income from that date.

2. BASIS OF PREPARATION AND SIGNIFICANT ACCOUNTING POLICIES (CONT'D):

2.4 Significant accounting policies (cont'd)

2.4.19 Derivative financial instruments (cont'd)

4) Day 1 profit

When the Group assesses fair values of over-the-counter derivatives using inputs that are not based on the observable market data, the Group does not recognize the difference between the transaction price and fair value (a Day 1 profit or loss) in the consolidated statements of profit or loss and other comprehensive income, but defers and recognizes it as an asset. The difference is depreciated during the trading period of financial instruments using the straight-line method.

2.4.20 Fair values

1) Valuation techniques and assumptions applied in measurement of fair values

Fair values of financial assets or liabilities are determined as follows:

Classification	Fair value measurement
Financial assets and liabilities designated at FVTPL	Financial assets and liabilities designated at FVTPL are measured at fair value based on valuation performed by independent professionals or the estimated amount using the valuation model of the Group.
Financial assets/liabilities at FVTPL and financial assets at FVTOCI	Government and public bonds and listed stocks in financial assets/liabilities at FVTPL and financial assets at FVTOCI are measured at fair value based on the quoted prices in active market. If quoted price in an active market or the estimated amount using valuation model of the Group does not exist, the Group uses fair value based on valuation performed by independent professionals.
Securities at amortized cost	Fair value of securities at amortized cost is based on valuation performed by independent professionals.
Loans at amortized cost	Fair value of loans at amortized cost is computed by discounting expected future cash flows using the market interest rate used for homogeneous loans.
Derivative assets and liabilities	Fair value of derivatives is computed using the quoted prices if they are traded in active market. If quoted price in active market does not exist, fair value of derivatives is computed using internal valuation techniques.
Deposits and borrowings	Fair value of deposits and borrowings is computed by discounting future cash flows using the yield of debentures issued by the Group.
Debentures	In principle, fair values of debentures are computed by discounting future cash flows using the yield of debentures issued by the Group. However, some of them are based on valuation performed by independent professionals.

2) Three-level fair value hierarchy

The Group classifies financial assets or liabilities measured by fair values by reference to the source of inputs used to derive the fair values. The classification is as follows:

Classification	Details
Level 1	Quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2	Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
Level 3	Inputs for the asset or liability that are not based on the observable market data (unobservable inputs)

3. SIGNIFICANT JUDGMENTS AND ESTIMATIONS:

Under K-IFRS, management is required to make judgments, estimates and assumptions that affect the accounting policies and the reported amounts of assets, liabilities, income and expenses in preparation of consolidated financial statements. When the estimates and associated assumptions based on the management's optimal determination at the end of reporting period are not consistent with the actual environment, actual results may differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

3.1 Critical judgment in applying accounting policies

3.1.1 Effective hedge relationships

As described in Note 2.3.16, the Group designates certain derivatives as hedges when the hedge is expected to be highly effective in offsetting the exposure to changes in the hedged item's fair value or cash flows. The Group continuously assesses the effectiveness of the hedge during the hedging period and determines if the hedge has been highly effective throughout the financial reporting periods for which the hedge was designated, prospectively.

Also, fair value hedge accounting is applied for the purpose of avoiding risk of fair value changes of recognized asset, liabilities or unrecognized confirmed contract as a whole or in part. Cash flow hedge accounting is applied for the purpose of avoiding risk of cash flow changes of recognized asset, liabilities and expected transactions that are highly likely to happen.

3.1.2 Business model

Classification and measurement of financial assets depends on the results of the SPPI and the business model test (please see financial assets sections of Note 2). The Group determines the business model at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. This assessment includes judgement reflecting all relevant evidence including how the performance of the assets is evaluated and their performance measured, the risks that affect the performance of the assets and how these are managed and how the managers of the assets are compensated. The Group monitors financial assets measured at amortized cost or FVTOCI that are derecognized prior to their maturity to understand the reason for their disposal and whether the reasons are consistent with the objective of the business for which the asset was held. Monitoring is part of the Group's continuous assessment of whether the business model for which the remaining financial assets are held continues to be appropriate and if it is not appropriate whether there has been a change in business model and so a prospective change to the classification of those assets. No such changes were required during the periods presented.

3.1.3 Significant increase in credit risk

As explained in Note 2, ECLs are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. IFRS 9 does not define what constitutes a significant increase in credit risk. In assessing whether the credit risk of an asset has significantly increased, the Group takes into account qualitative and quantitative reasonable and supportable forward-looking information.

3. SIGNIFICANT JUDGEMENTS AND ESTIMATIONS (CONT'D):

3.2 Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk causing a material adjustment to the carrying amounts of assets and liabilities within the next fiscal year.

3.2.1 Determination of fair value

In order to determine fair values of financial assets and liabilities without observable market values, valuation techniques are necessary. Financial instruments for which transactions do not occur frequently and prices are less objective, extensive judgment is required with regard to liquidity, concentration, uncertainty of market factors and assumptions related to price determination and broad range of judgment of other risks. Management believes that valuation techniques and assumptions used in the determination of fair values for financial instruments are reasonable.

3.2.2 Allowance for losses on credit (allowance ECLs, provision for acceptances and guarantees and unused credit limits)

It is necessary to record provisions for acceptances and guarantees and unused credit limits and to record the allowance for ECLs for loans at amortized cost or financial assets at FVTOCI by performing an impairment test. The accuracy of allowance for losses on credit is determined by assumptions and variables used in the model to estimate expected cash flows by individual borrowers for individual assessment and estimation of allowance for losses on credit by collective method and guarantees/unused credit limit liabilities.

3.2.3 Measurement of present value of defined benefit obligation

Present value of defined benefit obligation is calculated by performing actuarial valuation using the projected unit credit method at the end of each reporting period. In order to apply actuarial valuation method, it is necessary to estimate the discount rate, rates of future salary increase, mortality, etc. The present value of defined benefit obligation includes significant uncertainty of the ultimate cost of defined benefit plan on such estimation as it may last in the long term.

3.2.4 Impairment of goodwill

When the Group tests goodwill for impairment, the recoverable amount of the CGU is determined based on a value in use calculation. To estimate the value in use, management calculates cash flow projections of the CGU and determines the relevant discount rate.

4. OPERATING SEGMENT INFORMATION:

The Group is organized into four operating segments as follows based on their products and services:

Segment	Main business activities
Personal financing	Personal banking services for general public - lending & borrowing, financial services, etc.
Corporate financing	Corporate banking services for conglomerates, small- and medium-sized companies, institutions - lending & borrowing, import and export supports, financial services, etc.
Credit card	Credit card services for credit card holders, etc.
Others	Activities other than the above

Details of net income by operating segment for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 3,012,486	₩ 1,730,217	₩ 572,593	₩ 304,003	₩ 5,619,299	₩ (452,104)	₩ 5,167,195
Net commission income (losses)	220,985	237,237	15,127	12,103	485,452	199,478	684,930
Net other operating income (losses)	(318,145)	(135,312)	(4,670)	(28,231)	(486,358)	(97,834)	(584,192)
	2,915,326	1,832,142	583,050	287,875	5,618,393	(350,460)	5,267,933
Operating expenses:							
General and administrative expenses	1,089,039	503,774	283,960	49,288	1,926,061	1,055,139	2,981,200
Operating income before credit losses and income tax expenses	1,826,287	1,328,368	299,090	238,587	3,692,332	(1,405,599)	2,286,733
Allowance for ECLs	-	-	-	-	-	189,189	189,189
Income tax expenses	-	-	-	-	-	580,469	580,469
Net income for the period	₩ 1,826,287	₩ 1,328,368	₩ 299,090	₩ 238,587	₩ 3,692,332	₩ (2,175,257)	₩ 1,517,075

	For the year ended December 31, 2018						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 2,833,154	₩ 1,715,753	₩ 565,146	₩ 203,801	₩ 5,317,854	₩ (232,160)	₩ 5,085,694
Net commission income (losses)	217,010	237,216	11,933	162,649	628,808	31,112	659,920
Net other operating income (losses)	(284,135)	(120,947)	(4,482)	(439,269)	(848,833)	284,109	(564,724)
	2,766,029	1,832,022	572,597	(72,819)	5,097,829	83,061	5,180,890
Operating expenses:							
General and administrative expenses	1,112,651	506,278	260,029	43,002	1,921,960	1,009,893	2,931,853
Operating income before credit losses and income tax expenses	1,653,378	1,325,744	312,568	(115,821)	3,175,869	(926,832)	2,249,037
Allowance for ECLs	-	-	-	-	-	585,482	585,482
Income tax expenses	-	-	-	-	-	440,986	440,986
Net income for the period	₩ 1,653,378	₩ 1,325,744	₩ 312,568	₩ (115,821)	₩ 3,175,869	₩ (1,953,300)	₩ 1,222,569

4. OPERATING SEGMENT INFORMATION (CONT'D):

Revenue from external customers for the years ended December 31, 2019 and 2018, and non-current assets as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Revenue from external customers: For the year ended December 31, 2019	Revenue from external customers: For the year ended December 31, 2018	Non-current assets: December 31, 2019	Non-current assets: December 31, 2018
Domestic	₩ 13,126,725	₩ 12,233,221	₩ 3,954,718	₩ 3,750,310
Foreign	26,663	25,766	1,963	1,711
	₩ 13,153,388	₩ 12,258,987	₩ 3,956,681	₩ 3,752,021

Trust accounts' assets and operating income of the Group as of and for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	As of and for the year ended December 31, 2019: Assets	As of and for the year ended December 31, 2019: Operating income	As of and for the year ended December 31, 2018: Assets	As of and for the year ended December 31, 2018: Operating income
Consolidated trust accounts	₩ 3,658,401	₩ 92,053	₩ 3,631,343	₩ 103,735
Unconsolidated trust accounts	37,400,098	841,639	34,372,634	697,815
	₩ 41,058,499	₩ 933,692	₩ 38,003,977	₩ 801,550

Receivables and payables between the Group and trust accounts as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification		December 31, 2019	December 31, 2018
Receivables	Accrued fee on trust accounts	₩ 18,038	₩ 17,162
Payables	Borrowings from trust accounts	₩ 700,474	₩ 1,755,465

Transactions between the Group and trust accounts for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification		December 31, 2019	December 31, 2018
Profit	Fees on trust accounts	₩ 109,144	₩ 87,984
Loss	Interest expenses	₩ 25,023	₩ 25,147

5. FINANCIAL ASSETS:

Details of book value and fair value of financial assets as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification		December 31, 2019 Book value	December 31, 2019 Fair value
Financial assets at FVTPL:			
Financial assets at FVTPL		₩ 9,523,943	₩ 9,523,943
Trading derivative assets		501,661	501,661
		10,025,604	10,025,604
Derivative assets:			
Hedging derivative assets		34,068	34,068
Financial assets at FVTOCI:			
Financial assets at FVTOCI		21,930,870	21,930,870
Financial assets at amortized cost:			
Deposits (*1)	Deposits in Korean won	2,271,471	2,271,471
	Deposits in foreign currency	1,649,110	1,649,110
		3,920,581	3,920,581
Debt securities (*1)		12,441,531	12,571,821
Loans (*2)	Loans in Korean won	210,441,970	213,904,922
	Loans in foreign currency	1,714,337	1,843,219
	Credit card receivables	7,323,588	7,433,526
	Others	18,315,191	18,358,902
		237,795,086	241,540,569
Receivables (*3 and *4)		3,104,821	2,839,509
		257,262,019	260,872,480
		₩ 289,252,561	₩ 292,863,022

(*1) Deposits and dept securities are presented at the net carrying amount after deduction of allowance for ECLs.
(*2) Loans are presented at net carrying amount after deduction of allowance for ECLs and present value discounts. Deferred LOF/LOC amounting to ₩324,173 million as of December 31, 2019, is excluded. (Note 10. (3))
(*3) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*4) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for ECLs and present-value discounts.

5. FINANCIAL ASSETS (CONT'D):

Classification		December 31, 2018 Book value	Fair value
Financial assets at FVTPL:			
Financial assets at FVTPL		₩ 10,152,290	₩ 10,152,290
Trading derivative assets		444,447	444,447
		10,596,737	10,596,737
Derivative assets:			
Hedging derivative assets		20,253	20,253
Financial assets at FVTOCI:			
Financial assets at FVTOCI		20,073,081	20,073,081
Financial assets at amortized cost:			
Deposits (*1)	Deposits in Korean won	2,360,369	2,360,369
	Deposits in foreign currency	1,900,485	1,900,485
		4,260,854	4,260,854
Debt securities (*1)		9,336,103	9,401,223
Loans (*2)	Loans in Korean won	199,625,804	201,197,475
	Loans in foreign currency	1,370,134	1,508,359
	Credit card receivables	6,823,215	6,936,154
	Others	19,497,103	19,566,761
		227,316,256	229,208,749
Receivables (*3 and *4)		5,001,847	4,724,598
		245,915,060	247,595,424
		₩ 276,605,131	₩ 278,285,495

(*1) Deposits and dept securities are presented at net carrying amount after deduction of allowance for ECLs.
(*2) Loans are presented at net carrying amount after deduction of allowance for ECLs and present value discounts. Deferred LOF/LOC amounting to ₩277,239 million as of December 31, 2018, is excluded. (Note 10. (3))
(*3) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*4) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for ECLs and present-value discounts.

Transferred financial assets derecognized not in their entirety as of December 31, 2019 and 2018, are as follows:

1) Bonds sold under repurchase agreements

Transferred bonds sold under repurchasable agreements with a condition to repurchase at a firm price derecognized not in their entirety as of December 31, 2019 and 2018, are as follow (Korean won in millions):

Classification		December 31, 2019
Transferred assets	Financial assets at FVTPL	₩ 321,561
Related liabilities	Bonds sold under repurchase agreements	303,400

Classification		December 31, 2018
Transferred assets	Financial assets at FVTPL	₩ 808,031
Related liabilities	Bonds sold under repurchase agreements	769,600

5. FINANCIAL ASSETS (CONT'D):

2) Securities for lending

In case the Group loans securities held by the Group, the ownership of the securities is transferred. However, those loaned securities must be returned at the end of the lending period. Therefore, as the Group holds most of the risks and rewards of the securities, it continues to recognize the entire securities for lending.

Securities for lending as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31 , 2018	Lending to
Financial assets at FVTPL - Debt securities	₩ 5,978	₩ 2,503	The Korea Securities Finance Corporation and others

The fair values of collateral available to sell or repledge, and collateral sold or repledged, regardless of debtor's default, as of December 31, 2019 and 2018, are as follows(Korean won in millions):

	December 31, 2019		December 31, 2018	
	Fair value of collateral held	Fair value of collateral sold and repledged	Fair value of collateral held	Fair value of collateral sold and repledged
Securities	₩ 13,838,187	₩ -	₩ 14,873,782	₩ -

6. CASH AND DUE FROM BANKS:

Cash and due from banks as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Details	Financial institution	Interest rate (%)	December 31, 2019	December 31, 2018
Cash in Korean won	Cash on hand	-	-	₩ 1,671,563	₩ 1,586,061
Cash in foreign currency	Cash on hand	-	-	353,898	347,803
Due from banks in Korean won	Reserve deposits	The Bank of Korea	-	1,849,487	1,384,850
	Non-monetary financial institution deposits	Korea Exchange and others	1.41	501	170,530
	Bank deposits	Other financial Institutions	0.92–2.00	104,061	171,809
	Other deposits	The Bank of Korea and others	1.21	317,431	633,271
				2,271,480	2,360,460
Due from banks in foreign currency	Reserve deposits		-	72,307	149,173
	Deposits at other banks		(-)1.00–8.00	1,550,833	1,744,470
	Time deposits		2.15–8.50	8,088	10,968
	Other deposits		1.55–1.90	21,754	13,730
				1,652,982	1,918,341
Allowance for ECLs				(3,881)	(17,947)
				₩ 5,946,042	₩ 6,194,718

6. CASH AND DUE FROM BANKS (CONT'D):

Changes in the total book value of due from banks for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 4,278,801	₩ -	₩ -	₩ 4,278,801
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	(122,000)	-	-	(122,000)
Financial assets originated or derecognized	(210,695)	-	-	(210,695)
Others (*1)	(21,644)	-	-	(21,644)
Ending balance	₩ 3,924,462	₩ -	₩ -	₩ 3,924,462

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 5,971,890	₩ -	₩ -	₩ 5,971,890
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Financial assets originated or derecognized	(1,775,856)	-	-	(1,775,856)
Business combinations	650	-	-	650
Others (*1)	82,117	-	-	82,117
Ending balance	₩ 4,278,801	₩ -	₩ -	₩ 4,278,801

(*1) Other changes are due to exchange rate fluctuations.

6. CASH AND DUE FROM BANKS (CONT'D):

Changes in allowance for ECLs of due from banks for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 17,947	₩ -	₩ -	₩ 17,947
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Reversal of allowance for ECLs	(14,663)	-	-	(14,663)
Others (*1)	597	-	-	597
Ending balance	₩ 3,881	₩ -	₩ -	₩ 3,881

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 6,970	₩ -	₩ -	₩ 6,970
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for ECLs	10,963	-	-	10,963
Others (*2)	14	-	-	14
Ending balance	₩ 17,947	₩ -	₩ -	₩ 17,947

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) Other changes are due to exchange rate fluctuations.

6. CASH AND DUE FROM BANKS (CONT'D):

Cash and due from banks in Korean won and in foreign currency that are restricted in use as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Financial institution	December 31, 2019	December 31, 2018	Reason for restriction
Reserve deposits in Korean won	The Bank of Korea	₩ 1,849,487	₩ 1,384,850	Required under the *Banking Act* and other related regulations
Other deposits in Korean won	The Bank of Korea	300,000	620,000	Required by the Bank of Korea for the purpose of liquidity management
Non-monetary financial institution deposits in Korean won	Korea Exchange	501	501	Penalty joint fund related to government bond transaction and guarantee deposit
Reserve deposits in foreign currency	The Bank of Korea	72,307	149,173	Required under the *Banking Act* and other related regulations
Other deposits in foreign currency	Other financial Institutions	21,754	13,730	Deposits related to derivatives trading
Deposit on securities and futures	Samsung Futures Inc. and seven others	849	145	Reserve securities and futures
Allowance for ECLs		(5)	(5)	
		₩ 2,244,893	₩ 2,168,394	

7. FINANCIAL ASSETS AT FVTPL:

Details of financial assets at FVTPL as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Equity securities:		
Marketable equity securities	₩ 110,676	₩ 71,774
Non-marketable equity securities	62,628	51,321
	173,304	123,095
Debt securities:		
Government bonds	1,399,304	1,353,064
Financial bonds	3,238,762	3,696,878
Corporate bonds	449,021	460,837
Public and private bonds	342,654	435,670
Others	64,919	29,588
	5,494,660	5,976,037
Other securities:		
Beneficiary certificate	2,875,764	2,556,130
Mutual fund	223,688	202,965
Foreign currencies	396,254	263,652
Others	340,958	1,001,704
	3,836,664	4,024,451
Loans	19,315	28,707
	₩ 9,523,943	₩ 10,152,290

The Group irrevocably designates a financial asset as measured at FVTPL at the time of initial recognition of the financial asset if doing so eliminates or significantly reduces the accounting mismatch. In this case, financial instruments designated as measured at FVTPL cannot be reversed. The Group does not hold financial instruments designated as measured at FVTPL as of December 31, 2019 and 2018.

Financial assets at FVTPL provided as collateral as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Provided to	Remarks	December 31, 2019	
		Pledged amount	Book value of securities provided as collateral
BNK Asset Management and 22 others	Interinstitutional repurchase sale	₩ 322,400	₩ 321,561
NH Futures Co., Ltd. and 11 others	Substitute securities for derivative transactions	19,460	22,678
Korea Securities depository and three others	Others	116,200	116,901
		₩ 458,060	₩ 461,140

Provided to	Remarks	December 31, 2018	
		Pledged amount	Book value of securities provided as collateral
KB Asset Management and 22 others	Interinstitutional repurchase sale	₩ 805,075	₩ 808,031
NH Futures Co., Ltd. and five others	Substitute securities for derivative transactions	8,760	9,107
Korea Securities depository and other	Others	75,200	75,463
		₩ 889,035	₩ 892,601

8. FINANCIAL ASSETS AT FVTOCI:

Details of financial assets at FVTOCI as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019	
Classification	Book value	Allowance for ECLs
Equity securities:		
Marketable equity securities	₩ 193,564	₩ -
Non-marketable equity securities	218,738	-
Foreign currencies	273	-
	412,575	-
Debt securities:		
Government bonds	3,557,499	-
Financial bonds	13,845,930	(588)
Corporate bonds	2,162,861	(715)
Public bonds	1,265,465	(126)
Foreign currencies	686,540	(189)
	21,518,295	(1,618)
	₩ 21,930,870	₩ (1,618)

	December 31, 2018	
Classification	Book value	Allowance for ECLs
Equity securities:		
Marketable equity securities	₩ 162,769	₩ -
Non-marketable equity securities	213,252	-
Foreign currencies	273	-
	376,294	-
Debt securities:		
Government bonds	3,330,236	-
Financial bonds	13,014,775	(537)
Corporate bonds	1,399,931	(489)
Public bonds	1,280,436	(108)
Foreign currencies	671,409	(251)
	19,696,787	(1,385)
	₩ 20,073,081	₩ (1,385)

Details of financial assets designated as measured at FVTOCI at December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Equity securities:		
Marketable equity securities	₩ 193,564	₩ 162,769
Non-marketable equity securities	218,738	213,252
Foreign currencies	273	273
	₩ 412,575	₩ 376,294

The Group designates financial assets that are held for strategic reasons as measured at FVTOCI, as these financial assets are not held for capital appreciation through investment. In other cases, they are classified as financial assets at FVTPL.

8. FINANCIAL ASSETS AT FVTOCI (CONT'D):

Details of disposal of equity securities at FVTOCI at December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	
	Fair value at the time of disposal	Accumulated profit and loss at the time of disposal
Equity securities:		
Marketable equity securities (*1)	₩ 44,816	₩ (4,134)

(*1) The effect of income tax is not considered.

Classification	December 31, 2018	
	Fair value at the time of disposal	Accumulated profit and loss at the time of disposal
Equity securities:		
Marketable equity securities (*1)	₩ 83,327	₩ (43,001)

(*1) The effect of income tax is not considered.

The Group disposed equity securities at FVTOCI for the year ended December 31, 2019, due to disposal of equity securities acquired by debt-equity swap. The Group will reclassify the accumulative profit or loss on equity securities at FVTOCI from other comprehensive income to retained earnings at the end of the year.

Details of financial assets at FVTOCI provided as collateral as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Provided to	Remarks	December 31, 2019	
		Pledged amount	Book value of securities provided as collateral
The Bank of Korea	Payment risk	₩ 2,020,000	₩ 2,036,736
	Daylight overdraft	600,000	604,376
	Borrowing	410,000	412,764
NH Investment & Securities Co., Ltd. and eight others	Credit enhancement for derivative transactions	33,159	33,430
Korea Securities Depository	Others	1,000	1,012
		₩ 3,064,159	₩ 3,088,318

Provided to	Remarks	December 31, 2018	
		Pledged amount	Book value of securities provided as collateral
The Bank of Korea	Payment risk	₩ 2,080,000	₩ 2,091,510
	Daylight overdraft	600,000	601,876
	Borrowing	590,000	592,222
NH Investment & Securities Co., Ltd. and 22 others	Credit enhancement for derivative transactions	240,525	240,760
Korea Securities Depository	Others	1,000	1,014
		₩ 3,511,525	₩ 3,527,382

8. FINANCIAL ASSETS AT FVTOCI (CONT'D):

Changes in the total book value of debt securities at FVTOCI for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 19,696,787	₩ -	₩ -	₩ 19,696,787
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	16,643,733	-	-	16,643,733
Disposal or repayment	(14,929,256)	-	-	(14,929,256)
Amortization of effective interest rate	(12,456)	-	-	(12,456)
Valuation	96,569	-	-	96,569
Others (*1)	22,918	-	-	22,918
Ending balance	₩ 21,518,295	₩ -	₩ -	₩ 21,518,295

(*1) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 17,988,470	₩ -	₩ -	₩ 17,988,470
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	21,538,280	-	-	21,538,280
Disposal or repayment	(19,922,220)	-	-	(19,922,220)
Amortization of effective interest rate	1,114	-	-	1,114
Valuation	64,842	-	-	64,842
Others (*1)	26,301	-	-	26,301
Ending balance	₩ 19,696,787	₩ -	₩ -	₩ 19,696,787

(*1) Other changes are due to exchange rate fluctuations.

8. FINANCIAL ASSETS AT FVTOCI (CONT'D):

Changes in allowance for ECLs of debt securities at FVTOCI for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,385	₩ -	₩ -	₩ 1,385
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for ECLs (*1)	305	-	-	305
Disposal	(79)	-	-	(79)
Others (*2)	7	-	-	7
Ending balance	₩ 1,618	₩ -	₩ -	₩ 1,618

(*1) The amount of reversal of allowance for ECLs due to repayment of debt securities is included.
(*2) Other changes are due to exchange rate fluctuations.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 945	₩ -	₩ -	₩ 945
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for ECLs (*2)	741	-	-	741
Disposal	(311)	-	-	(311)
Others (*3)	10	-	-	10
Ending balance	₩ 1,385	₩ -	₩ -	₩ 1,385

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) The amount of reversal of allowance for ECLs due to repayment of debt securities is included.
(*3) Other changes are due to exchange rate fluctuations.

9. SECURITIES AT AMORTIZED COST:

Details of securities at amortized cost as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019 Book value	December 31, 2019 Allowance for ECLs
Debt securities:		
Government bonds	₩ 4,973,080	₩ -
Financial bonds	3,069,105	-
Corporate bonds	3,950,166	(1,086)
Public bonds	450,275	(9)
	₩ 12,442,626	₩ (1,095)

Classification	December 31, 2018 Book value	December 31, 2018 Allowance for ECLs
Debt securities:		
Government bonds	₩ 3,181,042	₩ -
Financial bonds	1,419,824	(5)
Corporate bonds	4,026,327	(1,049)
Public bonds	710,042	(78)
	₩ 9,337,235	₩ (1,132)

Details of securities at amortized cost provided as collaterals as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Provided to	Remarks	December 31, 2019 Pledged amount	December 31, 2019 Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 3,730,000	₩ 3,706,046
	Daylight overdraft	310,000	307,914
	Borrowing	470,000	468,214
NH Futures Co., Ltd. and three others	Substituted securities for derivative transaction	26,000	26,000
NH Capital Co., Ltd. and another	Others	15,871	15,799
		₩ 4,551,871	₩ 4,523,973

Provided to	Remarks	December 31, 2018 Pledged amount	December 31, 2018 Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 2,200,000	₩ 2,165,991
	Daylight overdraft	366,000	362,759
	Borrowing	310,000	309,190
NH Futures Co., Ltd. and four others	Substituted securities for derivative transaction	36,000	35,997
Korea exchange and another	Others	14,725	14,627
		₩ 2,926,725	₩ 2,888,564

9. SECURITIES AT AMORTIZED COST (CONT'D):

Changes in the total book value for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	4,716,824	-	-	4,716,824
Repayment	(1,624,962)	-	-	(1,624,962)
Amortization of effective interest rate	13,529	-	-	13,529
Ending balance	₩ 12,442,626	₩ -	₩ -	₩ 12,442,626

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 8,231,407	₩ -	₩ -	₩ 8,231,407
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	2,009,376	-	-	2,009,376
Repayment	(914,309)	-	-	(914,309)
Amortization of effective interest rate	10,761	-	-	10,761
Ending balance	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235

9. SECURITIES AT AMORTIZED COST (CONT'D):

Changes in allowance for ECLs for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 1,132	₩ -	₩ -	₩ 1,132
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Reversal of allowance for ECLs (*1)	(37)	-	-	(37)
Ending balance	₩ 1,095	₩ -	₩ -	₩ 1,095

(*1) The amount of reversal of allowance for ECLs due to repayment of debt securities is included.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 884	₩ -	₩ -	₩ 884
Transfer to 12-month ECLs	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for ECLs (*2)	248	-	-	248
Ending balance	₩ 1,132	₩ -	₩ -	₩ 1,132

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) The amount of reversal of allowance for ECLs due to repayment of debt securities is included.

10. LOANS AT AMORTIZED COST:

Details of loans at amortized cost as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Type	December 31, 2019	December 31, 2018
Loans in Korean won	Corporate	₩ 93,457,121	₩ 87,561,227
	Household	112,690,462	103,173,844
	Public	4,588,068	9,334,527
	Integrated	551,346	663,999
		211,286,997	200,733,597
	Allowance for ECLs	(845,027)	(1,107,793)
	Book value, net	210,441,970	199,625,804
Loans in foreign currency	Loans	1,407,749	1,485,118
	Off-shore	392,632	107,792
		1,800,381	1,592,910
	Allowance for ECLs	(86,044)	(222,776)
	Book value, net	1,714,337	1,370,134
Other loans	Credit card receivables	7,561,021	7,057,688
	Bills purchased	750,747	886,580
	Bills purchased in foreign currency	1,816,895	1,291,264
	Private placement bonds	18,243	30,223
	Payment for acceptances and guarantees	8,010	11,048
	Domestic import usance	1,840,359	1,979,422
	Others	13,944,085	15,368,862
		25,939,360	26,625,087
	Allowance for ECLs	(300,580)	(304,769)
	Book value, net	25,638,780	26,320,318
Receivables	Receivables	3,124,665	5,023,639
	Allowance for ECLs	(4,727)	(6,288)
	Book value, net	3,119,938	5,017,351
Total loans and receivables		242,151,403	233,975,233
Total allowance for ECLs		(1,236,378)	(1,641,626)
Deferred LOF/LOC		324,172	277,239
Present value discounts of receivables		(15,117)	(15,504)
Total loans and receivables, net		₩ 241,224,080	₩ 232,595,342

10. LOANS AT AMORTIZED COST (CONT'D):

Details of receivables at amortized cost as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification		December 31, 2019		December 31, 2018
Domestic exchange settlement debits	₩	204,600	₩	636,257
Accrued income		664,229		690,199
Accounts receivable		1,141,485		1,167,161
Suspense payment		5,433		13,198
Guarantee deposits paid		485,085		481,651
Unsettled credit card receivables		340,735		283,040
Receivables from proxy sale of NACF		957		1,822
Others		282,141		1,750,311
Total receivables		3,124,665		5,023,639
Allowance for ECLs		(4,727)		(6,288)
Present value discounts		(15,117)		(15,504)
Total of receivables, net	₩	3,104,821	₩	5,001,847

Changes in deferred LOF/LOC for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019							
Classification		January 1, 2019		Increase		Decrease		December 31, 2019
Deferred LOF	₩	(14,427)	₩	(14,080)	₩	(10,707)	₩	(17,800)
Deferred LOC		291,666		264,880		214,574		341,972
Deferred LOC, net	₩	277,239	₩	250,800	₩	203,867	₩	324,172

	For the year ended December 31, 2018							
Classification		January 1, 2018		Increase		Decrease		December 31, 2018
Deferred LOF	₩	(15,643)	₩	(10,892)	₩	(12,108)	₩	(14,427)
Deferred LOC		287,311		214,593		210,238		291,666
Deferred LOC, net	₩	271,668	₩	203,701	₩	198,130	₩	277,239

10. LOANS AT AMORTIZED COST (CONT'D):

Changes in the total book value for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs (*1)		
	12-month ECLs (*1)	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 213,160,478	₩ 18,949,092	₩ 1,865,663	₩ 233,975,233
Transfer to 12-month ECLs	6,429,159	(6,417,806)	(11,353)	-
Transfer to financial assets with a significant increase in credit risk	(9,446,504)	9,489,990	(43,486)	-
Transfer to credit-impaired financial assets	(669,352)	(495,132)	1,164,484	-
Financial assets originated or derecognized	13,396,300	(3,755,251)	(647,066)	8,993,983
Write-offs	-	-	(801,921)	(801,921)
Disposals	(110,997)	(199,487)	(147,317)	(457,801)
Others (*2)	441,909	-	-	441,909
Ending balance	₩ 223,200,993	₩ 17,571,406	₩ 1,379,004	₩ 242,151,403

(*1) Deferred LOF/LOC and present value discounts are not included.
(*2) Others include the amount of changes in exchange rates and restructured loans.

	For the year ended December 31, 2018			
		Lifetime ECLs (*2)		
	12-month ECLs (*2)	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 199,593,876	₩ 18,508,774	₩ 2,054,318	₩ 220,156,968
Transfer to 12-month ECLs	6,750,851	(6,740,485)	(10,366)	-
Transfer to financial assets with a significant increase in credit risk	(8,734,281)	8,759,137	(24,856)	-
Transfer to credit-impaired financial assets	(723,856)	(456,704)	1,180,560	-
Financial assets originated or derecognized	16,104,693	(981,056)	(371,313)	14,752,324
Write-offs	-	-	(819,101)	(819,101)
Disposals	(109,258)	(140,574)	(67,501)	(317,333)
Debt-equity swap	-	-	(75,425)	(75,425)
Others (*3)	261,417	-	(653)	260,764
Business combinations	17,036	-	-	17,036
Ending balance	₩ 213,160,478	₩ 18,949,092	₩ 1,865,663	₩ 233,975,233

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) Deferred LOF/LOC and present value discounts are not included.
(*3) Others include the amount of changes in exchange rates and restructured loans.

10. LOANS AT AMORTIZED COST (CONT'D):

Changes in allowance for ECLs for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 341,851	₩ 446,350	₩ 853,425	₩ 1,641,626
Transfer to 12-month ECLs	78,501	(75,306)	(3,195)	-
Transfer to financial assets with a significant increase in credit risk	(33,230)	42,338	(9,108)	-
Transfer to credit-impaired financial assets	(323,393)	(251,938)	575,331	-
Provision (reversal) of allowance for ECLs	276,236	213,566	(227,195)	262,607
Write-offs	-	-	(801,921)	(801,921)
Recovery of write-offs	-	-	254,371	254,371
Disposals	(801)	(10,666)	(35,247)	(46,714)
Others (*1)	10,727	-	(84,318)	(73,591)
Ending balance	₩ 349,891	₩ 364,344	₩ 522,143	₩ 1,236,378

(*1) Others include the amount of changes in exchange rates, restructured loans and interest income on impaired loans.

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 296,718	₩ 333,696	₩ 1,011,407	₩ 1,641,821
Transfer to 12-month ECLs	46,154	(43,157)	(2,997)	-
Transfer to financial assets with a significant increase in credit risk	(38,274)	47,361	(9,087)	-
Transfer to credit-impaired financial assets	(200,324)	(204,693)	405,017	-
Provision of allowance for ECLs	227,812	315,943	10,045	553,800
Write-offs	-	-	(819,101)	(819,101)
Recovery of write-offs	-	-	340,869	340,869
Disposals	(757)	(2,800)	(15,772)	(19,329)
Debt-equity swap	-	-	(15,038)	(15,038)
Others (*2)	9,937	-	(51,918)	(41,981)
Business combinations	585	-	-	585
Ending balance	₩ 341,851	₩ 446,350	₩ 853,425	₩ 1,641,626

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) Others include the amount of changes in exchange rates, restructured loans and interest income on impaired loans.

The uncollected contractual amount of financial assets that was written off, but still under the process of pursuing collection by the Group as of December 31, 2019, amounts to ₩4,929,836 million.

11. INVESTMENT IN ASSOCIATES:

Details of investments in associates as of December 31, 2019 and 2018, are as follows (Korean won in millions, shares in thousands):

	December 31, 2019					
	Main business	Location	Date of the financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	December 31, 2019	180	9.00	₩ 7,820
NH-QCP Global Partnership PEF (*2)	Other financial business	Korea	December 31, 2019	2,994,000	24.95	15,625
IBK-NH Smallgiant PEF (*3)	Other financial business	Korea	December 31, 2019	3.5	44.90	32,578
NH-AJUIB Growth 2013 PEF	Other financial business	Korea	December 31, 2019	18,300,049	29.95	21,296
Kyunggi-DSC Superman Investment Fund No. 1	Other financial business	Korea	December 31, 2019	2.7	25.00	8,442
NH Agri-Biz Value Creative 1st PEF	Other financial business	Korea	December 31, 2019	8,164,870	48.03	7,725
NH-AJU Digital Fund	Other financial business	Korea	December 31, 2019	2.4	40.00	2,132
NH-NAU Agro Food 1st Private Equity Fund	Other financial business	Korea	December 31, 2019	7,500,000	50.00	7,140
2012sunlight, Co., Ltd. (*4)	Meat processing	Korea	-	9.8	46.57	-
Yujinmplus Co., Ltd. (*4)	Mold manufacturing	Korea	-	33	23.02	-
Seasons Shipping Co., Ltd. (*4)	Cargo transportation	Korea	-	16	20.27	-
Inkordan Trading Co., Ltd. (*4)	Clothing manufacturing	Korea	-	15	42.30	-
						₩ 102,758

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through its ability to designate members of the board of directors.
(*2) The distribution rate of earnings is 24.95% and the contribution rate of investments is 83.17%.
(*3) The distribution rate of earnings is 44.90% and the contribution rate of investments is 46.29%.
(*4) The shares were acquired pursuant to the debt-to-equity swaps. The investees are reclassified as investments in associates because their workout process was completed and the Group restored its voting rights over them.

	December 31, 2018					
	Main business	Location	Date of the financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	September 30, 2018	180	9.00	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.) (*1)	Issuance and sale of lottery tickets	Korea	September 30, 2018	600	9.98	3,919
NH-QCP Global Partnership PEF (*2)	Other financial business	Korea	December 31, 2018	9,980,000	24.95	19,510
IBK-NH Smallgiant PEF (*2)	Other financial business	Korea	December 31, 2018	3	44.90	25,714
NH-AJUIB Growth 2013 PEF (*2)	Other financial business	Korea	December 31, 2018	23,092,049	29.95	26,587
Kyunggi-DSC Superman Investment Fund No. 1 (*2)	Other financial business	Korea	December 31, 2018	3	25.00	9,048
NH Agri-Biz Value Creative 1st PEF (*2)	Other financial business	Korea	December 31, 2018	6,004,870	48.04	5,786
						₩ 98,194

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through its ability to designate members of the board of directors.
(*2) The capital stock and the number of investment shares have changed due to additional investment and distribution of investment securities.

11. INVESTMENT IN ASSOCIATES (CONT'D):

Changes in investment in associates for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year end December 31, 2019						
	January 1, 2019	Acquisition	Disposal etc.	Dividend	Gain (loss) on valuation of equity method investments	Share of other comprehensive gain (loss) of associates	December 31, 2019
Korea Credit Bureaus Co., Ltd.	₩ 7,630	₩ -	₩ -	₩ (135)	₩ 325	₩ -	₩ 7,820
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.) (*1)	3,919	-	(4,047)	-	-	128	-
NH-QCP Global Partnership PEF	19,510	-	(6,986)	-	3,101	-	15,625
IBK-NH Smallgiant PEF	25,714	5,792	-	-	1,072	-	32,578
NH-AJUIB Growth 2013 PEF	26,587	-	(4,792)	(1,383)	884	-	21,296
Kyunggi-DSC Superman Investment Fund No. 1	9,048	-	(750)	(750)	894	-	8,442
NH Agri-Biz Value Creative 1st PEF	5,786	2,160	-	-	(221)	-	7,725
NH-AJU Digital Fund	-	2,400	-	-	(268)	-	2,132
NH-NAU Agro Food 1st Private Equity Fund	-	7,500	-	-	(360)	-	7,140
	₩ 98,194	₩ 17,852	₩ (16,575)	₩ (2,268)	₩ 5,427	₩ 128	₩ 102,758

(*1) Donghang Lottery Co., Ltd. was disposed for the year ended December 31, 2019.

	For the year end December 31, 2018						
	January 1, 2018	Acquisition	Disposal etc.	Dividend	Gain (loss) on valuation of equity method investments	Share of other comprehensive gain (loss) of associates	December 31, 2018
Korea Credit Bureaus Co., Ltd.	₩ 6,886	₩ -	₩ -	₩ (113)	₩ 857	₩ -	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	3,355	-	-	-	597	(33)	3,919
NH Agri-Best 1st PEF (*1)	1,897	-	(1,005)	-	(892)	-	-
NHQCP Global Partnership PEF	7,985	9,980	-	-	1,545	-	19,510
IBK-NH Smallgiant PEF	9,099	18,813	-	-	(2,198)	-	25,714
NH-AJUIB Growth 2013 PEF	32,544	7,488	(9,943)	(5,181)	1,679	-	26,587
Kyunggi-DSC Superman Investment Fund No. 1	4,265	-	(1,550)	-	6,333	-	9,048
NH Agri-Biz Value Creative 1st PEF	3,059	3,120	(480)	-	87	-	5,786
	₩ 69,090	₩ 39,401	₩ (12,978)	₩ (5,294)	₩ 8,008	₩ (33)	₩ 98,194

(*1) NH Agri-Best 1st PEF was liquidated for the year ended December 31, 2018.

11. INVESTMENT IN ASSOCIATES (CONT'D):

A summary of financial information of associates as of December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 96,855	₩ 30,289	₩ 66,566	₩ 91,200	₩ 3,473	₩ 3,473
NH-QCP Global Partnership PEF	54,314	90	54,224	24,252	12,427	12,427
IBK-NH Smallgiant PEF	70,779	540	70,239	3,534	2,385	2,385
NH-AJUIB Growth 2013 PEF	71,287	181	71,106	9,573	2,337	2,337
Kyunggi-DSC Superman Investment Fund No. 1	38,385	4,618	33,767	4,097	3,574	3,574
NH Agri-Biz Value Creative 1st PEF	16,693	608	16,085	513	(458)	(458)
NH-AJU Digital Fund	5,454	125	5,329	10	(671)	(671)
NH-NAU Agro Food 1st Private Equity Fund	14,512	232	14,280	7	(720)	(720)

	December 31, 2018					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 87,193	₩ 22,738	₩ 64,455	₩ 55,505	₩ 9,409	₩ 9,409
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	63,200	25,591	37,609	45,289	5,986	5,656
NHQCP Global Partnership PEF	70,822	125	70,697	9,900	6,192	6,192
IBK-NH Smallgiant PEF	57,738	468	57,270	101	(4,894)	(4,894)
NH-AJUIB Growth 2013 PEF	99,343	10,574	88,769	18,462	5,607	5,607
Kyunggi-DSC Superman Investment Fund No. 1	38,551	2,358	36,193	4,088	25,333	25,333
NH Agri-Biz Value Creative 1st PEF	12,651	608	12,043	752	178	178

11. INVESTMENT IN ASSOCIATES (CONT'D):

A reconciliation of the financial information presented in the carrying amount of its interest in the associates as of December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 66,566	9.00	₩ 5,990	₩ 1,830	₩ 7,820
NH-QCP Global Partnership PEF	54,224	24.95	13,529	2,096	15,625
IBK-NH Smallgiant PEF	70,239	44.90	31,537	1,041	32,578
NH-AJUIB Growth 2013 PEF	71,106	29.95	21,296	-	21,296
Kyunggi-DSC Superman Investment Fund No. 1	33,767	25.00	8,442	-	8,442
NH Agri-Biz Value Creative 1st PEF	16,085	48.03	7,725	-	7,725
NH-AJU Digital Fund	5,329	40.00	2,132	-	2,132
NH-NAU Agro Food 1st Private Equity Fund	14,280	50.00	7,140	-	7,140

(*1) Others represent the fair value adjustments arising from acquisition of equity interest and so on.

	December 31, 2018				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 64,455	9.00	₩ 5,800	₩ 1,830	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	37,609	9.98	3,752	167	3,919
NHQCP Global Partnership PEF	70,697	24.95	17,639	1,871	19,510
IBK-NH Smallgiant PEF	57,270	44.90	25,714	-	25,714
NH-AJUIB Growth 2013 PEF	88,769	29.95	26,587	-	26,587
Kyunggi-DSC Superman Investment Fund No. 1	36,193	25.00	9,048	-	9,048
NH Agri-Biz Value Creative 1st Private Equity Fund	12,043	48.04	5,786	-	5,786

(*1) Others represent the fair value adjustments arising from acquisition of equity interest and so on.

12. TANGIBLE ASSETS:

Details of tangible assets as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019			
Classification	Acquisition cost	Accumulated depreciation	Subsidy	Book value
Land	₩ 1,424,426	₩ -	₩ -	₩ 1,424,426
Buildings	1,189,240	(229,282)	(433)	959,525
Leasehold improvements	283,835	(228,732)	(233)	54,870
Movable properties	983,963	(737,716)	(65)	246,182
Construction in progress	13,088	-	-	13,088
Right-of-use assets	210,759	(82,115)	-	128,644
	₩ 4,105,311	₩ (1,277,845)	₩ (731)	₩ 2,826,735

	December 31, 2018			
Classification	Acquisition cost	Accumulated depreciation	Subsidy	Book value
Land	₩ 1,431,767	₩ -	₩ -	₩ 1,431,767
Buildings	1,129,676	(195,529)	(444)	933,703
Leasehold improvements	265,383	(212,861)	(376)	52,146
Movable properties	921,190	(669,665)	(134)	251,391
Construction in progress	6,598	-	-	6,598
	₩ 3,754,614	₩ (1,078,055)	₩ (954)	₩ 2,675,605

12. TANGIBLE ASSETS (CONT'D):

Changes in acquisition cost of tangible assets for years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
Classification	January 1, 2019	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	December 31, 2019
Land	₩ 1,431,767	₩ 50	₩ (4,077)	₩ -	₩ (3,314)	₩ -	₩ 1,424,426
Buildings	934,147	48,781	(3,429)	(35,875)	16,682	(348)	959,958
Leasehold improvements	52,522	25,346	(389)	(22,382)	-	5	55,102
Movable properties	251,525	116,900	(15)	(121,943)	34	(254)	246,247
Construction in progress	6,598	28,658	-	-	(22,153)	(15)	13,088
Subsidy	(954)	-	18	205	-	-	(731)
Right-of-use assets	127,311	92,741	(6,554)	(84,871)	-	18	128,645
	₩ 2,802,916	₩ 312,476	₩ (14,446)	₩ (264,866)	₩ (8,751)	₩ (594)	₩ 2,826,735

(*1) Investment properties of ₩8,752 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩22,120 million and ₩34 million were transferred to buildings and movable properties, respectively.

	For the year ended December 31, 2018							
Classification	January 1, 2018	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	Business combinations	December 31, 2018
Land	₩ 1,417,970	₩ 5,102	₩ (4,159)	₩ -	₩ 12,854	₩ -	₩ -	₩ 1,431,767
Buildings	927,464	37,220	(784)	(35,802)	6,118	(69)	-	934,147
Leasehold improvements	45,105	28,245	(502)	(20,315)	-	(11)	-	52,522
Movable properties	250,126	113,249	(71)	(113,529)	2,000	(395)	145	251,525
Construction in progress	5,755	16,890	-	-	(16,047)	-	-	6,598
Subsidy	(1,180)	-	20	206	-	-	-	(954)
	₩ 2,645,240	₩ 200,706	₩ (5,496)	₩ (169,440)	₩ 4,925	₩ (475)	₩ 145	₩ 2,675,605

(*1) Investment properties of ₩4,925 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩3,862 million, ₩7,980 million, ₩2,000 million and ₩2,205 million were transferred to buildings, land, movable properties and investment properties, respectively.

13. INVESTMENT PROPERTIES AND NON-CURRENT ASSETS CLASSIFIED AS HELD FOR SALE:

Fair values of investment properties amount to ₩790,900 million and ₩733,109 million as of December 31, 2019 and 2018, respectively. Fair values are measured based on valuation results performed by independent professionals. Rental income from investment properties for the years ended December 31, 2019 and 2018, amounts to ₩17,892 million and ₩16,810 million, respectively. The fair value of investment properties is classified as Level 3 based on the input variables used in the valuation method. Valuation methods for investment properties and input variables, which are significant, but unobservable in measurement of fair value, are as follows:

Classification	Valuation methods	Input variables, which are significant but unobservable in measurement of fair value
Investment property	Calculated upon consideration of the yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject and escalation rate of the construction cost index.	Yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject and escalation rate of the construction cost index.

Details of investment properties as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019 Acquisition cost	Accumulated depreciation	Book value
Land	₩ 455,519	₩ -	₩ 455,519
Buildings	167,722	(33,601)	134,121
	₩ 623,241	₩ (33,601)	₩ 589,640

Classification	December 31, 2018 Acquisition cost	Accumulated depreciation	Book value
Land	₩ 452,226	₩ -	₩ 452,226
Buildings	156,881	(27,828)	129,053
	₩ 609,107	₩ (27,828)	₩ 581,279

Changes in investment properties for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
Classification	January 1, 2019	Acquisition	Disposal	Depreciation	Transfer (*1)	Other	December 31, 2019
Land	₩ 452,226	₩ -	₩ (21)	₩ -	₩ 3,314	₩ -	₩ 455,519
Buildings	129,053	4,594	-	(4,893)	5,437	(70)	134,121
	₩ 581,279	₩ 4,594	₩ (21)	₩ (4,893)	₩ 8,751	₩ (70)	₩ 589,640

(*1) Certain investment properties amounting to ₩8,752 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

	For the year ended December 31, 2018						
Classification	January 1, 2018	Acquisition	Disposal	Depreciation	Transfer (*1)	Other	December 31, 2018
Land	₩ 457,319	₩ -	₩ (219)	₩ -	₩ (4,874)	₩ -	₩ 452,226
Buildings	128,923	4,850	(17)	(4,643)	(51)	(9)	129,053
	₩ 586,242	₩ 4,850	₩ (236)	₩ (4,643)	₩ (4,925)	₩ (9)	₩ 581,279

(*1) Certain investment properties amounting to ₩4,925 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

At the end of the reporting period, the book value of assets held for sale is ₩15 million, and there have been no changes for the years ended December 31, 2019 and 2018.

14. INTANGIBLE ASSETS:

Details of intangible assets as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019 Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Goodwill	₩ 4,454	₩ -	₩ -	₩ 4,454
Development cost	664,262	(446,107)	-	218,155
Other intangible assets	910,729	(690,219)	(5,571)	214,939
	₩ 1,579,445	₩ (1,136,326)	₩ (5,571)	₩ 437,548

Classification	December 31, 2018 Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Goodwill	₩ 4,301	₩ -	₩ -	₩ 4,301
Development cost	577,113	(397,123)	-	179,990
Other intangible assets	823,874	(609,040)	(2,182)	212,652
	₩ 1,405,288	₩ (1,006,163)	₩ (2,182)	₩ 396,943

Changes in the book value of intangible assets for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
Classification	January 1, 2019	Acquisition	Disposal	Amortization	Impairment	Others	December 31, 2019
Goodwill	₩ 4,301	₩ -	₩ -	₩ -	₩ -	₩ 153	₩ 4,454
Development cost	179,990	89,263	-	(51,115)	-	17	218,155
Other intangible assets	212,652	98,020	(1,157)	(87,014)	(7,207)	(355)	214,939
	₩ 396,943	₩ 187,283	₩ (1,157)	₩ (138,129)	₩ (7,207)	₩ (185)	₩ 437,548

	For the year ended December 31, 2018							
Classification	January 1, 2018	Acquisition	Disposal	Amortization	Impairment	Other	Business combinations	December 31, 2018
Goodwill	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 36	₩ 4,265	₩ 4,301
Development costs	161,654	62,985	-	(44,629)	-	(20)	-	179,990
Other intangible assets	210,539	86,708	(1,523)	(81,565)	(406)	(1,186)	85	212,652
	₩ 372,193	₩ 149,693	₩ (1,523)	₩ (126,194)	₩ (406)	₩ (1,170)	₩ 4,350	₩ 396,943

The Group tests goodwill annually for impairment. The recoverable amount of the CGU is determined based on a value-in-use calculation. The value in use is the present value calculated using cash flow projections based on financial budgets approved by the management covering a five-year period.

The cash flows beyond that five-year period have been extrapolated using a steady 2% per annum growth rate and a discount rate is used considering risk-free rate, market risk premium and systematic risk of the CGU, etc.

Carrying amount and recoverable amount of the CGU recognizing goodwill at valuation date are as follows (Korean won in millions):

Classification	Carrying amount	Excess of recoverable amount over carrying amount
Nonghyup Finance Cambodia Co., Ltd.	₩ 4,454	₩ 24,362

15. RIGHT-OF-USE ASSETS:

Details of right-of-use assets as of December 31, 2019, are as follows (Korean won in millions):

Classification	Acquisition cost	Accumulated depreciation	Book value
Properties	₩ 181,475	₩ (74,559)	₩ 106,916
Delivery equipment	27,497	(6,609)	20,888
Others	1,787	(947)	840
	₩ 210,759	₩ (82,115)	₩ 128,644

Changes in the book value of right-of-use assets for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	January 1, 2019	Acquisition	Depreciation	Cancellation	Others	December 31 2019
Properties	₩ 108,325	₩ 80,811	₩ (76,222)	₩ (6,014)	₩ 16	₩ 106,916
Delivery equipment	17,607	11,522	(7,702)	(540)	1	20,888
Others	1,379	408	(947)	-	-	840
	₩ 127,311	₩ 92,741	₩ (84,871)	₩ (6,554)	₩ 17	₩ 128,644

Details of amount recognized in the income statement regarding leases for the year ended December 31, 2019, are as follows (Korean won in millions):

Classification	Amount
Interest expenses for lease liabilities	₩ 2,541
Costs associated with small asset lease	583
Costs associated with variable lease payments that are not included in the lease liability measurement	1,313

16. OTHER ASSETS:

Details of other assets as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Prepaid expenses	₩ 87,813	₩ 90,628
Supplies	2,591	3,245
Guarantee deposits paid	4,478	4,430
Suspense payment	118	1,846
Guarantees	142	144
Telephone and telex rights	1,304	1,378
Others	15,197	1,581
	₩ 111,643	₩ 103,252

17. FINANCIAL LIABILITIES:

Details of financial liabilities as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019 Book value	December 31, 2019 Fair value
Financial liabilities at FVTPL:		
FVTPL liabilities	₩ 13,342	₩ 13,342
Trading derivative liabilities	503,116	503,116
	516,458	516,458
Derivative liabilities:		
Hedging derivative liabilities	7,538	7,538
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	236,384,433	237,890,234
Borrowings (*2)	11,171,538	11,176,928
Debentures (*2)	15,819,070	16,087,699
Others (*1 and *3)	13,928,794	12,449,169
	277,303,835	277,604,030
	₩ 277,827,831	₩ 278,128,026

(*1) Others consist of domestic exchange settlements credits, trust account liabilities, guarantee deposits received, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation for fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

Classification	December 31, 2018 Book value	December 31, 2018 Fair value
Financial liabilities at FVTPL:		
FVTPL liabilities	₩ 13,276	₩ 13,276
Trading derivative liabilities	479,800	479,800
	493,076	493,076
Derivative liabilities:		
Hedging derivative liabilities	41,950	41,950
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	224,230,411	225,466,141
Borrowings (*2)	11,283,346	11,287,268
Debentures (*2)	16,828,002	17,030,545
Others (*1 and *3)	13,045,701	11,807,619
	265,387,460	265,591,573
	₩ 265,922,486	₩ 266,126,599

(*1) Others consist of domestic exchange settlements credits, trust account liabilities, guarantee deposits received, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation for fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

There are no financial liabilities designated at FVTPL as of December 31, 2019 and 2018.

18. DEPOSITS DUE TO CUSTOMERS:

Details of deposits due to customers as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification		December 31, 2019		December 31, 2018	
Demand deposits	Korean won	₩	37,143,789	₩	31,636,875
	Foreign currency		1,704,949		1,587,480
			38,848,738		33,224,355
Time deposits	Saving deposits in Korean won		189,443,852		185,280,757
	Saving deposits in foreign currency		1,862,295		1,752,694
	Installment deposits		4,709,112		3,338,610
			196,015,259		190,372,061
Certificates of deposit			1,520,436		633,995
		₩	236,384,433	₩	224,230,411

19. BORROWINGS:

Details of borrowings as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Provider	Interest rate (%)	December 31, 2019		December 31, 2018	
Borrowings in Korean won	The Bank of Korea	0.50–0.75	₩	723,735	₩	730,379
	Public sector	(-)1.25–5.15		5,500,756		5,543,981
	Others	0.00–3.88		1,683,141		1,593,161
				7,907,632		7,867,521
Borrowings in foreign currency	Borrowings from banks	2.21–3.79		2,485,009		2,526,669
	Borrowings from government	2.49–3.19		70,695		112,995
				2,555,704		2,639,664
Call money		3.40–4.10		34,900		-
Bonds sold under repurchase agreements		1.99–2.25		303,400		769,600
Bills sold		0.50–2.00		369,902		6,561
			₩	11,171,538	₩	11,283,346

20. DEBENTURES:

Details of debentures as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	Interest rate (%)	December 31, 2019		December 31, 2018	
Debentures in Korean won:					
General agricultural financial bonds	1.52–3.77	₩	9,380,000	₩	10,540,000
Subordinated agricultural financial bonds	2.15–4.88		4,300,000		4,000,000
Present-value discounts	-		(2,092)		(26,069)
			13,677,908		14,513,931
Debentures in foreign currency:					
General financial bonds	1.88–3.88		2,084,040		2,348,010
Overseas financial bonds	2.99		34,734		-
Accumulated loss (gain) on fair value hedges	-		30,900		(22,343)
Present-value discounts	-		(8,512)		(11,596)
			2,141,162		2,314,071
		₩	15,819,070	₩	16,828,002

21. PROVISIONS:

Details of provisions as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Provision for acceptances and guarantees	₩ 140,315	₩ 193,747
Provision for unused credit limit	137,752	137,892
Provision for mileage	13,578	15,167
Provision for restoration	36,752	32,044
Other provisions	32,390	83,730
	₩ 360,787	₩ 462,580

Acceptances and guarantees (including endorsement bills) as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Confirmed acceptances and guarantees:		
Acceptances and guarantees in Korean won	₩ 373,479	₩ 370,027
Acceptances and guarantees purchased	136,237	134,497
Acceptances and guarantees for imported goods (letter of guarantees)	39,190	15,233
Other acceptances and guarantees in foreign currencies	2,438,520	2,247,519
	2,987,426	2,767,276
Unconfirmed acceptances and guarantees:		
Issuance of local LOC	164,652	231,415
Issuance of import LOCs	1,382,579	1,318,277
Others	506,811	761,085
	2,054,042	2,310,777
Endorsement bills	36,600	19,307
	₩ 5,078,068	₩ 5,097,360

The percentage of provision for acceptances and guarantees to the outstanding balance of acceptances and guarantees as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	Outstanding balance	Provision for acceptances and guarantees	Ratio (%)
December 31, 2019	₩ 5,078,068	₩ 140,315	2.76
December 31, 2018	₩ 5,097,360	₩ 193,747	3.80

The percentage of provision for unused credit limit to the outstanding balance of unused credit limit as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	Outstanding balance	Provision for unused credit limit	Ratio (%)
December 31, 2019	₩ 86,678,896	₩ 137,752	0.16
December 31, 2018	₩ 79,814,779	₩ 137,892	0.17

21. PROVISIONS (CONT'D):

Changes in provisions for acceptances and guarantees for the years ended December 31, 2019 and 2018, are as follow (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 11,329	₩ 75,601	₩ 106,817	₩ 193,747
Transfer to 12-month ECLs	455	(455)	-	-
Transfer to financial assets with a significant increase in credit risk	(1)	1	-	-
Transfer to credit-impaired financial assets	(1)	-	1	-
Reversal of allowance for ECLs	(8,498)	(12,426)	(37,961)	(58,885)
Foreign currency translation	2,347	-	-	2,347
Others	3,106	-	-	3,106
Ending balance	₩ 8,737	₩ 62,721	₩ 68,857	₩ 140,315

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 10,658	₩ 73,248	₩ 117,002	₩ 200,908
Transfer to 12-month ECLs	196	(196)	-	-
Transfer to financial assets with a significant increase in credit risk	(467)	482	(15)	-
Transfer to credit-impaired financial assets	-	(48)	48	-
Provision (reversal) of allowance for ECLs	(2,729)	2,115	(10,218)	(10,832)
Foreign currency translation	3,922	-	-	3,922
Others	(251)	-	-	(251)
Ending balance	₩ 11,329	₩ 75,601	₩ 106,817	₩ 193,747

(*1) Beginning balance is restated in accordance with K-IFRS 1109.

21. PROVISIONS (CONT'D):

Changes in provision for unused credit limits for the years ended December 31, 2019 and 2018, are as follow (Korean won in millions):

	For the year ended December 31, 2019			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 72,891	₩ 65,001	₩ -	₩ 137,892
Transfer to 12-month ECLs	27,292	(27,292)	-	-
Transfer to financial assets with a significant increase in credit risk	(4,475)	4,475	-	-
Transfer to credit-impaired financial assets	(264)	(538)	802	-
Provision (reversal) of allowance for ECLs	(23,030)	23,692	(802)	(140)
Ending balance	₩ 72,414	₩ 65,338	₩ -	₩ 137,752

	For the year ended December 31, 2018			
		Lifetime ECLs		
	12-month ECLs	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 48,681	₩ 58,050	₩ -	₩ 106,731
Transfer to 12-month ECLs	20,986	(20,986)	-	-
Transfer to financial assets with a significant increase in credit risk	(5,585)	5,585	-	-
Transfer to credit-impaired financial assets	(143)	(425)	568	-
Provision (reversal) of allowance for ECLs	8,353	22,777	(568)	30,562
Foreign currency translation	599	-	-	599
Ending balance	₩ 72,891	₩ 65,001	₩ -	₩ 137,892

(*1) Beginning balance is restated in accordance with K-IFRS 1109.

22. OTHER LIABILITIES:

Details of other liabilities as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Trust accounts payable	₩ 2,215,770	₩ 2,816,440
Domestic exchange settlement credits	3,786,815	2,666,621
Foreign exchange settlement credits	44,667	21,747
Accounts payable	1,357,677	1,473,898
Accrued expenses	1,898,821	1,628,674
Guarantee deposit received	241,938	199,709
Agency	2,045,449	1,932,477
Financial guarantee contract	28,057	24,666
Unearned revenue	31,783	32,645
Deferred mileage revenue	86,739	83,677
Suspense receipt	107,331	102,467
Lease liabilities	115,076	-
Other sundry liabilities	2,351,748	2,456,203
	₩ 14,311,871	₩ 13,439,224

23. DERIVATIVES AND HEDGE ACCOUNTING:

Details of derivatives as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 352,167	₩ -	₩ 354,722	₩ -
Swap	84,041	-	92,123	-
Options purchased	4,662	-	-	-
Options sold	-	-	4,662	-
	440,870	-	451,507	-
Interest rate:				
Swap	58,993	34,068	50,112	7,538
Options purchased	871	-	-	-
Options sold	-	-	871	-
	59,864	34,068	50,983	7,538
Stock:				
Options purchased	267	-	-	-
Options sold	-	-	385	-
	267	-	385	-
Other	660	-	241	-
	₩ 501,661	₩ 34,068	₩ 503,116	₩ 7,538

	December 31, 2018			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 256,571	₩ -	₩ 383,080	₩ -
Swap	136,617	-	49,406	-
Options purchased	1,549	-	-	-
Options sold	-	-	1,549	-
	394,737	-	434,035	-
Interest rate:				
Swap	48,522	20,253	44,933	41,950
Options purchased	603	-	-	-
Options sold	-	-	603	-
	49,125	20,253	45,536	41,950
Stock:				
Options purchased	5	-	-	-
Options sold	-	-	20	-
	5	-	20	-
Other	580	-	209	-
	₩ 444,447	₩ 20,253	₩ 479,800	₩ 41,950

23. DERIVATIVES AND HEDGE ACCOUNTING (CONT'D):

The notional amounts outstanding for derivative contracts as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019 Trading	Hedging	Total
Currency:			
Forwards	₩ 41,071,743	₩ -	₩ 41,071,743
Swap	7,857,486	-	7,857,486
Options purchased	1,058,193	-	1,058,193
Options sold	1,058,193	-	1,058,193
	51,045,615	-	51,045,615
Interest rate:			
Forwards	200,000	-	200,000
Swap	11,043,599	2,560,359	13,603,958
Options purchased	30,000	-	30,000
Options sold	30,000	-	30,000
	11,303,599	2,560,359	13,863,958
Stock:			
Options purchased	5,708	-	5,708
Options sold	5,708	-	5,708
	11,416	-	11,416
Other	23,354	-	23,354
	₩ 62,383,984	₩ 2,560,359	₩ 64,944,343

Classification	December 31, 2018 Trading	Hedging	Total
Currency:			
Forwards	₩ 37,304,463	₩ -	₩ 37,304,463
Swap	5,898,678	-	5,898,678
Options purchased	572,691	-	572,691
Options sold	572,691	-	572,691
	44,348,523	-	44,348,523
Interest rate:			
Swap	7,056,397	2,852,049	9,908,446
Options purchased	30,000	-	30,000
Options sold	30,000	-	30,000
	7,116,397	2,852,049	9,968,446
Stock:			
Options purchased	8,959	-	8,959
Options sold	9,597	-	9,597
	18,556	-	18,556
Other	23,355	-	23,355
	₩ 51,506,831	₩ 2,852,049	₩ 54,358,880

23. DERIVATIVES AND HEDGE ACCOUNTING (CONT'D):

The timing of outstanding for hedging instruments contracts as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	Less than 1 year (December 31, 2019)	1 year–5 years	More than 5 years	Total
Interest rate:				
Swap	₩ 518,694	₩ 2,006,931	₩ 34,734	₩ 2,560,359

Classification	Less than 1 year (December 31, 2018)	1 year–5 years	More than 5 years	Total
Interest rate:				
Swap	₩ 379,483	₩ 2,439,023	₩ 33,543	₩ 2,852,049

Details of gain or loss on valuation of derivatives for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 352,192	₩ 354,633	₩ -	₩ -	₩ 352,192	₩ 354,633
Swap	82,209	82,418	-	-	82,209	82,418
Options purchased	4,724	130	-	-	4,724	130
Options sold	267	3,024	-	-	267	3,024
	439,392	440,205	-	-	439,392	440,205
Interest rate:						
Swap	28,134	22,353	54,172	10,667	82,306	33,020
Options purchased	304	35	-	-	304	35
Options sold	35	304	-	-	35	304
	28,473	22,692	54,172	10,667	82,645	33,359
Stock:						
Options purchased	81	13	-	-	81	13
Options sold	25	146	-	-	25	146
	106	159	-	-	106	159
Other	438	388	-	-	438	388
	₩ 468,409	₩ 463,444	₩ 54,172	₩ 10,667	₩ 522,581	₩ 474,111

Classification	For the year ended December 31, 2018					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 259,643	₩ 383,438	₩ -	₩ -	₩ 259,643	₩ 383,438
Swap	136,277	47,637	-	-	136,277	47,637
Options purchased	1,773	18	-	-	1,773	18
Options sold	262	950	-	-	262	950
	397,955	432,043	-	-	397,955	432,043
Interest rate:						
Swap	29,361	26,038	10,658	9,971	40,019	36,009
Options purchased	353	157	-	-	353	157
Options sold	158	353	-	-	158	353
	29,872	26,548	10,658	9,971	40,530	36,519
Stock:						
Options purchased	-	90	-	-	-	90
Options sold	159	1	-	-	159	1
	159	91	-	-	159	91
Other	29	-	-	-	29	-
	₩ 428,015	₩ 458,682	₩ 10,658	₩ 9,971	₩ 438,673	₩ 468,653

23. DERIVATIVES AND HEDGE ACCOUNTING (CONT'D):

At the end of the reporting period, hedged items applied with fair value hedge accounting include debt securities at FVTOCI and debentures. Changes in the fair value of derivatives due to fluctuation in interest rate are recognized in net income immediately. Interest rate swap is used as a hedging instrument in order to offset changes in fair values of hedged items due to fluctuation in interest rate.

Details of the Group's hedged item and types of hedge accounting as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019					
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Book value of hedged item	Fair value hedge accumulated adjustment	Fair value of hedging instrument
Debt securities at FVTOCI	Interest rate risk	Interest rate swap	Fair value hedge	₩ 480,435	₩ 1,034	₩ (132)
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	2,106,428	(30,900)	26,661

	December 31, 2018					
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Book value of hedged item	Fair value hedge accumulated adjustment	Fair value of hedging instrument
Debt securities at FVTOCI	Interest rate risk	Interest rate swap	Fair value hedge	₩ 496,524	₩ (9,547)	₩ 11,365
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	2,314,071	22,343	(33,062)

Details of gain (loss) on valuation of hedged items and hedging instruments for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019		
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instrument	Ineffective amount (*1)
Debt securities at FVTOCI	₩ 10,417	₩ (10,667)	₩ (250)
Debentures	(51,407)	54,172	2,765
	₩ (40,990)	₩ 43,505	₩ 2,515

(*1) The ineffective portion of the hedge is included in other comprehensive income or other operating income or expenses in the statement of comprehensive income.

	For the year ended December 31, 2018		
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instrument	Ineffective amount (*1)
Debt securities at FVTOCI	₩ (3,331)	₩ 2,753	₩ (578)
Debentures	1,561	(2,066)	(505)
	₩ (1,770)	₩ 687	₩ (1,083)

(*1) The ineffective portion of the hedge is included in other comprehensive income or other operating income or expenses in the statements of comprehensive income.

24. NET DEFINED BENEFIT LIABILITIES:

The Group operates a defined benefit pension plan (the "DB plan") in accordance with Employee Retirement Benefits Laws, which is also classified as DB plan under K-IFRS. Under DB plan, severance pay is made on a lump-sum basis or entitled to pension when an employee retires, based on the employee's service period and salary at retirement. The Group has purchased retirement benefits insurance, annuity, etc., and made deposits with Industrial Bank of Korea and others. The deposit for retirement insurance and assets for DB plan operation are presented as a deduction from defined benefit obligations under an account of plan assets.

If a retiree is up for quasi-retirement age limit of special retirement, the Group pays quasi-retirement age limit payments separate from general severance payments.

The Group is exposed to investment risk and interest risk.

Actuarial valuation for plan assets and defined benefit obligations related to the general severance payments and quasi-age severance payments is performed by an independent actuary as of December 31, 2019 and 2018, respectively. Current and past service costs related to present value of defined benefit obligations are measured using the projected unit credit method.

Key assumptions for actuarial valuation as of December 31, 2019 and 2018, are as follows (%):

Classification	December 31, 2019	December 31, 2018
Discount rate	2.02	2.33
Salary increase rate:		
Base-up	2.33	2.33
Empirical promotion rate	Empirical promotion rate by age	

Details of net defined benefit liabilities as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Present value of defined benefit obligations	₩ 1,948,033	₩ 1,767,157
Fair value of plan assets	(1,477,671)	(1,391,992)
Net defined benefit liabilities from DB plan	₩ 470,362	₩ 375,165

24. NET DEFINED BENEFIT LIABILITIES (CONT'D):

Changes in net defined benefit liabilities for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2019	₩ 1,767,157	₩ (1,391,992)	₩ 375,165
Current service cost	184,758	-	184,758
Interest expense (income)	40,060	(31,319)	8,741
Remeasurement elements:			
Return on planned assets (on the net basis of net interest cost)	-	7,293	7,293
Actuarial losses incurred due to changes in demographic assumptions	2,760	-	2,760
Actuarial losses incurred due to changes in financial assumptions	61,668	-	61,668
Actuarial losses incurred due to experience adjustments	27,630	-	27,630
Employer contributions	-	(223,000)	(223,000)
Payment	(128,492)	159,321	30,829
Transfer from related-party	11,242	-	11,242
Transfer to related-party	(18,698)	-	(18,698)
Other	(52)	2,026	1,974
Present value as of December 31, 2019	₩ 1,948,033	₩ (1,477,671)	₩ 470,362

Classification	For the year ended December 31, 2018		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2018	₩ 1,637,222	₩ (1,325,710)	₩ 311,512
Current service cost	192,582	-	192,582
Interest expenses (income)	45,788	(36,879)	8,909
Remeasurement elements:			
Return on planned assets (on the net basis of net interest cost)	-	17,793	17,793
Actuarial losses incurred due to changes in financial assumptions	86,811	-	86,811
Actuarial gains incurred due to experience adjustments	(20,234)	-	(20,234)
Employer contributions	-	(241,630)	(241,630)
Payment	(177,420)	192,557	15,137
Transfer from related-party	11,031	-	11,031
Transfer to related-party	(21,479)	-	(21,479)
Other	12,856	1,877	14,733
Present value as of December 31, 2018	₩ 1,767,157	₩ (1,391,992)	₩ 375,165

24. NET DEFINED BENEFIT LIABILITIES (CONT'D):

Portfolio of plan assets as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Fixed deposits	₩ 1,477,671	₩ 1,391,992

Investment strategies and policies of plan assets aim to balance risk reduction and pursuit of profit. The objective to minimize the variability of assets in relation to debt is basically achieved through diversified investment of assets, and partial asset-liability matching strategies. In order to reduce (adjust risk) variability of assets in relation to debt and achieve the intended levels of profit, investment is distributed over a vast range of many different types of assets. The distribution of assets is such that a regular income is secured similar to bonds, and partially matches the characteristics of a long maturity period in pension obligations.

The actual return on plan assets is ₩24,026 million and ₩19,086 million for the years ended December 31, 2019 and 2018, respectively.

The effects of reasonable possible changes to significant actuarial assumptions on defined benefit obligation whilst all other assumptions occurring as of December 31, 2019 and 2018, are held constant are as follows (Korean won in millions):

	December 31, 2019		December 31, 2018	
Classification	Increase	Decrease	Increase	Decrease
100 basis point change in discount rate	₩ (185,020)	₩ 217,978	₩ (169,861)	₩ 199,642
1%p change in salary increase rate	205,707	(178,491)	189,862	(165,023)

The sensitivity analysis presented above may not present the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another, since the actuarial assumptions are correlated. Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liabilities recognized in the consolidated statement of financial position.

The Group expects to make a contribution of ₩184,000 million to the defined benefit plans for the next fiscal year.

The weighted-average maturity of the defined benefit obligation is 10.5 years at December 31, 2019.

The amount of retirement benefits paid for the defined contribution plan for the years ended December 31, 2019 and 2018, is ₩131 and ₩178 million, respectively.

25. EQUITY:

Capital stock as of December 31, 2019 and 2018, is as follows (Korean won in millions, shares in units):

Classification	December 31, 2019	December 31, 2018
Shares authorized (in shares)	1,000,000,000	1,000,000,000
Par value (in Korean won)	₩ 5,000	₩ 5,000
Shares issued (in shares)	432,438,179	432,438,179
Common stock	₩ 2,162,191	₩ 2,162,191

Other paid-in capital as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Capital surplus:		
Capital in excess of par value	₩ 9,465,845	₩ 9,465,845
Other capital surplus	35,948	35,948
	9,501,793	9,501,793
Capital adjustments (*1)	(3,019)	(3,019)
Hybrid equity securities (*2)	349,648	349,648
	₩ 9,848,422	₩ 9,848,422

(*1) Capital adjustment arose from the acquisition of IT department of NACF.
(*2) The Group classifies the hybrid equity securities as capital, as the maturity of the hybrid equity securities is more than 30 years and the Group holds the right to extend the bond maturity continuously under the same conditions and evade delivering cash or another financial asset to pay the contractual obligation.

There were no changes in capital stock and paid-in capital in excess of par value for the year ended December 31, 2019.

Changes in capital stock and paid-in capital in excess of par value for the year ended December 31, 2018, are as follows (Korean won in millions):

Classification	Capital stock	Capital in excess of par value	Total
January 1, 2018	₩ 2,132,779	₩ 9,295,401	₩ 11,428,180
Issuance of capital stock (*1)	29,412	170,444	199,856
December 31, 2018	₩ 2,162,191	₩ 9,465,845	₩ 11,628,036

(*1) Based on the resolution of Board of Directors dated June 14, 2018, the Group issued 5,882,352 shares of common stock at an issue price of ₩34,000 per share.

25. EQUITY (CONT'D):

Details of other components of equity, which are recognized as accumulated other comprehensive income, as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Remeasurements of the net defined benefit liabilities	₩ (691,861)	₩ (619,831)
Gain on valuation of debt securities at FVTOCI	95,884	42,463
Loss on equity securities at FVTOCI	(124,651)	(67,188)
Exchange differences on translating foreign operations	1,736	(3,807)
Loss on valuation of investments in associates	(167)	(260)
	₩ (719,059)	₩ (648,623)

Changes in other components of equity for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019				
	January 1, 2019	Changes for the year	Deferred income tax	Transfer to retained earnings	December 31, 2019
Remeasurements of the net defined benefit liabilities	₩ (619,831)	₩ (99,351)	₩ 27,321	₩ -	₩ (691,861)
Gain (loss) on valuation of debt securities at FVTOCI	42,463	73,683	(20,262)	-	95,884
Gain (loss) on equity securities at FVTOCI	(67,188)	(82,256)	21,796	2,997	(124,651)
Exchange differences on translating foreign operations	(3,807)	5,543	-	-	1,736
Gain (loss) on valuation of investments in associates	(260)	128	(35)	-	(167)
	₩ (648,623)	₩ (102,253)	₩ 28,820	₩ 2,997	₩ (719,059)

Classification	For the year ended December 31, 2018				
	January 1, 2018	Changes for the year	Deferred income tax	Transfer to retained earnings	December 31, 2018
Remeasurements of the net defined benefit liabilities	₩ (558,663)	₩ (84,370)	₩ 23,202	₩ -	₩ (619,831)
Gain (loss) on valuation of debt securities at FVTOCI (*1)	(41,577)	115,985	(31,945)	-	42,463
Gain (loss) on equity securities at FVTOCI (*1)	(70,890)	(37,314)	9,840	31,176	(67,188)
Exchange differences on translating foreign operations	(5,483)	1,676	-	-	(3,807)
Gain (loss) on valuation of investments in associates (*1)	(236)	(33)	9	-	(260)
	₩ (676,849)	₩ (4,056)	₩ 1,106	₩ 31,176	₩ (648,623)

(*1) Beginning balance is restated in accordance with K-IFRS 1109.

25. EQUITY (CONT'D):

Details of retained earnings as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Regulatory reserve for bad debts (*1)	₩ 1,742,296	₩ 1,629,809
Legal reserve (*2)	278,922	157,116
Voluntary reserve for recapitalization (*3)	1,000,000	1,000,000
Voluntary reserve	14	14
Unappropriated retained earnings	2,552,550	1,786,458
	₩ 5,573,782	₩ 4,573,397

(*1) The Group has provided for loss allowances in accordance with K-IFRS. The difference in this amount and the provision for possible loan and other asset losses accumulated in accordance to the minimum accumulation ratio required by FSS is reserved as regulatory reserve for bad debts.
(*2) With respect to the allocation of net profit earned in a fiscal term, the Group 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
(*3) The Group provides for the voluntary reserve for the enhancement of capital and sound management without specific purpose.

Changes in retained earnings for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Beginning balance	₩ 4,573,397	₩ 3,283,817
Changes in consolidated taxation payment	103,387	139,920
Net income	1,517,075	1,222,569
Changes in accounting standards	-	165,347
Loss on equity securities at FVTOCI	(2,997)	(31,176)
Cash dividends	(600,000)	(190,000)
Dividends on hybrid equity securities	(17,080)	(17,080)
Ending balance	₩ 5,573,782	₩ 4,573,397

Reserve for bad debts as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Beginning balance	₩ 1,742,296	₩ 1,629,809
Planned reserve for bad debts	221,339	112,487
Expected balance	₩ 1,963,635	₩ 1,742,296

25. EQUITY (CONT'D):

Provision of reserve for bad debts and adjusted net income after reflecting reserve for bad debts for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Net income	₩ 1,517,075	₩ 1,222,569
Provision of reserve for bad debts	(221,339)	(85,290)
Adjusted net income after reserve for bad debts	1,295,736	1,137,279
Adjusted basic and diluted EPS after reserve for bad debts (in Korean won) (*1)	2,957	2,608

(*1) Hybrid equity securities dividends of ₩17,080 million for the years ended December 31, 2019 and 2018, respectively, are deducted from adjusted net income after reserve for bad debts when calculating adjusted basic EPS. Adjusted diluted EPS are identical to basic EPS, as the Group does not retain dilutive common shares.

Dividends for the year ended December 31, 2019, are as follows (Korean won in millions):

Type of stock	Shares of stock	Dividends Per share (in Korean won)	Total dividends
Common stock	432,438,179	₩ 1,387	₩ 600,000

26. CAPITAL MANAGEMENT:

26.1 Current state of regulatory capital

The Group reports to the Financial Supervisory Service on a monthly or quarterly basis about Group for International Settlement (BIS) capital adequacy ratio, common equity ratio based on market risk, basic common equity ratio and their computation evidences. In addition, the Group reviews the soundness of its capital using the capital adequacy ratio representing capital over the risk-weighted asset (BIS capital adequacy ratio).

The Group's regulatory capitals consist of the following two categories:

-Tier 1 capital (basic capital): Basic capital is composed of common equity tier 1 and additional tier 1 capital. Common equity tier 1 is composed of capital stock, additional paid-in capital, retained earnings, non-controlling interests of Group, which is the consolidated subsidiary, and accumulated other comprehensive income. Additional tier 1 capital is composed of capital securities (including hybrid equity securities) and non-controlling interests of consolidated subsidiaries

-Tier 2 capital (supplementary capital): Supplementary capital is composed of allowance for losses on credit for assets classified as normal or precautionary according to the forward-looking criteria, capital securities (such as subordinated bonds) and non-controlling interests of consolidated subsidiaries.

The basic and supplementary capitals listed above have many restrictions to be recognized as capital and regulatory capital is computed reflecting items deducted from capital.

Besides the BIS ratios reported to the Financial Supervisory Service, the Group sets up internal policies on capital management for the criteria of capital adequacy and soundness of finance. In addition, the Group monitors the soundness of finance by allocating the risk appetite of the available capital to the limit of internal capital (the amount of capital that ensures that the Group will be able to continue on its operation, while bearing many risks and the necessary capital amount that covers the unexpected losses (ULs) under specified probability). Internal capital, subject to the management, is to consider interest rate risk and credit-concentrated risk in addition to the credit, market and operating risk managed by regulatory capital. The Group computes on appropriateness of internal capital under regular inspection.

Following the implementation of BASEL III, the Group has calculated the risk-weighted assets on market risk, operating risk via the Standard Approach, and risk-weighted assets on credit risk via the Basic Internal Ratings-Based Approach, and are managing the ratios accordingly, as of December 1, 2013. Details of the Group's BIS capital adequacy ratio as of December 31, 2019 and 2018, are as follows (Korean won in millions, %):

Classification	December 31, 2019	December 31, 2018
Basic capital (A)	₩ 14,597,705	₩ 13,917,216
Supplementary capital (B)	2,929,344	3,051,045
Equity capital (C)	17,527,049	16,968,261
Risk-weighted assets (D)	115,368,291	109,178,105
Equity capital ratio (C/D*100)	15.19	15.54
Basic capital ratio (A/D*100)	12.65	12.75

26.2 Allocation of shareholders' equity

Allocation of shareholders' equity is determined by approval of the risk management committee within the available capital after the establishment of risk capital management plan reflecting business plan, strategies and analysis of risk situations. Allocated capitals by risk upon the risk capital management plan are divided by tolerance limits of department and business sector, and managed from risk management council.

The risk management committee and council of the Group review the internal capital policies on a regular basis, and have a duty to maintain the stable capital adequacy and the soundness of finance by preliminary authorization process on excess of the limitation of internal capital forecasted due to new or extension of business or exceptionally by an ex-post facto approval.

27. INCOME TAX EXPENSES:

The components of income tax expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Income tax currently payable	₩ 487,467	₩ 406,403
Adjustments recognized for the current period in relation to the current tax of prior periods	(1,111)	(65,196)
Change in deferred income tax due to temporary differences (*1)	65,293	98,673
Total income tax effect	551,649	439,880
Deferred income taxes directly applied to shareholders' equity	28,820	1,106
Income tax expenses	₩ 580,469	440,986
(*1) Net deferred tax assets due to temporary differences as of December 31, 2019 and 2018	₩ 513,828	₩ 579,121
Net deferred tax assets due to temporary differences as of January 1, 2019 and 2018 (*2)	579,121	677,794
Change in deferred income tax due to temporary differences	₩ (65,293)	₩ (98,673)

A reconciliation of income before income tax and income tax expenses for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Net income before income tax	₩ 2,097,544	₩ 1,663,555
Income tax expenses before adjustments (A) (*1)	566,463	447,116
Adjustments (B):	14,006	(6,130)
Non-taxable income	(5,937)	(8,717)
Non-deductible expenses	6,808	6,737
Unrecognized deferred income tax effects	6,090	1,239
Income taxes refund or additional income taxes for prior years	-	(1,739)
Others	7,045	(3,650)
Income tax expenses (A+B)	₩ 580,469	₩ 440,986
Effective tax rate	27.67%	26.51%

(*1) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the years ended December 31, 2019 and 2018.

The deferred income tax recognized as other comprehensive income for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Gain (loss) on securities measured at FVTOCI	₩ 1,533	₩ (22,105)
Remeasurements of the net defined benefit liabilities	27,322	23,202
Gain (loss) on valuation of investments in associates	(35)	9
	₩ 28,820	₩ 1,106

27. INCOME TAX EXPENSES (CONT'D):

The deferred income tax assets (liabilities) of the Group as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
Classification	Beginning	Increase	Decrease	Ending
(Temporary differences):				
Gain on valuation of securities	₩ 198,653	₩ 229,862	₩ 177,207	₩ 251,308
Investments in associates and subsidiaries (*2)	16,346	(45,631)	1,166	(30,451)
Gain (loss) on valuation of derivatives	59,188	(31,529)	55,781	(28,122)
Accrued income	(144,973)	(216,478)	(144,973)	(216,478)
Deferred LOF/LOC	(277,240)	(324,172)	(277,240)	(324,172)
Defined benefit obligations	1,632,048	316,825	159,321	1,789,552
Accrued expenses	81,840	68,510	76,443	73,907
Provision for acceptances and guarantee	193,747	140,315	193,747	140,315
Other provisions	181,152	126,137	183,075	124,214
Special deposits	(91,389)	(3,909)	(91)	(95,207)
Retirement insurance and assets for DB plan operation	(930,541)	(240,017)	(159,321)	(1,011,237)
Others	1,187,065	179,819	172,048	1,194,836
	₩ 2,105,896	₩ 199,732	₩ 437,163	₩ 1,868,465
Unrealizable temporary differences	-	-	-	-
Realizable temporary differences	2,105,896	199,732	437,163	1,868,465
Tax rate (*1)	27.5%			27.5%
Net deferred income tax asset	579,121			513,828

(*1) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the year ended December 31, 2019.

(*2) The income tax effect of equity method is reasonably estimated by considering the applicability and realizability of deferred income tax by each investee.

27. INCOME TAX EXPENSES (CONT'D):

Classification	For the year ended December 31, 2018			
	Beginning (*1)	Increase	Decrease	Ending
(Temporary differences):				
Gain on valuation of securities	₩ 300,107	₩ 171,054	₩ 272,508	₩ 198,653
Investments in associates and subsidiaries (*3)	26,931	(3,680)	6,905	16,346
Gain (loss) on valuation of derivatives	(25,389)	59,188	(25,389)	59,188
Accrued income	(52,593)	(201,767)	(109,387)	(144,973)
Allowance for ECLs	82,417	-	82,417	-
Deferred LOF/LOC	(271,668)	(277,240)	(271,668)	(277,240)
Defined benefit obligations	1,519,657	304,948	192,557	1,632,048
Accrued expenses	86,833	86,720	91,713	81,840
Provision for acceptances and guarantee	199,724	194,930	200,907	193,747
Other provisions	141,350	174,046	134,244	181,152
Special deposits	(86,983)	(4,494)	(88)	(91,389)
Retirement insurance and assets for DB plan operation	(948,085)	(175,013)	(192,557)	(930,541)
Others	1,492,404	170,753	476,092	1,187,065
	₩ 2,464,705	₩ 499,445	₩ 858,254	₩ 2,105,896
Unrealizable temporary differences	-	-	-	-
Realizable temporary differences	2,464,705	499,445	858,254	2,105,896
Tax rate (*2)	27.50%			27.50%
Net deferred income tax asset	677,794			579,121

(*1) This is the amount that reflects the effect of application of K-IFRS 1109.

(*2) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the year ended December 31, 2018.

(*3) The income tax effect of equity method is reasonably estimated by considering the applicability and realizability of deferred income tax by each investee.

28. INCOME AND EXPENSES BY CATEGORIES OF FINANCIAL INSTRUMENTS:

Interest income and expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Interest income:		
Deposits:		
Due from banks	₩ 54,632	₩ 40,192
Due from other financial institutions	23,569	15,027
	78,201	55,219
Financial assets at FVTPL	124,255	127,347
Financial assets at FVTOCI	509,124	399,078
Securities at amortized cost	216,780	203,334
Loans and other receivables at amortized cost	7,915,198	7,460,220
Others	19,325	9,771
	8,862,883	8,254,969
Interest expenses:		
Deposits due to customers	3,095,646	2,549,593
Debentures	413,915	428,390
Borrowings	124,749	138,535
Others	61,378	52,757
	3,695,688	3,169,275
Interest income, net	₩ 5,167,195	₩ 5,085,694

Net gain or loss on financial assets at FVTPL for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Financial assets at FVTPL:		
Gain (loss) on valuation:		
Gain	₩ 103,206	₩ 93,089
Loss	(27,556)	(66,961)
	75,650	26,128
Gain (loss) on disposal:		
Gain	129,039	259,240
Loss	(24,624)	(81,558)
	104,415	177,682
Gain (loss) on redemption:		
Gain	8,439	11,356
Loss	(12,525)	(11,229)
	(4,086)	127
Dividend income	4,050	4,079
Other income	112,435	82,108
	292,464	290,124
Trading derivatives:		
Gain (loss) on valuation:		
Gain	468,409	428,015
Loss	(463,444)	(458,682)
	4,965	(30,667)
Gain (loss) on disposal:		
Gain	1,073,015	1,180,768
Loss	(1,554,788)	(1,248,633)
	(481,773)	(67,865)
	(476,808)	(98,532)
	₩ (184,344)	₩ 191,592

28. INCOME AND EXPENSES BY CATEGORIES OF FINANCIAL INSTRUMENTS (CONT'D):

Net gain or loss on financial assets at FVTOCI for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Gain (loss) on disposal:		
Gain	₩ 15,597	₩ 12,972
Loss	-	(21,551)
	15,597	(8,579)
Gain (loss) on redemption:		
Gain	562	352
Loss	-	(519)
	562	(167)
Dividend income (*1)	5,699	8,460
	₩ 21,858	₩ (286)

(*1) Dividend income arising from disposal of financial assets at FVTOCI for the years ended December 31, 2019 and 2018, amounted to ₩560 million and ₩639 million, respectively.

The amount reclassified from accumulated other comprehensive income to gain (loss) at the time of removal by financial assets at FVTOCI for the year ended December 31, 2019, is ₩(-)9,209 million.

Net gain or loss on financial assets at amortized cost for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Gain (loss) on disposal: (*1)		
Gain	₩ 6,075	₩ 4,255
Loss	(35,884)	(22,046)
	₩ (29,809)	₩ (17,791)

(*1) For the purpose of credit risk management, certain loans at amortized cost were disposed of.

Provision of allowance for ECLs-related gain (loss) on financial assets at FVTOCI and financial assets at amortized cost for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Financial assets FVTOCI	₩ (305)	₩ (741)
Securities at amortized cost	37	(248)
Due from banks at amortized cost	14,663	(10,963)
Loans and receivables at amortized cost	(262,607)	(553,800)
	₩ (248,212)	₩ (565,752)

29. COMMISSION INCOME AND EXPENSES:

Commission income and expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Commission income:		
Deposits	₩ 1,349	₩ 1,390
Loans and credits	81,850	92,993
Foreign exchange	33,691	34,549
Credit card	335,126	341,849
Asset management	58,301	60,159
Agency business	159,218	152,298
Guarantee service	33,652	34,601
Trust service	157,635	133,246
Others	259,121	246,627
	1,119,943	1,097,712
Commission expenses:		
Loans and credits	30,757	25,329
Foreign exchange	9,616	9,433
Credit card	319,998	329,916
Agency business	22,576	24,314
Others	52,066	48,800
	435,013	437,792
Commission income, net	₩ 684,930	₩ 659,920

30. OTHER OPERATING INCOME AND EXPENSES:

Other operating income and expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Other operating income:		
Gain on valuation of hedging instrument	₩ 56,735	₩ 11,712
Gain on valuation of hedged items	10,582	12,295
Gain from changes in foreign exchange rate	995,424	681,014
Transfer from other provisions	55,815	331
Others	125,480	116,260
	1,244,036	821,612
Other operating expenses:		
Loss on valuation of hedging instrument	11,198	10,129
Loss on valuation of hedged items	53,243	14,743
Loss from changes in foreign exchange rate	454,843	518,548
Fund contribution	538,428	494,159
Transfer to other provisions	37,376	13,238
Others	217,567	188,474
	1,312,655	1,239,291
	₩ (68,619)	₩ (417,679)

31. EMPLOYEE BENEFITS:

Details of employee benefits for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Benefits:		
Employee benefits	₩ 1,262,125	₩ 1,279,278
Fringe benefits	463,642	426,794
	1,725,767	1,706,072
Retirement expenses	193,716	201,722
Termination benefits	50,422	76,991
	₩ 1,969,905	₩ 1,984,785

32. OTHER GENERAL AND ADMINISTRATIVE EXPENSES:

Other general and administrative expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019		For the year ended December 31, 2018	
Tax and dues	₩	116,250	₩	109,771
Telecommunications and transportation		32,632		29,029
Supplies		23,963		23,540
Advertising		105,339		96,162
Utilities		24,703		24,947
Rental		34,339		121,151
Service contract		155,795		137,161
Others		115,279		109,673
	₩	608,300	₩	651,434

33. OTHER INCOME AND EXPENSES:

Other income and expenses for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019		For the year ended December 31, 2018	
Other income:				
Gain on disposal of assets	₩	4,510	₩	2,452
Rent income		17,892		16,810
Miscellaneous income		25,597		27,874
Gain on disposal of investments in affiliates		4		210
Others		3,993		2,067
		51,996		49,413
Other expenses:				
Loss on disposal of assets		2,502		2,069
Impairment loss of assets		7,207		406
Expenses related to collecting receivables		5,696		6,535
Depreciation		4,893		4,643
Agricultural support project expenses (*1)		299,742		291,454
Expenses on restoration		864		1,410
Loss on disposal of investments in affiliates		185		-
Miscellaneous expenses		58,834		70,287
Others		777		1,177
		380,700		377,981
	₩	(328,704)	₩	(328,568)

(*1) Agricultural support project expenses, which are annually paid to the NACF in accordance with the *Agricultural Cooperative Act*, are computed by multiplying the imposed ratio to the average of operating revenue for the recent three years.

34. EPS:

Net income and weighted-average number of common shares used for computation are as follows (Korean won in millions, except per-share amounts):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Net income	₩ 1,517,075	₩ 1,222,569
Dividends on hybrid equity securities	(17,080)	(17,080)
Income attributable to common shares	1,499,995	1,205,489
Weighted-average number of common shares (in shares)	432,438,179	429,569,525
Basic and diluted EPS (in Korean won)	₩ 3,469	₩ 2,806

Diluted EPS equals to basic EPS as there is no dilution effect for the years ended December 31, 2019 and 2018.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS:

The Group is exposed to various financial risks, such as credit, market and liquidity, associated with financial instruments.

For risk management, the Group has the risk management committee; the top legislative organization; the risk management council; the operational legislative organization; and other executive departments, such as risk management task force department, individual risk management department and independent monitoring department.

The risk management committee consists of within 10 directors and deliberates and determines major issues, such as establishment of risk management policies and strategies and determination of risk tolerance limit. Some ordinary and continual issues can be deliberated and determined by the risk management council.

The Group retains various risk management policies and systems, such as establishment of risk tolerance limit, constant monitoring to maintain optimum level of risk and performance evaluation and capital distribution considering the risk. The conditions and results of risk management, including risk management and analysis, are periodically reported to risk management committee and council.

The risk management task force team establishes and manages the risk tolerance limit by business sector and accounting, and those risk measurement and analysis are monthly reported to the risk management council. Also, the Group regularly calculates and monitors the integrated risk to merge exposed risks into a single indicator and manage it comprehensively to be within the reasonable level of risk.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in non-payment of the principal and interest to the payables and potential financial loss to the Group. Credit risk arises from deposits, securities, loans, off-balance accounts, etc. The purpose of credit risk management is to improve asset soundness and to secure the stable revenue by minimizing the probability of credit risk through the establishment and management of credit risk tolerance limit and the proper management of portfolios.

For credit risk management of loan process, the Group separated operation and underwriting process in the business process and monitored such various segments of its credit risk portfolio. The Group also established and operated a total exposure to credit risk limit management system to reduce concentration of credit risk by specific type of loans or borrowers to acceptable level and to diversify risk in the loan portfolio and manage risks in the individual exposure limit system. Furthermore, a credit risk is managed through an early alert system in the event of non-performance by counterparties and underwriting risk is managed by loan underwriting specialists to maintain the tight underwriting standards.

The Group separately measures expected and unexpected losses. Expected losses ("EL") are expected credit risks based on past experience and computed by multiplying exposure at default by probability of default and loss given default. Unexpected losses ("UL") mean maximum credit losses under certain probability deducting EL.

35.1.1 The Group's maximum level of exposures to credit risk

The Group's maximum level of exposures to credit risk as of December 31, 2019 and 2018, are summarized as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Deposits	₩ 3,920,581	₩ 4,260,854
Loans (*1)	238,138,574	227,622,202
Receivables	3,104,821	5,001,846
Debt securities	39,454,487	35,008,927
Derivative assets	535,729	464,700
Loans and credit commitments	84,400,398	78,249,585
Guarantees and endorsed bills	4,805,306	4,867,758
Financial guarantee contracts	2,551,260	1,794,796
	₩ 376,911,156	₩ 357,270,668

(*1) The loans above include the loans measured at FVTPL.

35.1.2 Classification of financial instruments based on credit risk

Measurement credit risk exposures of loans and receivables at amortized cost based on internal risk level as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Credit risk levels (Internal level)	December 31, 2019					
	Household (*1)			Corporate (*1)		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 135,755,114	₩ 10,752,803	₩ -	₩ 57,911,324	₩ 4,459,775	₩ -
Rating 7	341,354	639,391	-	-	850,197	-
Rating 8	4,804	145,017	-	-	84,175	-
Rating 9–10	-	-	455,203	-	-	924,207
	₩ 136,101,272	₩ 11,537,211	₩ 455,203	₩ 57,911,324	₩ 5,394,147	₩ 924,207

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk (cont'd)

Credit risk levels (Internal level)	December 31, 2019			
	Others (*1 and *2)			
	12-month	Significant increases	Impairment	Allowance
Rating 1–6	₩ 26,126,442	₩ 475,411	₩ -	₩ (508,234)
Rating 7	-	75,650	-	(142,111)
Rating 8	-	25,525	-	(59,658)
Rating 9–10	-	-	345	(521,648)
	₩ 26,126,442	₩ 576,586	₩ 345	₩ (1,231,651)

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.
(*2) Receivables are not included in others.

Credit risk levels (Internal level)	December 31, 2018					
	Household (*1)			Corporate (*1)		
	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 122,231,341	₩ 11,143,859	₩ -	₩ 53,247,375	₩ 5,527,969	₩ -
Rating 7	252,429	596,471	-	-	818,144	-
Rating 8	3,394	160,630	-	-	130,712	-
Rating 9–10	-	-	349,130	-	-	1,345,605
	₩ 122,487,164	₩ 11,900,960	₩ 349,130	₩ 53,247,375	₩ 6,476,825	₩ 1,345,605

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.

Credit risk levels (Internal level)	December 31, 2018			
	Others (*1 and *2)			
	12-month	Significant increases	Impairment	Allowance
Rating 1–6	₩ 32,558,639	₩ 472,821	₩ -	₩ (657,486)
Rating 7	-	82,678	-	(139,014)
Rating 8	-	30,313	-	(136,502)
Rating 9–10	-	-	84	(702,336)
	₩ 32,558,639	₩ 585,812	₩ 84	₩ (1,635,338)

(*1) The above amounts of loans and receivables do not include the deferred LOF/LOC and present value discounts.
(*2) Receivables are not included in others.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.2 Classification of financial instruments based on credit risk (cont'd)

The level of exposures to credit risk of loan commitment and financial guarantee contract based on internal risk level as of December 31, 2019 and 2018, is summarized as follows (Korean won in millions):

	December 31, 2019					
	Loan commitment			Financial guarantee contract		
Credit risk levels (internal level)	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 80,443,679	₩ 3,436,191	₩ -	₩ 1,833,348	₩ 717,122	₩ -
Rating 7	31,735	202,621	-	-	790	-
Rating 8	232	19,814	-	-	-	-
Rating 9–10	-	-	266,126	-	-	-
	₩ 80,475,646	₩ 3,658,626	₩ 266,126	₩ 1,833,348	₩ 717,912	₩ -

	December 31, 2018					
	Loan commitment			Financial guarantee contract		
Credit risk levels (internal level)	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1–6	₩ 68,706,321	₩ 7,648,290	₩ -	₩ 1,775,124	₩ 18,449	₩ -
Rating 7	369,877	583,434	-	-	329	-
Rating 8	163,384	310,723	-	-	-	-
Rating 9–10	-	-	467,556	-	-	894
	₩ 69,239,582	₩ 8,542,447	₩ 467,556	₩ 1,775,124	₩ 18,778	₩ 894

The Group's maximum level of exposures to credit risk of debt securities as of December 31, 2019 and 2018, are summarized as follows (Korean won in millions):

	December 31, 2019				
Credit risk levels (external level)	Financial assets at FVTPL	Financial assets at FVTOCI (*1)		Securities at amortized cost (*1)	
		12-month (*1)	Allowance (*2)	12-month (*1)	Allowance
AAA	₩ 2,944,958	₩ 19,134,123	₩ (697)	₩ 12,442,626	₩ (1,095)
AA+–AA-	2,493,771	2,240,263	(836)	-	-
A–BBB	25,915	143,909	(85)	-	-
BBB- or below	30,016	-	-	-	-
	₩ 5,494,660	₩ 21,518,295	₩ (1,618)	₩ 12,442,626	₩ (1,095)

(*1) There are no debt securities whose loss allowances are measured at an amount equal to the lifetime ECLs.
(*2) The effect from the loss allowance for financial assets at FVTOCI is recognized in accumulated other comprehensive income. So, the book values of those are unaffected by the effect.

	December 31, 2018				
Credit risk levels (external level)	Financial assets at FVTPL	Financial assets at FVTOCI (*1)		Securities at amortized cost (*1)	
		12-month (*1)	Allowance (*2)	12-month (*1)	Allowance
AAA	₩ 3,591,127	₩ 18,108,453	₩ (565)	₩ 9,337,235	₩ (1,132)
AA+–AA-	2,369,910	1,446,227	(712)	-	-
A–BBB	15,000	142,107	(108)	-	-
	₩ 5,976,037	₩ 19,696,787	₩ (1,385)	₩ 9,337,235	₩ (1,132)

(*1) There are no debt securities whose loss allowances are measured at an amount equal to the lifetime ECLs.
(*2) The effect from the loss allowance for financial assets at FVTOCI is recognized in accumulated other comprehensive income. So, the book values of those are unaffected by the effect.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.3 Percentage of allowance for ECLs of financial instruments

As of December 31, 2019 and 2018, the percentage of allowance for ECLs is as follows (Korean won in millions):

	December 31, 2019			
	Financial assets at	Financial assets at amortized cost		
Classification	FVTOCI	Due from banks	Securities	Loans (*1)
Total amount	₩ 21,518,296	₩ 3,924,462	₩ 12,442,626	₩ 239,026,737
Allowance for ECLs	1,618	3,881	1,095	1,231,651
Ratio (%)	0.01	0.10	0.01	0.52

(*1) Receivables and deferred LOF/LOC are not included in the above total amounts of loans.

	December 31, 2018			
	Financial assets at	Financial assets at amortized cost		
Classification	FVTOCI	Due from banks	Securities	Loans (*1)
Total amount	₩ 19,696,787	₩ 4,278,801	₩ 9,337,235	₩ 228,951,594
Allowance for ECLs	1,385	17,947	1,132	1,635,338
Ratio (%)	0.01	0.42	0.01	0.71

(*1) Receivables and deferred LOF/LOC are not included in the above total amounts of loans.

35.1.4 Classification of financial instruments by industry, country and customer

Loans classified by industry as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019				
Industry	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Manufacturing	₩ 19,443,285	₩ 449,428	₩ 3,202,923	₩ 23,095,636	₩ (271,199)
Construction	3,926,701	545	94,174	4,021,420	(61,322)
Retail and wholesale	14,936,248	94,788	591,128	15,622,164	(100,687)
Finance and insurance	2,802,922	171,004	562,893	3,536,819	(24,265)
Member cooperatives	17,491,758	-	1,703,531	19,195,289	(53,115)
Others	152,686,083	1,084,616	19,784,710	173,555,409	(721,063)
	₩ 211,286,997	₩ 1,800,381	₩ 25,939,359	₩ 239,026,737	₩ (1,231,651)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

	December 31, 2018				
Industry	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Manufacturing	₩ 18,988,061	₩ 386,650	₩ 2,616,942	₩ 21,991,653	₩ (300,318)
Construction	3,563,555	3,504	113,566	3,680,625	(161,413)
Retail and wholesale	13,786,356	60,157	792,673	14,639,186	(97,434)
Finance and insurance	2,779,287	39,693	374,586	3,193,566	(26,618)
Member cooperatives	16,369,860	-	1,614,256	17,984,116	(59,504)
Others	145,246,478	1,102,906	21,113,064	167,462,448	(990,051)
	₩ 200,733,597	₩ 1,592,910	₩ 26,625,087	₩ 228,951,594	₩ (1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Acceptances and guarantees (including endorsed bills) by industry as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Manufacturing	₩ 2,139,277	₩ 1,291,772	₩ 28,141	₩ 3,459,190	68.12
Construction	51,618	15,567	-	67,185	1.32
Retail and wholesale	270,315	281,823	8,459	560,597	11.04
Finance and insurance	195,128	8,625	-	203,753	4.01
Others	331,088	456,255	-	787,343	15.51
	₩ 2,987,426	₩ 2,054,042	₩ 36,600	₩ 5,078,068	100.00

	December 31, 2018				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Manufacturing	₩ 2,027,905	₩ 1,515,474	₩ -	₩ 3,543,379	69.51
Construction	67,764	24,234	-	91,998	1.80
Retail and wholesale	257,103	344,979	19,307	621,389	12.19
Finance and insurance	109,665	29,919	-	139,584	2.74
Others	304,839	396,171	-	701,010	13.76
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Portfolio of financial assets at FVTPL and FVTOCI and securities at amortized cost by industry as of December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019					
	Financial assets at FVTPL		Financial assets at FVTOCI		Securities at amortized cost	
Classification	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Government and government-sponsored institutions	₩ 2,060,474	21.63	₩ 4,221,838	19.25	₩ 4,973,080	39.97
Finance and insurance	6,592,715	69.22	16,032,083	73.10	7,438,459	59.79
Manufacturing	320,407	3.36	621,812	2.84	-	-
Others	550,347	5.79	1,055,137	4.81	29,992	0.24
	₩ 9,523,943	100.00	₩ 21,930,870	100.00	₩ 12,441,531	100.00

	December 31, 2018					
	Financial assets at FVTPL		Financial assets at FVTOCI		Securities at amortized cost	
Classification	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Government and government-sponsored institutions	₩ 2,251,742	22.18	₩ 3,887,984	19.37	₩ 3,311,007	35.46
Finance and insurance	6,956,125	68.52	15,138,462	75.42	5,865,091	62.82
Manufacturing	262,846	2.59	348,801	1.74	-	-
Others	681,577	6.71	697,834	3.47	160,005	1.72
	₩ 10,152,290	100.00	₩ 20,073,081	100.00	₩ 9,336,103	100.00

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Loans classified by country as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019				
Country	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Korea	₩ 211,286,997	₩ 657,366	₩ 21,930,162	₩ 233,874,525	₩ (1,156,091)
China	-	-	909,955	909,955	(10,113)
Japan	-	40,660	294,494	335,154	(6,219)
USA	-	183,897	751,228	935,125	(16,493)
Indonesia	-	35,238	77,059	112,297	(8,196)
Hong Kong	-	73,830	253,163	326,993	(4,498)
Panama	-	87,398	1,095	88,493	(3,566)
Singapore	-	-	7,585	7,585	(153)
Others	-	721,992	1,714,618	2,436,610	(26,322)
	₩ 211,286,997	₩ 1,800,381	₩ 25,939,359	₩ 239,026,737	₩ (1,231,651)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

	December 31, 2018				
Country	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Korea	₩ 200,733,597	₩ 887,675	₩ 22,991,737	₩ 224,613,009	₩ (1,572,609)
China	-	-	378,377	378,377	(6,599)
Japan	-	-	239,363	239,363	(5,267)
USA	-	96,413	790,318	886,731	(10,085)
Indonesia	-	39,256	133,105	172,361	(4,722)
Hong Kong	-	37,755	160,895	198,650	(3,785)
Panama	-	85,885	9,149	95,034	(4,477)
Singapore	-	-	8,438	8,438	(72)
Others	-	445,926	1,913,705	2,359,631	(27,722)
	₩ 200,733,597	₩ 1,592,910	₩ 26,625,087	₩ 228,951,594	₩ (1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Acceptances and guarantees (including endorsed bills) by country as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Korea	₩ 1,016,442	₩ 302,978	₩ -	₩ 1,319,420	25.98
China	42,350	167,105	15,344	224,799	4.43
Japan	143,873	57,349	-	201,222	3.96
USA	102,389	315,554	798	418,741	8.25
Indonesia	6,523	37,584	181	44,288	0.87
Hong Kong	-	2,011	40	2,051	0.04
Panama	38,166	44,251	-	82,417	1.62
Singapore	37,888	8,430	-	46,318	0.91
Others	1,599,795	1,118,780	20,237	2,738,812	53.94
	₩ 2,987,426	₩ 2,054,042	₩ 36,600	₩ 5,078,068	100.00

	December 31, 2018				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Korea	₩ 878,303	₩ 617,176	₩ -	₩ 1,495,479	29.34
China	33,944	211,051	2,460	247,455	4.85
Japan	94,868	53,941	-	148,809	2.92
USA	75,738	293,596	-	369,334	7.25
Indonesia	7,798	51,958	166	59,922	1.18
Hong Kong	-	544	-	544	0.01
Panama	23,635	3,417	-	27,052	0.53
Singapore	137,236	7,677	-	144,913	2.84
Others	1,515,754	1,071,417	16,681	2,603,852	51.08
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Portfolio of financial assets at FVTPL and FVTOCI and securities at amortized cost in each country as of December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019					
	Financial assets at FVTPL		Financial assets at FVTOCI		Securities at amortized cost	
Classification	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Korea	₩ 9,487,345	99.62	₩ 21,651,709	98.73	₩ 12,441,531	100.00
China	-	-	44,106	0.20	-	-
USA	28,078	0.29	110,760	0.51	-	-
Japan	-	-	17,693	0.08	-	-
Others	8,520	0.09	106,602	0.48	-	-
	₩ 9,523,943	100.00	₩ 21,930,870	100.00	₩ 12,441,531	100.00

	December 31, 2018					
	Financial assets at FVTPL		Financial assets at FVTOCI		Securities at amortized cost	
Classification	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Korea	₩ 10,115,333	99.64	₩ 19,818,324	98.73	₩ 9,336,103	100.00
China	-	-	64,150	0.32	-	-
USA	29,807	0.29	72,674	0.36	-	-
Japan	-	-	16,493	0.08	-	-
Others	7,150	0.07	101,441	0.51	-	-
	₩ 10,152,290	100.00	₩ 20,073,082	100.00	₩ 9,336,103	100.00

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Loans classified by customers as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Customer	December 31, 2019				
	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Household	₩ 95,866,217	₩ 52,392	₩ 3,835,541	₩ 99,754,150	₩ (313,883)
Private business	56,915,484	86,044	1,390,755	58,392,283	(162,368)
Corporate	36,150,982	1,286,051	4,365,143	41,802,176	(674,414)
Member cooperatives	17,491,758	-	1,703,531	19,195,289	(53,115)
Financial institution	892,109	373,331	14,540,203	15,805,643	(24,539)
Government and others	3,970,447	2,563	104,186	4,077,196	(3,332)
	₩ 211,286,997	₩ 1,800,381	₩ 25,939,359	₩ 239,026,737	₩ (1,231,651)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Customer	December 31, 2018				
	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Household	₩ 88,337,677	₩ 34,597	₩ 3,589,494	₩ 91,961,768	₩ (303,265)
Private business	50,583,160	87,108	1,258,343	51,928,611	(152,054)
Corporate	35,779,999	1,444,595	4,522,781	41,747,375	(1,091,052)
Member cooperatives	16,369,860	-	1,614,256	17,984,116	(59,493)
Financial institution	1,422,487	22,362	15,466,251	16,911,100	(25,654)
Government and others	8,240,414	4,248	173,962	8,418,624	(3,820)
	₩ 200,733,597	₩ 1,592,910	₩ 26,625,087	₩ 228,951,594	₩ (1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Acceptances and guarantees (including endorsed bills) by customers as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019				
	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Corporate	₩ 2,860,457	₩ 1,586,012	₩ 36,600	₩ 4,483,069	88.28
Private business	9,238	7,254	-	16,492	0.32
Member cooperatives	550	15,666	-	16,216	0.32
Financial institutions	39,837	844	-	40,681	0.80
Government and others	77,344	444,266	-	521,610	10.28
	₩ 2,987,426	₩ 2,054,042	₩ 36,600	₩ 5,078,068	100.00

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.1 Credit risk (cont'd)

35.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Classification	December 31, 2018				
	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Corporate	₩ 2,650,332	₩ 1,897,891	₩ 19,307	₩ 4,567,530	89.61
Household	200	-	-	200	0.01
Private business	15,032	7,504	-	22,536	0.44
Member cooperatives	594	36,379	-	36,973	0.73
Financial institutions	39,038	1,436	-	40,474	0.79
Government and others	62,080	367,567	-	429,647	8.42
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

35.1.5 Financial impact of collateral on loans

The extent of reducing credit risk due to collateral and other credit enhancements for credit-impaired financial assets as of December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Loans	₩ 430,200	₩ 436,284
Commitment to loans and credit	2,279	58,296
Financial guarantee and notes payable	-	134
	₩ 432,479	₩ 494,714

35.1.6 Assets acquired by exercising security rights

Details of assets acquired by exercising security rights as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Property and equipment (*1)	₩ 15	₩ 15

(*1) Property and equipment are presented as non-current assets classified as held for sale in the consolidated statements of financial position.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.2 Market risk

Market risk is the risk of loss in the value of portfolio and financial instruments caused by adverse movements in market variables, such as interest rates, stock price, currency exchange rate, etc. The Group manages and divides market risk into two risks, generated through trading position or non-trading position. The trading market risk that the Group is mainly exposed to is the interest rate risk arising from the adverse change in the value of debt instruments and interest rate-embedded securities due to changes in market interest rate. The Group is additionally exposed to stock price, foreign exchange rate risk and commodity price risk arising from equity securities, debt securities and derivatives. The Group is exposed to the interest rate risk and liquidity risk.

35.2.1 Trading position

a) The trading position in accordance with 'Regulation of Trading Policy' is subject to the trading market management. The basic requirements of the trading position are as follows:

-The target position is not restricted to the sale. It is evaluated daily at fair value and should be able to be a hedge against important risks in the market.
-The trading position should be controlled by the instruction of the trading policy and managed by a separate trading department.
-The target position is operated in accordance with a documented trading strategy and the limit of trading should be controlled.
-Without the prior approval, a professional dealer or an operating division for the target position should be authorized to handle transactions within the predetermined limit.
-The target position for the risk management should be periodically reported to the management.

b) Details of risk management by risk type

① Interest rate risk

Interest rate risk from trading positions arises mainly from the trades of Korean won-denominated debt securities. As the financial instruments in the trading accounts are marked to market daily, the Group manages the interest rate risk related to its trading accounts using market-value-based tools used to measure risk, such as Value at Risk (VaR) and sensitivity analysis.

② Equity price risk

Equity price risk arises from the Group's equity trading portfolio in Korean won since the Group has no trading position of equity securities denominated in foreign currencies. The equity trading portfolio in Korean won consists of exchange-traded stocks and nearest month or second nearest-month futures contracts under the strict restrictions considering diversification as well as stop-loss limits and position limits.

③ Foreign exchange rate risk

Foreign exchange rate risk arises when the Group has assets and liabilities that are denominated in currencies other than Korean 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 and Euro are typically accounted for the majority of the Group's foreign currency assets and liabilities.

c) Measurement of market risk occurring at the trading position

① VaR measurement

VaR is a statistically estimated maximum amount of loss that could occur in a holding (or trading) period for a given confidence interval due to changes in market variables, such as interest rate, stock price, exchange rate and commodity price. The Group monitors risk arising from trading activities in business sectors and departments, and measures market risk of all the trading assets and liabilities in both Korean won and foreign currencies using VaR.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.2 Market risk (cont'd)

35.2.1 Trading position (cont'd)

The Group calculates VaR using historical simulation model when the Group measures market risk arising from the trading position. Under historical simulation model, VaR is calculated as sublevel (1 - confidence level) of a normal distribution of risk resulting from revaluation of loan portfolio applying a scenario of actual profit ratio movements for the past 250 business days to currently holding loan portfolio. The Group discloses 10-day VaR measured at 99% confidence level.

VaR is a commonly used market risk measurement technique with the following limitations. VaR estimates possible loss 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 loss can be different depending on the changes in assumptions made at the time of the calculation. In addition, the time periods used for the model, generally one or 10 days are assumed 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.

② Back testing

The Group conducts back testing of results against daily actual gain (loss) and expected gain (loss) on a daily basis. By performing back testing, the Group checks the validity of the model and any loss that might exceed a predetermined 99% confidence level.

③ Stress testing

The Group conducts stress testing to assess its market risk exposure to abnormal market fluctuations, such as changes in interest rate, equity price, exchange rate and implied volatility of derivatives, subject to the changes in the value of the portfolio. The Group uses not only hypothetical scenarios as a main scenario, but also historical scenarios as a supplementary analysis. Stress testing is conducted on a monthly basis.

The Group calculates VaR based on its consolidated financial statements and the following table shows average VaR, maximum VaR and minimum VaR at a 99% confidence level of interest rate risk, stock price risk and foreign exchange rate risk, commodity price risk and other risk for trading positions with a 10-day holding period as of December 31, 2019 and 2018 (Korean won in millions):

	December 31, 2019			
Classification	Max	Min	Average	December 31, 2019
Interest rate risk	₩ 29,869	₩ 15,538	₩ 19,895	₩ 28,285
Stock price risk	18,208	6,579	14,044	10,209
Foreign currency risk	2,053	147	700	1,712
Other risk	8	-	3	1
Total risk (*1)	25,433	15,310	20,229	24,255

(*1) Total VaR is computed taking into consideration the correlations of the risk factors.

	December 31, 2018			
Classification	Max	Min	Average	December 31, 2018
Interest rate risk	₩ 30,944	₩ 15,974	₩ 27,687	₩ 16,431
Stock price risk	23,983	5,481	16,142	8,034
Foreign currency risk	5,372	117	1,578	490
Other risk	17	-	3	3
Total risk (*1)	31,153	15,110	25,897	15,763

(*1) Total VaR is computed taking into consideration the correlations of the risk factors.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.2 Market risk (cont'd)

35.2.2 Non-trading positions

Non-trading positions refer to all positions, excluding trading positions. The Group's principal market risk from non-trading activities is interest rate risk. Interest rate risk refers to the risk of exposure to loss from reduction of net interest income or net asset value as a result of interest rate changes due to mismatched maturities between interest earning assets and interest-bearing liabilities or mismatched interest rate change periods.

The subject for interest rate risk measurement includes non-trading positions, such as interest-bearing assets, interest-bearing liabilities, and transaction of derivatives held for hedging, and others among off-balance transactions. The Group has measured and managed the interest rate risk, which affects the Group's earnings and the economic value of the Group's net assets. From the Group's earnings perspective, the Group has measured and managed interest rate risk through interest rate accumulated gap ratio, net interest income simulations, □NII and others, to manage changes in net interest income as a result of interest rate changes. With respect to the economic value of the Group's net assets, the Group has measured and managed interest rate risk through duration gap, □EVE and others, to manage changes in the value of net assets of future cash flow as a result of interest rate changes.

The objective of interest risk management is to manage changes in interest income at a sustainable level due to change in interest rates and is to manage stable net asset value through effective management of interest-earning asset and interest-bearing liabilities. The limits for interest rate accumulated gap ratio, □NII, □EVE and others are approved annually by the risk management committee for interest rate risk management.

□EVE for non-trading portfolios as of December 31, 2019, are as follows (Korean won in millions):

Classification	December 31, 2019
□EVE	₩ 1,001,634

In accordance with the application of IRRBB from December 31, 2019, interest rate risk is calculated using □EVE. As of December 31, 2018, interest rate risk was calculated using VaR and the VaR was ₩100,382 million.

35.3 Liquidity risk

35.3.1 General

Liquidity risk is the risk of loss that the Group is unable to meet its payment obligations arising from financial liabilities as they fall due or raise funds with high interest rates and unfavorable disposal of securities to solve the shortage of funds or facing inability to pay dues to unexpected cash flows.

The cash flows disclosed in maturity analysis do not correspond to the amounts of discounted principals and interest payments at the contracts in the consolidated statements of financial position.

35.3.2 Liquidity risk management

The Group classifies and discloses contractual maturity of all financial liabilities in relation to liquidity risk into six categories, such as less than one month, one month to three months, three to six months, six months to one year, one year to five years and more than five years. The Group manages liquidity risk by analyzing cash flows of the liabilities in the groups of homogeneous accounts under the appropriate criteria (remaining contractual maturity, contract period, etc.).

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.3 Liquidity risk (cont'd)

35.3.3 The term structure of financial liabilities

The term structures of liabilities as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019						
Classification (*1 and *2)	Less than 1 month	1 month–3 months	3 months–6 months	6 months–1 year	1 year–5 years	More than 5 years	Total
Deposits due to customers	₩ 117,896,341	₩ 22,098,588	₩ 35,329,411	₩ 54,363,542	₩ 7,259,067	₩ 2,036,926	₩ 238,983,875
Financial liabilities at FVTPL	2,554	-	-	10,788	-	-	13,342
Trading derivative liabilities	503,116	-	-	-	-	-	503,116
Hedging derivative liabilities	631	1,929	39	2,014	3,003	45	7,661
Borrowings	3,114,493	631,534	674,317	1,215,380	4,212,772	1,524,768	11,373,264
Debentures	346,317	71,534	2,156,232	2,139,238	10,170,847	1,999,738	16,883,906
Other financial liabilities	13,745,258	3,280	7,338	47,543	11,033	-	13,814,452
Lease liabilities	7,031	10,245	12,727	21,185	66,351	848	118,387
	₩ 135,615,741	₩ 22,817,110	₩ 38,180,064	₩ 57,799,690	₩ 21,723,073	₩ 5,562,325	₩ 281,698,003

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

	December 31, 2018						
Classification (*1 and *2)	Less than 1 month	1 month–3 months	3 months–6 months	6 months–1 year	1 year–5 years	More than 5 years	Total
Deposits due to customers	₩ 104,870,767	₩ 25,662,531	₩ 31,389,839	₩ 53,986,950	₩ 8,894,334	₩ 2,060,262	₩ 226,864,683
Financial liabilities at FVTPL	-	2,525	-	10,751	-	-	13,276
Trading derivative liabilities	479,800	-	-	-	-	-	479,800
Hedging derivative liabilities	2,497	4,291	(54)	10,354	26,091	-	43,179
Borrowings	3,413,970	428,001	769,206	1,211,905	4,405,666	1,323,732	11,552,480
Debentures	219,274	1,110,439	3,013,819	2,278,396	9,186,921	2,214,614	18,023,463
Other financial liabilities	12,972,955	3,010	7,443	52,624	10,454	-	13,046,486
	₩ 121,959,263	₩ 27,210,797	₩ 35,180,253	₩ 57,550,980	₩ 22,523,466	₩ 5,598,608	₩ 270,023,367

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.3 Liquidity risk (cont'd)

35.3.4 Maturity analysis of off-balance accounts

Guarantees and loan commitments, including guarantees for debenture issuance and guarantees for loans, which are financial guarantees provided by the Group, have expiration dates. However, under the term of the guarantees and loan commitments, timely payment shall be made upon demand by the counterparty. Details of off-balance accounts as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Loan commitment (*1)	₩ 87,865,217	₩ 80,981,910
Guarantees and endorsed bills (*1)	5,078,068	5,097,360
	₩ 92,943,285	₩ 86,079,270

(*1) The amount of financial guarantee contracts is included. The total financial guarantee contracts amount to ₩2,551,260 million and ₩1,794,796 million as of December 31, 2019 and 2018, respectively.

35.4 Currency risk

Currency risk is a risk incurred when the fair value of a financial instrument or value of future cash flows fluctuates due to the changes in foreign exchange rates. Currency risk does not arise from the financial instruments expressed in the functional currency or in non-monetary items measured by using the historical foreign exchange rates. In order to establish the stop loss and limits, the Group manages the foreign exchange net exposure amount of the trading and non-trading portfolios by each currency.

Significant assets and liabilities denominated in foreign currencies as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019					
Classification	USD	JPY	EUR	CNY	Others	Total
Assets:						
Cash and due from banks	₩ 1,552,235	₩ 162,479	₩ 129,781	₩ 14,159	₩ 148,226	₩ 2,006,880
Financial assets at FVTPL	392,373	-	3,892	-	-	396,265
Derivative assets	46,241	-	-	-	-	46,241
Financial assets at FVTOCI	686,540	-	272	-	-	686,812
Financial assets at amortized cost	6,152,453	231,312	200,150	9,534	83,272	6,676,721
Other financial assets	-	-	-	-	128	128
	₩ 8,829,842	₩ 393,791	₩ 334,095	₩ 23,693	₩ 231,626	₩ 9,813,047
Liabilities:						
Deposits	₩ 3,263,005	₩ 107,226	₩ 173,615	₩ 13,743	₩ 102,278	₩ 3,659,867
Derivative liabilities	27,300	-	-	-	-	27,300
Borrowings	2,426,324	55,959	62,927	8,946	36,448	2,590,604
Debentures	2,141,162	-	-	-	-	2,141,162
Other financial liabilities	564,509	52,551	109,487	651	20,439	747,637
	₩ 8,422,300	₩ 215,736	₩ 346,029	₩ 23,340	₩ 159,165	₩ 9,166,570

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.4 Currency risk (cont'd)

	December 31, 2018					
Classification	USD	JPY	EUR	CNY	Others	Total
Assets:						
Cash and due from banks	₩ 1,757,247	₩ 172,792	₩ 163,761	₩ 57,814	₩ 114,531	₩ 2,266,145
Financial assets at FVTPL	263,652	-	-	-	-	263,652
Derivative assets	27,190	-	-	-	-	27,190
Financial assets at FVTOCI	671,409	-	273	-	-	671,682
Financial assets at amortized cost	6,084,636	246,374	264,961	6,520	55,994	6,658,485
Other financial assets	1	-	-	-	223	224
	₩ 8,804,135	₩ 419,166	₩ 428,995	₩ 64,334	₩ 170,748	₩ 9,887,378
Liabilities:						
Deposits	₩ 2,931,675	₩ 104,054	₩ 235,532	₩ 22,581	₩ 101,577	₩ 3,395,419
Derivative liabilities	54,738	-	-	-	-	54,738
Borrowings	2,493,025	75,822	63,429	701	6,687	2,639,664
Debentures	2,314,071	-	-	-	-	2,314,071
Other financial liabilities	633,532	19,842	112,087	1,119	25,137	791,717
	₩ 8,427,041	₩ 199,718	₩ 411,048	₩ 24,401	₩ 133,401	₩ 9,195,609

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.5 Offsetting financial assets and liabilities

Details of financial assets that are set off and subject to an enforceable master netting arrangement or similar agreement as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019					
				Non offsetting amount		
Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the consolidated statement of financial position	Financial instruments	Cash collateral received	Net amounts
Derivative assets	₩ 535,729	₩ -	₩ 535,729	₩ 261,774	₩ 25,290	₩ 248,665
Loaned securities	5,978	-	5,978	5,978	-	-
Loans-bonds purchased under resale agreements	13,075,600	-	13,075,600	13,075,600	-	-
Receivables-receivable spot exchange	284,226	-	284,226	284,189	-	37
Receivables-receivable spot exchange in foreign currency	708,293	-	708,293	520,807	-	187,486
Receivables-domestic exchange settlement debits	8,946,454	8,741,854	204,600	-	-	204,600
Receivables-intercompany receivables	277,566	70	277,496	-	-	277,496
	₩ 23,833,846	₩ 8,741,924	₩ 15,091,922	₩ 14,148,348	₩ 25,290	₩ 918,284

	December 31, 2018					
				Non offsetting amount		
Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the consolidated statement of financial position	Financial instruments	Cash collateral received	Net amounts
Derivative assets	₩ 464,700	₩ -	₩ 464,700	₩ 256,075	₩ 14,837	₩ 193,788
Loans-bonds purchased under resale agreements	13,885,700	-	13,885,700	13,885,700	-	-
Receivables-receivable spot exchange	310,940	-	310,940	310,872	-	68
Receivables-receivable spot exchange in foreign currency	721,717	-	721,717	486,431	-	235,286
Receivables-domestic exchange settlement debits	10,033,158	9,396,901	636,257	-	-	636,257
Receivables-intercompany receivables	1,739,195	131	1,739,064	-	-	1,739,064
	₩ 27,155,410	₩ 9,397,032	₩ 17,758,378	₩ 14,939,078	₩ 14,837	₩ 2,804,463

35. RISK DISCLOSURE OF FINANCIAL INSTRUMENTS (CONT'D):

35.5 Offsetting financial assets and liabilities (cont'd)

Details of financial liabilities that are set off and subject to an enforceable master netting arrangement or similar agreement as of December 31, 2019 and 2018, are as follows (Korean won in millions):

	December 31, 2019					
				Non offsetting amount		
Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the consolidated statement of financial position	Financial instruments	Cash collateral provided	Net amounts
Derivative liabilities	₩ 510,654	₩ -	₩ 510,654	₩ 261,774	₩ 20,597	₩ 228,283
Borrowings-bonds sold under repurchase agreements	303,400	-	303,400	303,400	-	-
Other financial liabilities-payable spot exchange	520,906	-	520,906	520,807	-	99
Other financial liabilities-payable spot exchange in foreign currency	471,594	-	471,594	284,189	-	187,405
Other financial liabilities-domestic exchange settlement credits	12,528,669	8,741,854	3,786,815	-	-	3,786,815
Other financial liabilities-intercompany payables	4,530	70	4,460	-	-	4,460
	₩ 14,339,753	₩ 8,741,924	₩ 5,597,829	₩ 1,370,170	₩ 20,597	₩ 4,207,062

	December 31, 2018					
				Non offsetting amount		
Classification	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the consolidated statement of financial position	Financial instruments	Cash collateral provided	Net amounts
Derivative liabilities	₩ 521,750	₩ -	₩ 521,750	₩ 256,075	₩ 12,612	₩ 253,063
Borrowings-bonds sold under repurchase agreements	769,600	-	769,600	769,600	-	-
Other financial liabilities-payable spot exchange	486,517	-	486,517	486,431	-	86
Other financial liabilities-payable spot exchange in foreign currency	546,144	-	546,144	310,872	-	235,272
Other financial liabilities-domestic exchange settlement credits	12,063,522	9,396,901	2,666,621	-	-	2,666,621
Other financial liabilities-intercompany payables	1,029	131	898	-	-	898
	₩ 14,388,562	₩ 9,397,032	₩ 4,991,530	₩ 1,822,978	₩ 12,612	₩ 3,155,940

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS:

Fair value hierarchy of financial instruments as of December 31, 2019 and 2018, is as follows (Korean won in millions):

All financial instruments at fair value are categorized into one of the following three fair value hierarchy levels:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
Level 3: Inputs for the asset or liability that are not based on the observable market data (unobservable inputs)

Classification	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ 1,065,788	₩ 6,630,083	₩ 1,828,072	₩ 9,523,943
Derivative assets	-	534,368	1,361	535,729
Financial assets at FVTOCI	11,361,564	10,350,295	219,011	21,930,870
	₩ 12,427,352	₩ 17,514,746	₩ 2,048,444	₩ 31,990,542
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 13,342	₩ -	₩ 13,342
Derivative liabilities	-	510,065	589	510,654
	₩ -	₩ 523,407	₩ 589	₩ 523,996

Classification	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ 1,425,925	₩ 7,166,647	₩ 1,559,718	₩ 10,152,290
Derivative assets	-	463,192	1,508	464,700
Financial assets at FVTOCI	3,462,952	16,396,604	213,525	20,073,081
	₩ 4,888,877	₩ 24,026,443	₩ 1,774,751	₩ 30,690,071
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 13,276	₩ -	₩ 13,276
Derivative liabilities	-	520,764	986	521,750
	₩ -	₩ 534,040	₩ 986	₩ 535,026

Financial assets and liabilities at FVTPL, financial assets at FVTOCI and derivative assets and liabilities are recognized at fair value. 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 at the measurement date.

Fair value of financial instruments traded in an active market is determined by using the published price quotations based on market prices. However, if the market for a financial instrument is not active, fair value is determined by using a valuation method.

The fair value of debt securities is calculated by the average of the appraised values of KIS Pricing, Korea Asset Pricing, NICE P&I and FN Pricing.

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS (CONT'D):

The following table gives information about how the fair values of these financial assets and financial liabilities included in the Level 2 and Level 3 are determined (in particular, the valuation method, significant unobservable inputs and relationship of unobservable inputs to fair value).

Classification	Valuation techniques	Input variables, which are significant but unobservable in measurement of fair value	Range
Financial instruments that are measured at fair value:			
Financial assets at FVTPL	Discounted cash flow, FCFE model, Dividend discount model, Net asset value method, Binomial model, etc.	Expected growth rate Discount rate Volatility of the underlying assets	0.00% 3.07%–18.32% 14.51%–21.81%
Derivatives	Discounted cash flow, Intrinsic forward rate, Option-pricing model, and Monte Carlo simulation	Risk-free rate of return Forward rate Volatility of the underlying assets Discount curve	- - 2.58%–69.91% (-)1.80%–20.63%
Financial assets at FVTOCI	Discounted cash flow, Comparable companies valuation method, Dividend discount model, Net asset value method, etc.	Expected growth rate Discount rate	0.00% 9.92%–15.94%
Financial instruments that not measured at fair value (but fair value disclosures are required):			
Debt securities at amortized cost	Discounted cash flow	Market yield	-
Loans at amortized cost	Discounted cash flow	Market yield, Credit spread, Liquidity risk premium and other spread	-
Deposits and borrowings	Discounted cash flow	Market yield, Other spread	-
Debentures	Discounted cash flow	Risk-free rate of return, Credit spread	-

Financial assets and financial liabilities that are classified as Level 3 are measured at fair value based on the valuation performed by independent professionals or the estimated amount using the valuation model of the Group. Unobservable input variables are calculated from an internal system, and suitability of the unobservable input variables is reviewed at all times. The valuation council of fair value reviews the valuation model of the Group, and reviews and approves the suitability of the valuation model.

The following table shows the sensitivity analysis of the fair value of Level 3 financial instruments.

The sensitivity analysis of the financial instruments has been performed by classifying them as favorable and unfavorable changes based on how changes in unobservable assumptions have effects on the fluctuations of financial instruments' value. When the fair value of a financial instruments is affected by more than one input variable, the results from assuming the most favorable and the most unfavorable changes are shown in the table below. The sensitivity analysis was performed for two types of Level 3 financial instruments: (a) interest rate derivatives, equity derivatives, equity securities and loans that fair value changes are recognized in net incomes and (b) equity securities that fair value changes are recognized in other comprehensive income.

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS (CONT'D):

Sensitivity analysis by type of financial instruments as a result of changes in input parameters as of December 31, 2019 and 2018, is as follows (Korean won in millions):

	December 31, 2019				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Financial assets at FVTPL (*1)	₩ 1,828,072	₩ 6,797	₩ (4,286)	₩ -	₩ -
Derivative assets (*2)	1,361	2,464	(336)	-	-
Financial assets at FVTOCI (*1)	219,011	-	-	13,594	(6,432)
	₩ 2,048,444	₩ 9,261	₩ (4,622)	₩ 13,594	₩ (6,432)
Financial liabilities:					
Derivative liabilities (*2)	₩ 589	₩ (21)	₩ (2,115)	₩ -	₩ -

(*1) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0%–1%) and the discount rate or the correlation between liquidation value (-1%–1%) and discount rate.
(*2) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20%, interest by 2% and exchange rate by 10%.

	December 31, 2018				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Financial assets at FVTPL (*1)	₩ 1,559,718	₩ 4,892	₩ (3,545)	₩ -	₩ -
Derivative assets (*2)	1,508	835	(73)	-	-
Financial assets at FVTOCI (*1)	213,525	-	-	13,439	(6,516)
	₩ 1,774,751	₩ 5,727	₩ (3,618)	₩ 13,439	₩ (6,516)
Financial liabilities:					
Derivative liabilities (*2)	₩ 986	₩ 126	₩ (846)	₩ -	₩ -

(*1) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0%–1%) and the discount rate or the correlation between liquidation value (-1%–1%) and discount rate.
(*2) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20%, interest by 2% and exchange rate by 10%.

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS (CONT'D):

Changes in Level 3 financial instruments for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
	Beginning	Gain	Other comprehensive income	Purchase/ issue	Disposal/ settlement	Transfer from or to Level 3 (*2)	Ending
Financial instruments:							
Financial assets at FVTPL	₩ 1,559,718	₩ 48,947	₩ -	₩ 415,741	₩ (196,334)	₩ -	₩ 1,828,072
Net derivative assets	522	250	-	-	-	-	772
Financial assets at FVTOCI	213,525	-	4,986	500	-	-	219,011
	₩ 1,773,765	₩ 49,197	₩ 4,986	₩ 416,241	₩ (196,334)	₩ -	₩ 2,047,855

	For the year ended December 31, 2018							
	Beginning	Gain (loss)	Other comprehensive income	Purchase/ issue	Disposal/ Settlement	Business Combinations	Transfer from or to Level 3 (*2)	Ending
Financial instruments:								
Financial assets at FVTPL (*1)	₩ 1,457,204	₩ 163,179	₩ -	₩ 218,166	₩ (278,852)	₩ 21	₩ -	₩ 1,559,718
Net derivative assets (*1)	817	(118)	-	-	(177)	-	-	522
Financial assets at FVTOCI (*1)	200,195	-	11,921	1,144	-	-	265	213,525
	₩ 1,658,216	₩ 163,061	₩ 11,921	₩ 219,310	₩ (279,029)	₩ 21	₩ 265	₩ 1,773,765

(*1) Beginning balance is restated in accordance with K-IFRS 1109.
(*2) Financial assets at FVTOCI were transferred out of Level 1 to Level 3, as they were delisted.

For the years ended December 31, 2019 and 2018, gain (loss) related to financial assets and liabilities is included in gain (loss) on financial instruments at FVTPL in the consolidated statements of profit or loss and other comprehensive income.

Total valuation gain and loss, which are recognized as other comprehensive income (loss), are related to unlisted equity securities for strategic purposes as of December 31, 2019 and 2018.

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS (CONT'D):

Gain or loss recognized from changes in Level 3 financial instruments for the years ended December 31, 2019 and 2018, is as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	
	Income or loss during the reporting period	Income or loss related to financial instruments held as of December 31, 2019
Gain on financial assets at FVTPL	₩ 49,196	₩ 47,067

Classification	For the year ended December 31, 2018	
	Income or loss during the reporting period	Income or loss related to financial instruments held as of December 31, 2018
Gain on financial assets at FVTPL	₩ 163,061	₩ 15,575

The Group recognizes transfers between the fair value hierarchy levels as of the event or change in circumstances that caused the transfer. There are no changes in valuation techniques, which are used as measurement methods of fair value of financial instruments, which are classified as Level 2 and Level 3. There are no significant changes to the business environment or economic environment, which affect the fair value of financial instruments owned by the Group for the years ended December 31, 2019 and 2018.

Fair value and carrying amount of financial assets and liabilities that are recorded at amortized cost as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019				
	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 2,025,460	₩ 3,920,582	₩ -	₩ 5,946,042	₩ 5,946,042
Securities at amortized cost	1,705,620	10,866,201	-	12,571,821	12,441,531
Loans at amortized cost	13,818	-	244,690,433	244,704,251	241,224,080
Other financial assets	-	-	222	222	222
	₩ 3,744,898	₩ 14,786,783	₩ 244,690,654	₩ 263,222,335	₩ 259,611,875
Financial liabilities:					
Deposits	₩ 1,528	₩ -	₩ 237,888,706	₩ 237,890,234	₩ 236,384,433
Borrowings	-	-	11,176,928	11,176,928	11,171,538
Debentures	-	16,087,699	-	16,087,699	15,819,070
Other financial liabilities (*1)	58	-	12,449,111	12,449,169	13,928,794
	₩ 1,586	₩ 16,087,699	₩ 261,514,745	₩ 277,604,030	₩ 277,303,835

(*1) Interest payables included in the computation for fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

36. FAIR VALUE HIERARCHY OF FINANCIAL INSTRUMENTS (CONT'D):

	December 31, 2018				
Classification	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 1,933,864	₩ 4,260,854	₩ -	₩ 6,194,718	₩ 6,194,718
Securities at amortized cost	494,214	8,907,009	-	9,401,223	9,336,103
Loans at amortized cost	-	-	234,210,586	234,210,586	232,595,342
Other financial assets	222	-	207	429	429
	₩ 2,428,300	₩ 13,167,863	₩ 234,210,793	₩ 249,806,956	₩ 248,126,592
Financial liabilities:					
Deposits	₩ -	₩ -	₩ 225,466,141	₩ 225,466,141	₩ 224,230,411
Borrowings	-	-	11,287,268	11,287,268	11,283,346
Debentures	-	17,030,545	-	17,030,545	16,828,002
Other financial liabilities (*1)	-	-	11,807,619	11,807,619	13,045,701
	₩ -	₩ 17,030,545	₩ 248,561,028	₩ 265,591,573	₩ 265,387,460

(*1) Interest payables included in the computation for fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

37. RELATED-PARTY TRANSACTIONS:

Details of related-party of the Group as of December 31, 2019, are as follows:

Classification	Company
Ultimate parent company	NACF
Parent company	NH Financial Group Inc.
Associates	Korea Credit Bureau Co., Ltd.; NH-AJUIB Growth 2013 PEF; NH-QCP Global Partnership PEF; IBK-NH Smallgiant PEF; Kyunggi-DSC Superman Investment Fund No.1; NH Agri-Biz Value Creative 1st PEF; NHAJU Digital Fund; NH-NAU Agro Food 1st Private Equity Fund; 2012sunlight Co., Ltd.; Yujinmplus Co., Ltd.; Seasons Shipping Co., Ltd.; and Inkordan Trading Co., Ltd.
Other related parties	NH Life Insurance Co., Ltd.; NH Property and Casualty Insurance Co., Ltd.; NH Investment & Securities Co., Ltd.; NH NongHyup Capital Co., Ltd.; NH Savings Bank Co., Ltd.; NH REITs Management Co., Ltd.; NH Venture Investment Co., Ltd.; NH-Amundi Overseas Senior Loan Private Fund 2; NH-Amundi Global TPG Asia VII Private Master Fund(USD)[F0F]; NH-Amundi US Infra Private Fund 1; NH-Amundi MBKP Special Situations I Private Fund 1; MMT; Woori Global Real Estate Private Balanced Fund; KB Neulpureun(Evergreen) Private Fund No. 97 and 3 others; NH Futures Co., Ltd.; NH Investment & Securities (H.K.) Ltd.; NH Absolute Global Opportunity Fund; NH Absolute Return Investment Strategies Fund; NH Securities Vietnam Co., Ltd.; NH Securities America Inc.; NH Absolute Return Partners Pte., Ltd.; PT. NH Korindo Securities Indonesia; Beijing NH Investment Advisory Co., Ltd.; NH Absolute Return PEF No.1; N.H. Bio First New Technology Association; KoFC Woori Growth Champ 2010 No.3; NH New Growth Private Equity Fund; GnM Holdings Co., Ltd.; Granmonster Co., Ltd.; Makeulike Co., Ltd.; Gran Place Co., Ltd.; Doubletree Interactive Co., Ltd.; Amarketing Co., Ltd; True Color Co., Ltd.; Likenclick Co., Ltd.; ThePlayer Co., Ltd.; NH Healthcare1 Fund; NH Hedge Co., Ltd.; Principal Guaranteed Trust of NH Investment & Securities; IBS 11th SPC Inc.; Woori Credit 6th Co., Ltd.; New Harmony 2nd Co., Ltd.; Precious 6th Co., Ltd.; Spes 9th Co., Ltd.; Biangko 2nd Co., Ltd.; Biangko 3rd Co., Ltd.; Biangko 7th Co., Ltd.; Biangko 8th Co., Ltd.; Green Power 1st Co., Ltd.; Green Power 2nd Co., Ltd.; Green Power 3rd Co., Ltd.; Renewable Energy 9th Co., Ltd.; New start JH Co., Ltd.; New Real Two Namdaemun Co., Ltd.; Warmachine 8th Co., Ltd.; Warmachine 9th Co., Ltd.; Warmachine 10th Co., Ltd.; Warmachine 12th Co., Ltd.; Warmachine 11th Co., Ltd.; Warmachine 15th Co., Ltd.; Tlindependence; Cube 4th Co., Ltd.; Cube 5th Co., Ltd.; The shop oncheon 3rd co., Ltd.; Gochon Logis 2nd Co., Ltd.; Merigogo 4th Co., Ltd.; New Harmony sinnae 1st Co., Ltd; New Harmony sinnae 2nd Co., Ltd; Park One Alpha 7th Co. Ltd.; Park One Beta 1st Co. Ltd.; JSK 1st Co., Ltd.; Gwanggyo SK 2nd Co., Ltd.; Gwanggyo SK 1st Co., Ltd.; New Songdo NH 1st co., Ltd.; N-First Realty 3rd Co., Ltd.; Parkcity First co.,Ltd.; VictoryJije1st Co., Ltd.; NH Southgate Co., Ltd.; RG HVL overseas resources development Fund No.1; KORAMCO Professional Investment Type Private Real Estate Fund No.97 (Class 2); GIS GLOBAL SPECIALIZED PRIVATE PLACEMENT REAL ESTATE INVESTMENT TRUST NO.300; Pavilion professional private equity real estate investment trust No. 20; Pavilion professional private equity real estate investment trust No. 27; PTR IPO Multi Private Investment Trust; Core IPO Series Multi private fund 2; Korea Investment Richway Securities Investment Trust; Samsung FANG plus 1.5X leverage fund; LION Gold Bridge Loan Hedge Fund No.1; NH-Amundi Asset Management Co., Ltd.; Genesis No.1 Private Equity Fund; Blue Ocean Corporate’s Financial Stabilization PEF No.1; NH-LB Growth Champ 2011-4 PEF; NH-QCP HNC KD-1 PEF; INIAS NH Private Equity Joint Venture; KDBC-EUM Corporate's Financial Stabilization PEF No.4; Truben Global Healthcare Private Equity Joint Venture; Yeouido munhwa broadcasting PFV; NH Special Purpose Acquisition 12 Co., Ltd.; NH Special Purpose Acquisition 13 Co., Ltd.; NH Special Purpose Acquisition 14 Co., Ltd.; NH Special Purpose Acquisition 15 Co., Ltd.; Stassets DA value Investment Association No.2; Stassets DA value Investment Association No.3; Midas PEF No.1; Global Opportunity Private Equity Joint Venture; Glenwood Co-investment PEF No.1; Bric-Obit New Technology Investment No. 1; Bric-Obit New Technology Investment No. 8; NH Axis Hightech New Technology Investment; Ascendo New Generation Healthcare Investment; NH-Aju Kosdaq Scaleup Fund; NH-Paxtone Private Equity Fund; NH-OPUS Corporate Financial Stability Private Equity Fund; NH-OPUS Corporate Financial Stability Private Equity Fund II; Medical Investment Management Inc.; Sandonghansangchieop Co., Ltd.; Seoulseongbochieop Co., Ltd.; Daguang Real Estate Developing Co., Ltd.; Edupalace Inc.; Edupalace Co., Ltd.; Square-DAvalue Fund NO 1; MK Ventures-K Clavis Growth capital Venture Fund 1; Mastern No.51 Yeouido PFV Co.,Ltd; Smilegate Vietnam Kairos Private Equity Fund #1; NH-Soo Investment innovative growth M&A fund; EIP Investment Infrastructure No.1 PEF; NH Co-Investment Private Equity Fund; CO-OP Group(Tianjin) International Leasing Co., Ltd.; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2; Attila Infra PEF No.1; Korea Growth Opportunity Private Equity Fund I; Stonebridge Rising Star Venture Fund No.1; NH Agribusiness Group Inc.; NH Networks Co., Ltd.; NH Information System Co., Ltd.; Agricultural Cooperative Asset Management Co., Ltd.; NH Partners Co., Ltd.; NH Kimhae I&D Co.; NongHyup Foundation; NongHyup Hanaro Mart Inc.; Agricultural Corporation NongHyup Food Grain Inc.; Korea Agriculture Cooperative Marketing Inc.; Agricultural Cooperative Pusan Gyeongnam Marketing Inc.; Agricultural Cooperative Chungbuk Marketing Co., Ltd.; Daejeon Agricultural Products Marketing Co., Ltd.; NongHyup Logistics Service Inc.; NongHyup Chemical Co., Ltd.; NH NongHyup Trading Co., Ltd.; NongHyup-Agro Inc.; NongHyup Red Ginseng Co., Ltd.; Namhae Chemical Corporation; NongHyup Moguchon Inc.; NongHyup Feed Inc.; Nongwoo BIO Co., Ltd.; NH Heuk Sarang Co., Ltd.; NongHyup Food Inc.; Kongyoung Homeshopping Co., Ltd.; Agricultural Corporation Orion NongHyup Inc.; NH-Hay Inc.; NonghHup TMR Co., Ltd.; PT NongHyup feed Indonesia; Nisso-namhae Agro Co., Ltd.; Korea NongHyup International; NongHyup America Inc.; NH Sanghai Trade Co., Ltd.; Sanglim Agricultural Co., Ltd.; Beijing Shinong Seed Co., Ltd.; Nongwoo Seed America Inc.; PT Koreana Seed Indonesia; Nongwoo Seed INDIA PVT. Ltd.; Beijing Shinong International Trading Limited.; Nongwoo Seed Myanmar Co., Ltd.; Tolya Tohum Tarim Sanayi Ticaret Anonim Sirketi; Daewoo Logistics Corp.; HND Logistics Co., Ltd.; and Gwangyang International Container Terminal

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Details of related-party transactions of the Group as of December 31, 2019 and 2018, are as follows (Korean Won in millions):

	December 31, 2019							
Company	Receivables	Derivative assets	Allowances	Other assets	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Ultimate parent company:								
NACF	₩ 83,637	₩ 13,330	₩ 25	₩ 2,495	₩ 2,495,930	₩ 124,622	₩ -	₩ 2,507
Parent company:								
NH Financial Group Inc.	306	-	20	-	150	-	-	-
Associates:								
Korea Credit Bureau Co., Ltd.	-	-	-	-	5	-	-	-
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	-	5,264	-	-	5
NH Agri-Biz Value Creative 1st PEF	60	-	-	-	-	-	-	-
NH-AJU Digital Fund	-	-	-	-	811	-	-	-
NH-NAU Agro Food 1st Private Equity Fund	116	-	-	-	-	-	-	-
2012 Sunlight, Co., Ltd.	895	-	-	-	-	-	-	-
Yujinmplus Co., Ltd.	1,076	-	-	-	-	-	-	-
Seasons Shipping Co., Ltd.	1,140	-	-	-	-	-	-	-
Inkordan Trading Co., Ltd.	1,710	-	-	-	-	-	-	-
Other related parties:								
NH Life Insurance Co., Ltd.	2,034	47,414	1	4,168	26,836	63,016	-	14,967
NH Property and Casualty Insurance Co., Ltd.	1,224	2,540	1	-	13,983	7,200	-	-
NH Investment & Securities Co., Ltd.	5,517	3,411	1	223	560,876	11,311	69,999	15,966
NH Nonghyup Capital Co., Ltd.	6,007	-	3	-	12,146	-	-	-
NH Savings Bank Co., Ltd.	142	-	9	-	-	-	-	-
NH REITs Management Co., Ltd.	16	-	-	-	32	-	-	-
NH Venture Investment Co., Ltd.	9	-	1	-	9,224	-	-	-
NH Futures Co., Ltd.	110	-	-	229	68,876	-	-	69
NH- Amundi Asset Management Co., Ltd.	215	-	19	-	104,280	-	-	508
Yeouido munhwa broadcasting PFV	36,889	-	-	-	-	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	1,706	-	-	22
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	1,857	-	-	4
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	3,682	-	-	45
NH Special Purpose Acquisition 15 Co., Ltd.	-	-	-	-	2,765	-	-	6
Stassets DA value Investment Association No.2	-	-	-	-	22	-	-	-
Stassets DA value Investment Association No.3	-	-	-	-	22	-	-	-
Ascendo New Generation Healthcare Investment	-	-	-	-	222	-	-	-
NH-AJU KOSDAQ SCALEUP FUND	-	-	-	-	21,818	-	-	1
Square-DAvalue Fund NO 1	-	-	-	-	220	-	-	-
MK Ventures-K Clavis Growth capital Venture Fund 1	-	-	-	-	241	-	-	-
Smilegate Vietnam Kairos Private Equity Fund #1	-	-	-	-	85	-	-	-
NH-Soo Investment innovative growth M&A fund	-	-	-	-	20,686	-	-	3

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	December 31, 2019							
Company	Receivables	Derivative assets	Allowances	Other assets	Deposits	Derivative liabilities	Debentures	Other liabilities (*)
Other related parties:								
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1	₩ -	₩ -	₩ -	₩ -	₩ 3,940	₩ -	₩ -	₩ 2
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2	-	-	-	-	5,200	-	-	2
Korea Growth Opportunity Private Equity Fund I	-	-	-	-	1,488	-	-	-
NH Agribusiness Group Inc.	655,216	-	187	159	81,761	-	-	165
NH Networks Co., Ltd.	10,898	-	31	20,785	34,593	-	-	21,279
NH Information System Co., Ltd.	2,944	-	1	-	47,466	-	-	85
Agricultural Cooperative Asset Management Co., Ltd.	159,878	-	52	-	586	-	-	440
NH Partners Co., Ltd.	188	-	-	-	15,165	-	-	291
NH KIMHAE I&D CO.	-	-	-	-	766	-	-	-
Nonghyup Foundation	22	-	-	27	8,715	-	-	84
Nonghyup Hanaro Mart Inc.	136,174	-	44	62	1,666	-	-	8,058
Agricultural Corporation Nonghyup Food Grain Inc.	33,327	-	156	-	507	-	-	-
Korea Agriculture Cooperative Marketing Inc.	268	-	-	-	8,539	-	-	2,572
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	84	-	-	-	3,005	-	-	2,707
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	229	-	-	-	19	-	-	623
Daejeon Agricultural Products Marketing Co., Ltd.	20	-	-	-	450	-	-	-
Nonghyup Logistics Service Inc.	15,792	-	-	2,231	3,483	-	-	3,910
Nonghyup Chemical Co., Ltd.	74,575	239	35	-	1,048	4	-	-
NH Nonghyup Trading Co., Ltd.	19,553	173	107	-	554	155	-	-
Nonghyup-Agro Inc.	18	-	-	-	85	-	-	-
Nonghyup Red Ginseng Co., Ltd.	19,742	-	157	-	291	-	-	-
Namhae Chemical Corporation	39,884	82	38	-	11,854	1	-	256
Nonghyup Moguchon Inc.	63,191	-	261	-	1,472	-	-	-
Nonghyup Feed Inc.	360,306	3,815	589	-	91,957	35	-	-
Nongwoo BIO Co., Ltd.	14,468	-	7	-	2,284	-	-	-
NH Heuk Sarang Co., Ltd.	22	-	-	-	10	-	-	-
NongHyup Food Inc.	25	-	2	-	6,954	-	-	-
Kongyoung Homeshopping Co., Ltd.	55	-	-	-	228	-	-	-
Agricultural Corporation Orion Nonghyup Inc.	6,108	-	1	-	100	-	-	-
Nisso-namhae Agro Co., Ltd.	20	-	-	-	15,636	-	-	1
Sanglim Agricultural Co., Ltd.	3,280	-	2	-	764	-	-	-

(*) Other assets and other liabilities include right-of-use assets *and* lease liabilities

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	December 31, 2018						
Company	Receivables	Derivative assets	Allowances	Deposits	Derivative liabilities	Debentures	Other liabilities
Ultimate parent company:							
NACF	₩ 9,406	₩ 46,416	₩ 3	₩ 426,792	₩ 39,582	₩ -	₩ 16
Parent company:							
NH Financial Group Inc.	333	-	14	417	-	-	161,746
Associates:							
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	46	-	-	64	-	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	2,427	-	-	13
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	3,961	-	-	6
NH Agri-Biz Value Creative 1st PEF	61	-	-	-	-	-	-
Other related parties:							
NH Investment & Securities Co., Ltd.	3,153	5,651	14	420,503	7,118	69,997	6,791
NH Nonghyup Capital Co., Ltd.	4,803	-	3	29,640	-	-	-
NH-Amundi Asset Management Co., Ltd.	118	-	11	95,646	-	-	685
Nongwoo BIO Co., Ltd.	520	-	1	4,388	-	-	-
NH Life Insurance Co., Ltd.	1,888	119,960	1	51,948	7,315	-	3,888
NH Property and Casualty Insurance Co., Ltd.	1,219	14,092	1	16,001	1,028	-	-
NH REITs Management Co.,Ltd.	19	-	-	4,119	-	-	-
NH Agribusiness Group Inc.	683,813	-	183	76,705	-	-	209
Namhae Chemical Corporation	30,118	1	97	16,205	28	-	176
NH Heuk Sarang Co., Ltd.	22	-	-	-	-	-	-
Nisso-namhae Agro Co., Ltd.	18	-	-	10,599	-	-	2
Daejeon Agricultural Products Marketing Co., Ltd.	41	-	3	488	-	-	-
Agricultural Corporation Nonghyup Food Grain Inc.	35,100	-	164	4,426	-	-	-
Nonghyup Moguchon Inc.	63,732	-	149	2,079	-	-	-
Nonghyup Logistics Service Inc.	11,240	-	-	1,487	-	-	1,555
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	94	-	-	2,001	-	-	2,705
Nonghyup Feed Inc.	302,688	639	969	9,022	187	-	-
Nonghyup-Agro Inc.	46	-	-	266	-	-	-
Nonghyup Hanaro Mart Inc.	74,913	-	34	8,314	-	-	7,706
Korea Agriculture Cooperative Marketing Inc.	203	-	-	6,278	-	-	2,656
NH Information System Co., Ltd.	179	-	-	38,313	-	-	366
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	1,953	-	4	93	-	-	606
Nonghyup Chemical Co., Ltd.	49,430	-	36	542	-	-	-
Nonghyup Red Ginseng Co., Ltd.	19,353	-	278	2,015	-	-	15
NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)	148	-	-	2,659	-	-	461
NH Networks Co., Ltd.	771	-	3	26,644	-	-	2,393
NH Nonghyup Trading Co., Ltd.	15,817	27	89	4,740	215	-	-
Nonghyup Foundation	18	-	2	58,053	-	-	63
Agricultural Cooperative Asset Management Co., Ltd.	159,528	-	80	671	-	-	366
NH Futures Co., Ltd.	96	-	31	48,832	-	-	42

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	December 31, 2018						
Company	Receivables	Derivative assets	Allowances	Deposits	Derivative liabilities	Debentures	Other liabilities
Other related parties:							
NH Savings Bank Co., Ltd.	₩ 206	₩ -	₩ 14	₩ -	₩ -	₩ -	₩ -
NongHyup Food Inc.	28	-	2	1,864	-	-	-
Kongyoung Homeshopping Co., Ltd.	66	-	-	217	-	-	-
Home and Shopping Co., Ltd.	-	-	-	441	-	-	-
NH SL Special Purpose Acquisition Co., Ltd.	-	-	-	1	-	-	-
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	1,707	-	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	1,725	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	1,722	-	-	13
Agricultural Corporation Orion Nonghyup Inc.	4,136	-	-	1,284	-	-	-
Yoesu Green Energy Co., Ltd.	1	-	-	53	-	-	-
Sanglim Agricultural Co., Ltd.	2,526	-	1	32	-	-	-
Daewoo Logistics Corp.	-	-	-	54	-	-	-

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Significant transactions with related parties for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 319	₩ 7,809	₩ 74,051	₩ 23	₩ 593	₩ -	₩ 444,348
Parent company:							
NH Financial Group Inc.	-	-	1,108	5	-	-	-
Associates:							
Korea Credit Bureau Co., Ltd.	-	-	-	-	6	-	-
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	-	67	-	-
NH Agri-Biz Value Creative 1st PEF	-	240	-	-	-	-	-
NH-AJU Digital Fund	-	-	-	-	10	-	-
NH-NAU Agro Food 1st Private Equity Fund	-	169	-	-	-	-	-
2012 Sunlight, Co., Ltd.	-	-	64	-	-	-	-
Yujinmplus Co., Ltd.	-	-	299	-	-	-	-
Seasons Shipping Co., Ltd.	-	-	14	-	-	-	-
Inkordan Trading Co., Ltd.	-	-	11	-	-	-	-
Other related parties:							
NH Life Insurance Co., Ltd.	4	10,420	337,005	-	7	-	70,064
NH Property and Casualty Insurance Co., Ltd.	2	3,110	37,902	-	11	-	28,134
NH Investment & Securities Co., Ltd.	78	58	23,932	(13)	18,585	230	98,107
NH Nonghyup Capital Co., Ltd.	-	125	-	-	8	-	676
NH Savings Bank Co., Ltd.	-	129	59	(5)	-	-	-
NH REITs Management Co., Ltd.	-	-	-	-	3	-	-
NH Venture Investment Co., Ltd.	-	-	-	1	6	-	-
NH Futures Co., Ltd.	303	23	-	(31)	125	821	-
NH- Amundi Asset Management Co., Ltd.	-	17	-	8	1,412	-	1,456
Other related parties:							
Yeouido munhwa broadcasting PFV	391	-	-	-	-	-	-
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	-	22	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	-	23	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	30	-	-
NH Special Purpose Acquisition 13 Co., Ltd.	-	-	-	-	58	-	-
NH Special Purpose Acquisition 14 Co., Ltd.	-	-	-	-	77	-	-
NH Special Purpose Acquisition 15 Co., Ltd.	-	-	-	-	6	-	-
Stassets DA value Investment Association No.2	-	-	-	-	1	-	-
Stassets DA value Investment Association No.3	-	-	-	-	1	-	-
Ascendo New Generation Healthcare Investment	-	-	-	-	1	-	-
NH-AJU KOSDAQ SCALEUP FUND	-	-	-	-	69	-	-
Square-DAvalue Fund NO 1	-	-	-	-	1	-	-
NH-Soo Investment innovative growth M&A fund	-	-	-	-	40	-	-
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1	-	-	-	-	13	-	-
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2	-	-	-	-	6	-	-
Korea Growth Opportunity Private Equity Fund I	-	-	-	-	1	-	-
NH Agribusiness Group Inc.	17,974	2	702	3	470	-	1,715

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	For the year ended December 31, 2019						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
NH Networks Co., Ltd.	₩ 220	₩ 1	₩ 143	₩ 28	₩ 3	₩ -	₩ 33,371
NH Information System Co., Ltd.	-	-	3,690	1	176	-	66,985
Agricultural Cooperative Asset Management Co., Ltd.	4,292	-	134	(27)	9	4,881	1
NH Partners Co., Ltd.	-	13	112	-	5	-	33,425
NH KIMHAE I&D CO.	-	-	-	-	3	-	-
Nonghyup Foundation	-	1	-	(2)	482	-	110
Nonghyup Hanaro Mart Inc.	1,543	30	302	11	2	264	839
Agricultural Corporation Nonghyup Food Grain Inc.	87	-	67	(7)	1	-	46
Korea Agriculture Cooperative Marketing Inc.	-	8	1,079	-	45	-	73
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	131	-	43	-	58
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	27	18	1	(4)	-	4	179
Daejeon Agricultural Products Marketing Co., Ltd.	-	2	-	(3)	-	3	1
Nonghyup Logistics Service Inc.	483	12	415	-	15	-	26,977
Nonghyup Chemical Co., Ltd.	3,381	202	239	-	5	-	4
NH Nonghyup Trading Co., Ltd.	584	205	338	18	6	-	155
Nonghyup-Agro Inc.	13	-	-	-	8	-	-
Nonghyup Red Ginseng Co., Ltd.	449	-	12	(120)	-	-	99
Namhae Chemical Corporation	1,528	395	82	(59)	554	-	23
Nonghyup Moguchon Inc.	1,052	6	366	112	1	-	199
Nonghyup Feed Inc.	483	990	3,815	(380)	14	-	158
Nongwoo BIO Co., Ltd.	150	2	-	5	17	-	107
NH Heuk Sarang Co., Ltd.	-	2	-	-	-	-	-
NongHyup Food Inc.	-	1	-	1	-	-	2
Agricultural Corporation Orion Nonghyup Inc.	137	7	-	-	-	-	-
NonghHup TMR Co., Ltd.	-	1	-	-	-	-	-
Nisso-namhae Agro Co., Ltd.	-	1	-	-	91	-	-
Sanglim Agricultural Co., Ltd.	109	2	-	1	-	-	-
Daewoo Logistics Corp.	-	-	14	-	-	-	-

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	For the year ended December 31, 2018						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 295	₩ 18	₩ 92,668	₩ 1	₩ 1,567	₩ -	₩ 357,117
Parent company:							
NH Financial Group Inc.	-	-	786	2	-	-	-
Associates:							
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	-	1,577	-	-	5	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	-	74	-	2,697
Kyunggi-DSC Superman Investment Fund No. 1	-	-	-	-	20	-	-
NH Agri-Biz Value Creative 1st PEF	-	314	-	-	-	-	-
Chang Myung Shipping Co., Ltd.	-	9	2	23,393	264	-	-
Other related parties:							
NH Investment & Securities Co., Ltd.	1	33	17,495	13	2,981	45	48,815
NH Nonghyup Capital Co., Ltd.	-	160	-	1	8	-	2,574
NH-Amundi Asset Management Co., Ltd.	-	18	-	4	1,462	-	1,264
Nongwoo BIO Co., Ltd.	414	2	-	(59)	17	-	10
NH Life Insurance Co., Ltd.	3	11,704	260,132	-	6	-	18,971
NH Property and Casualty Insurance Co., Ltd.	2	3,091	15,810	-	9	-	21,369
NH REITs Management Co., Ltd.	-	-	-	-	1	-	-
NH Agribusiness Group Inc.	22,478	2	718	(25)	216	-	2,596
Namhae Chemical Corporation	899	911	1	26	543	-	28
NH Heuk Sarang Co., Ltd.	-	1	-	-	-	-	6
Nisso-namhae Agro Co., Ltd.	-	-	-	-	22	-	-
Daejeon Agricultural Products Marketing Co., Ltd.	-	1	-	1	-	4	5
Agricultural Corporation Nonghyup Food Grain Inc.	137	-	182	149	2	-	72
Nonghyup Moguchon Inc.	1,219	5	380	132	1	-	151
Nonghyup Logistics Service Inc.	447	2	554	(2)	9	-	24,545
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	281	-	33	-	72
Nonghyup Feed Inc.	1,267	1,197	857	513	9	-	187
Nonghyup Hanaro Mart Inc.	381	9	425	20	5	21	853
Korea Agriculture Cooperative Marketing Inc.	-	7	1,272	-	77	-	223

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	For the year ended December 31, 2018						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
NH Information System Co., Ltd.	₩ -	₩ 1	₩ 2,883	₩ (1)	₩ 190	₩ -	₩ 64,017
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	70	15	-	3	-	-	196
Nonghyup Chemical Co., Ltd.	2,904	163	-	22	7	-	-
Nonghyup Red Ginseng Co., Ltd.	630	10	16	192	1	-	319
NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)	-	30	146	-	37	-	29,708
NH Networks Co., Ltd.	69	1	157	1	6	-	27,759
NH Nonghyup Trading Co., Ltd.	386	114	231	57	6	-	215
Nonghyup Foundation	-	-	-	-	64	-	-
Agricultural Cooperative Asset Management Co., Ltd.	4,409	-	168	13	8	4,687	-
NH Futures Co., Ltd.	260	24	-	31	92	504	-
NH Savings Bank Co., Ltd.	-	143	77	9	-	-	-
NongHyup Food Inc.	-	1	-	(1)	15	-	2
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	-	25	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	-	24	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	13	-	-
Agricultural Corporation Orion Nonghyup Inc.	30	2	-	-	1	-	-
Sanglim Agricultural Co., Ltd.	27	1	-	(1)	-	-	-
Others (*1)							
Resom Resort Co., Ltd.	-	-	-	(31,626)	6	-	-
NH Agri-Best 1st PEF	-	1	-	-	18	-	-

(*1) The companies in conglomerate group, except for the parent company, subsidiaries, jointly controlled entities, associates and other related parties, are included in the others category.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

The Group's acceptances, guarantees and unused credit limits with related parties as of December 31, 2019 and 2018, are summarized as follows (Korean won in millions):

	December 31, 2019	
Classification	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 2,238,563	NACF
Unused credit limit in Korean won	503	NH Financial Group Inc.
Unused credit limit in Korean won	83,246	NH Life Insurance Co., Ltd
Unused credit limit in Korean won	32,276	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	445,931	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	15,956	NH Nonghyup Capital Co., Ltd.
Unused credit limit in Korean won	508	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	54	NH REITs Management Co., Ltd.
Unused credit limit in Korean won	91	NH Venture Investment Co., Ltd.
Unused credit limit in Korean won	201	NH Futures Co., Ltd.
Unused credit limit in Korean won	785	NH-Amundi Asset Management Co., Ltd.
Unused credit limit in Korean won	430,158	NH Agribusiness Group Inc.
Acceptances and guarantees in Korean won	729	NH Agribusiness Group Inc.
Unused credit limit in Korean won	29,167	NH Networks Co., Ltd.
Unused credit limit in Korean won	856	NH Information System Co., Ltd.
Unused credit limit in Korean won	13,186	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	8,774	NH Partners Co., Ltd.
Acceptances and guarantees in Korean won	1,438	NH Partners Co., Ltd.
Unused credit limit in Korean won	78	Nonghyup Foundation
Unused credit limit in Korean won	69,640	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	193	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	10,867	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	416	Agricultural Cooperative Pusan Gyeongnam Marketing Inc.
Unused credit limit in Korean won	4,871	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	180	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	4,602	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	159,418	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	13,501	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	3,587	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	2,563	NH Nonghyup Trading Co., Ltd.
Unused credit limit in foreign currencies	16,368	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in Korean won	4,438	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in foreign currencies	11,964	NH Nonghyup Trading Co., Ltd.
Unused credit limit in Korean won	62	Nonghyup-Agro Inc.
Unused credit limit in Korean won	2,061	Nonghyup Red Ginseng Co., Ltd.
Unused credit limit in Korean won	160,224	Namhae Chemical Corporation
Unused credit limit in foreign currencies	211,352	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,683	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	36,548	Namhae Chemical Corporation
Unused credit limit in Korean won	8,707	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	579	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	45,989	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	174,142	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	101,429	Nonghyup Feed Inc.
Unused credit limit in Korean won	11,232	Nongwoo BIO Co., Ltd.
Unused credit limit in Korean won	338	NH Heuk Sarang Co., Ltd.
Unused credit limit in Korean won	75	NongHyup Food Inc.
Unused credit limit in Korean won	145	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	3,275	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in foreign currencies	1,158	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in Korean won	20	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	894	Sanglim Agricultural Co., Ltd.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

	December 31, 2018	
Classification	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 2,113,643	NACF
Unused credit limit in Korean won	591	NH Financial Group Inc.
Unused credit limit in Korean won	83,472	NH Life Insurance Co., Ltd
Unused credit limit in Korean won	32,281	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	465,737	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	17,746	NH Nonghyup Capital Co., Ltd.
Unused credit limit in Korean won	444	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	882	NH-Amundi Asset Management Co., Ltd.
Unused credit limit in Korean won	204	NH Futures Co., Ltd.
Unused credit limit in Korean won	454	Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)
Unused credit limit in Korean won	411,563	NH Agribusiness Group Inc.
Acceptances and guarantees in Korean won	729	NH Agribusiness Group Inc.
Unused credit limit in Korean won	159	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	1,033	Nonghyup Red Ginseng. Co., Ltd.
Unused credit limit in Korean won	7,974	NH Nonghyup Trading Co., Ltd.
Unused credit limit in foreign currencies	8,887	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in foreign currencies	16,859	NH Nonghyup Trading Co., Ltd.
Unused credit limit in Korean won	34	Nonghyup-Agro Inc.
Unused credit limit in Korean won	10,979	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	158,765	Namhae Chemical Corporation
Unused credit limit in foreign currencies	209,256	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,862	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	40,087	Namhae Chemical Corporation
Unused credit limit in Korean won	161,972	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	24,172	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	6,894	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	391	Agricultural Cooperative Pusan Gyeongnam Marketing Inc.
Unused credit limit in Korean won	4,010	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	599	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	20,780	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	559	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	7,264	NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)
Acceptances and guarantees in Korean won	2,988	NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)
Unused credit limit in Korean won	45,993	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	224,552	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	91,587	Nonghyup Feed Inc.
Unused credit limit in Korean won	29,294	NH Networks Co., Ltd.
Unused credit limit in Korean won	14,017	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	3,321	NH Information System Co., Ltd.
Unused credit limit in Korean won	338	NH Heuk Sarang Co., Ltd.
Unused credit limit in Korean won	182	Nonghyup Foundation
Unused credit limit in Korean won	22	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	7,036	Nongwoo BIO Co., Ltd.
Unused credit limit in Korean won	43	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	80,316	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	134	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	52	NH REITs Management Co., Ltd.
Unused credit limit in Korean won	3,951	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in foreign currencies	950	Agricultural Corporation Orion Nonghyup Inc.
Acceptances and guarantees in foreign currencies	168	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in Korean won	72	NongHyup Food Inc.
Unused credit limit in Korean won	716	Sanglim Agricultural Co., Ltd.
Unused credit limit in Korean won	48	Yoesu Green Energy Co., Ltd.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Details of commitments related to derivative instruments with related parties as of December 31, 2019 and 2018, are summarized as follows (Korean won in millions):

Company	Classification	December 31, 2019	December 31, 2018
NACF	Open interest	₩ 7,318,082	₩ 7,255,616
NH Life Insurance Co., Ltd.	Open interest	5,256,956	5,188,246
NH Property and Casualty Insurance Co., Ltd.	Open interest	489,866	522,934
NH Investment & Securities Co., Ltd.	Open interest	868,948	1,128,331
Nonghyup Chemical Co., Ltd.	Open interest	16,627	-
NH Nonghyup Trading Co., Ltd.	Open interest	23,917	17,198
Namhae Chemical Corporation	Open interest	13,894	13,417
Nonghyup Feed Inc.	Open interest	207,849	192,791

Details of fixed asset transactions with related parties for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019		For the year ended December 31, 2018	
Classification	Purchase of tangible assets	Purchase of intangible assets	Purchase of tangible assets	Purchase of intangible assets
NACF	₩ 194	₩ -	₩ 5	₩ -
NH Networks Co., Ltd.	85,773	-	62,858	11
NH Information System Co., Ltd.	2,503	19,376	2,627	35,597
Nonghyup Hanaro Mart Inc.	800	-	77	-
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	1	-	-	-
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	1	-

Details of the collateral provided from related parties as of December 31, 2019, are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NACF	Securities	₩ 1,120,000
NH Property and Casualty Insurance Co., Ltd.	Securities	40,000
NH Life Insurance Co., Ltd.	Securities	110,000

Details of the collateral provided to related parties as of December 31, 2019, are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NH Nonghyup Capital Co., Ltd.	Securities	₩ 2,126
NH Investment & Securities Co., Ltd.	Securities	45,539
NH Futures Co., Ltd.	Securities	15,360
NH- Amundi Asset Management Co., Ltd.	Securities	37,140
NH Life Insurance Co., Ltd.	Securities	3,294

The key management compensations for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019	For the year ended December 31, 2018
Short-term employee benefits	₩ 2,332	₩ 2,494
Retirement expenses	606	674
	₩ 2,938	₩ 3,168

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Significant lending transactions with related parties for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019			
	Beginning (*1)	Increase	Decrease (*2)	Ending (*1)
Ultimate parent company:				
NACF	₩ -	₩ 79,600	₩ -	₩ 79,600
Associates:				
2012 Sunlight, Co., Ltd. (*3)	958	-	64	894
Yujinmplus Co., Ltd. (*3)	1,094	-	18	1,076
Seasons Shipping Co., Ltd. (*3)	1,154	-	14	1,140
Inkordan Trading Co., Ltd. (*3)	1,727	-	18	1,709
Other related parties:				
NH Investment & Securities Co., Ltd.	-	2,200	-	2,200
Yeouido munhwa broadcasting PFV	-	36,889	-	36,889
NH Agribusiness Group Inc.	664,739	6,000	34,504	636,235
NH Networks Co., Ltd.	-	10,000	-	10,000
Agricultural Cooperative Asset Management Co., Ltd.	159,075	435	-	159,510
Nonghyup Hanaro Mart Inc.	74,200	61,000	-	135,200
Agricultural Corporation Nonghyup Food Grain Inc.	35,019	33,300	35,019	33,300
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	1,920	-	1,723	197
Nonghyup Logistics Service Inc.	11,118	8,200	3,613	15,705
Nonghyup Chemical Co., Ltd.	40,400	277,993	251,100	67,293
NH Nonghyup Trading Co., Ltd.	2,600	8,000	2,600	8,000
Nonghyup Red Ginseng Co., Ltd.	19,161	4,000	3,489	19,672
Nonghyup Moguchon Inc.	63,200	15,975	16,200	62,975
Nonghyup Feed Inc.	8,841	4,214	4,800	8,255
Nongwoo BIO Co., Ltd.	-	14,200	-	14,200
Agricultural Corporation Orion Nonghyup Inc.	4,119	1,981	-	6,100
Sanglim Agricultural Co., Ltd.	2,514	1,132	376	3,270

(*1) Transactions from operating activities including settlement are excluded and loans related to credit limit are recorded at net amounts.
(*2) The amounts include foreign currency translation gains and losses.
(*3) The amounts include the transactions before the establishment of related-party relationship.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Classification	For the year ended December 31, 2018			
	Beginning (*1)	Increase	Decrease (*2)	Ending (*1)
Ultimate parent company:				
NACF	₩ 10,000	₩ -	₩ 10,000	₩ -
Other related parties:				
NH Agribusiness Group Inc.	1,154,477	34,000	523,738	664,739
Agricultural Cooperative Asset Management Co., Ltd.	172,232	-	13,157	159,075
Nonghyup Hanaro Mart Inc.	21,800	52,400	-	74,200
Agricultural Corporation Nonghyup Food Grain Inc.	24,142	35,019	24,142	35,019
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	2,762	1,057	1,900	1,919
Nonghyup Logistics Service Inc.	15,032	-	3,914	11,118
Nonghyup Chemical Co., Ltd.	27,027	137,100	123,727	40,400
NH Nonghyup Trading Co., Ltd.	500	2,100	-	2,600
Nonghyup Red Ginseng Co., Ltd.	28,637	-	9,476	19,161
Nonghyup Moguchon Inc.	50,070	27,200	14,070	63,200
Nonghyup Feed Inc.	36,800	4,041	32,000	8,841
Nongwoo BIO Co., Ltd.	34,800	-	34,800	-
Agricultural Corporation Orion Nonghyup Inc.	-	4,119	-	4,119
Sanglim Agricultural Co., Ltd.	-	2,514	-	2,514
Others:	-	-	-	-
Resom Resort Co., Ltd. (*3)	73,949	-	73,949	-

(*1) Transactions from operating activities including settlement are excluded and loans related to credit limit are recorded at net amounts.
(*2) The amounts include foreign currency translation gains and losses.
(*3) The related-party relationship has been released for the year ended December 31, 2018.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Significant borrowing transactions with related parties for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

	For the year ended December 31, 2019			
Classification	Beginning (*1)	Borrowing	Repayment (*2)	Ending (*1)
Associates:				
Kyunggi-DSC Superman Investment Fund No. 1	₩ 3,881	₩ 4,818	₩ 3,881	₩ 4,818
Other related parties:				
NH Investment & Securities Co., Ltd.	305,100	190,712	305,100	190,712
NH Futures Co., Ltd.	1,000	3,000	3,000	1,000
NH- Amundi Asset Management Co., Ltd.	92,500	127,000	122,500	97,000
NH Special Purpose Acquisition 10 Co., Ltd.	1,592	-	1,592	-
NH Special Purpose Acquisition 11 Co., Ltd.	1,636	-	1,636	-
NH Special Purpose Acquisition 12 Co., Ltd.	1,720	1,624	1,720	1,624
NH Special Purpose Acquisition 13 Co., Ltd.	-	1,726	-	1,726
NH Special Purpose Acquisition 14 Co., Ltd.	-	3,560	-	3,560
NH Special Purpose Acquisition 15 Co., Ltd.	-	2,000	-	2,000
Stassets DA value Investment Association No.2	-	21	-	21
Stassets DA value Investment Association No.3	-	21	-	21
Square-DAvalue Fund NO 1	-	219	-	219
NH-Soo Investment innovative growth M&A fund	-	20,000	-	20,000
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1	-	3,000	-	3,000
Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2	-	4,000	-	4,000
NH Agribusiness Group Inc.	12,318	12,824	12,318	12,824
NH Information System Co., Ltd.	9,000	30,000	30,000	9,000
Agricultural Cooperative Asset Management Co., Ltd.	500	500	500	500
Nonghyup Foundation	57,800	19,187	68,300	8,687
Korea Agriculture Cooperative Marketing Inc.	4,000	12,000	10,000	6,000
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	2,000	3,000	2,000	3,000
Nonghyup Logistics Service Inc.	440	340	340	440
Namhae Chemical Corporation	15,969	243,306	247,845	11,430

(*1) Transactions from operating activities including settlement and deposit on demand are excluded.
(*2) The amounts include foreign currency translation gains and losses.

37. RELATED-PARTY TRANSACTIONS (CONT'D):

Classification	For the year ended December 31, 2018			
	Beginning (*1)	Borrowing	Repayment (*2)	Ending (*1)
Associates:				
Kyunggi-DSC Superman Investment Fund No. 1	₩ 2,500	₩ 3,881	₩ 2,500	₩ 3,881
NH Agri-Best 1st PEF	3,099	-	3,099	-
Other related parties:				
NH Investment & Securities Co., Ltd.	195,000	305,100	195,000	305,100
NH Futures Co., Ltd.	1,000	3,000	3,000	1,000
NH- Amundi Asset Management Co., Ltd.	88,000	92,500	88,000	92,500
NH Special Purpose Acquisition 10 Co., Ltd.	-	1,592	-	1,592
NH Special Purpose Acquisition 11 Co., Ltd.	-	1,636	-	1,636
NH Special Purpose Acquisition 12 Co., Ltd.	-	1,720	-	1,720
NH Agribusiness Group Inc.	11,471	12,318	11,471	12,318
NH Information System Co., Ltd.	9,000	30,000	30,000	9,000
Agricultural Cooperative Asset Management Co., Ltd.	500	-	-	500
Nonghyup Foundation	38,800	57,800	38,800	57,800
Korea Agriculture Cooperative Marketing Inc.	3,000	4,000	3,000	4,000
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	1,000	3,500	2,500	2,000
Nonghyup Logistics Service Inc.	440	440	440	440
Namhae Chemical Corporation	7,000	238,294	229,325	15,969
Kongyoung Homeshopping Co., Ltd.	5,000	-	5,000	-
Daewoo Logistics Corp.	54	-	54	-
NH Special Purpose Acquisition 7 Co., Ltd.	1,340	-	1,340	-
NH SL Special Purpose Acquisition Co., Ltd.	723	-	723	-
Yoesu Green Energy Co., Ltd.	200	-	200	-
Changmyung Shipping Co., Ltd.	10,714	-	10,714	-
Others:				
Resom Resort Co., Ltd.	200	-	200	-

(*1) Transactions from operating activities including settlement and deposit on demand are excluded.
(*2) The amounts include foreign currency translation gains and losses.

38. COMMITMENTS AND CONTINGENCIES:

Details of agreements that the Group has made as of December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019		December 31, 2018	
Loan commitment	₩	84,458,368	₩	77,986,747
Credit guarantee (*1)		1,710,989		1,827,657
CP purchase agreement (*1)		509,542		375
Securities purchase agreement		1,186,318		1,167,131
	₩	87,865,217	₩	80,981,910

(*1) As of December 31, 2019, the Group provided the credit line with the limit of ₩1,710,989 million and made the commercial paper purchase agreement with the limit of ₩509,542 million as collaterals to repay the principals and interests of debentures and commercial papers issued by NH KIWOOM 1ST LLC and 37 other SPEs.

The Group made four investment commitments amounting to ₩181,000 million as of December 31. 2019.

The Group is involved in various pending legal proceedings arising in the normal course of business. As of December 31, 2019, the Group is named as a plaintiff in 169 cases with related aggregate claims amounting to ₩83,909 million, and as a defendant in 129 cases with related aggregate claims amounting to ₩61,753 million. Accordingly, the Group accrued for a litigation-related liability of ₩25,165 million in other liabilities. Except for accrued litigations-related liabilities, the Group believes that the outcome of litigations will not have a material impact on the consolidated financial statements.

The Group holds written-off loans, on which the statute of limitation was not completed or the Group has not lost its claim rights to borrowers and guarantors, amounting to ₩4,929,836 million and ₩4,794,495 million as of December 31, 2019 and 2018, respectively.

39. CONSOLIDATED STATEMENTS OF CASH FLOWS:

39.1 Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of cash flows consist of cash and due from banks (excluding restricted due from banks) from the consolidated statement of financial position. Cash and cash equivalents as of December 31, 2019 and 2018, are adjusted as follows (Korean won in millions):

Classification (*1)	December 31, 2019		December 31, 2018	
Cash and due from banks	₩	5,949,923	₩	6,212,665
Less: Restricted due from bank (Refer to Note 6)		(2,244,898)		(2,168,399)
Less: Due from banks with a maturity of three months or more at acquisition		(70,000)		(160,000)
	₩	3,635,025	₩	3,884,266

(*1) Allowance for ECLs is not included.

39. CONSOLIDATED STATEMENTS OF CASH FLOWS (CONT'D):

39.2 Non-cash transactions

Significant non-cash transactions not included in the consolidated statements of cash flows for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Changes in gain (loss) on valuation of financial assets at FVTOCI	₩ (4,439)	₩ 121,672
Transfer to investment properties from tangible assets	8,751	-
Transfer to tangible assets from investment properties	-	4,925
Changes in loans due to debt-equity swap	117,397	68,190
Recognition of right-of-use assets and lease liabilities	82,745	-

Changes in liabilities arising from financing activities for the years ended December 31, 2019 and 2018, are as follows (Korean won in millions):

Classification	For the year ended December 31, 2019				
	January 1, 2019	Cash flows in financing activities	Exchange rate changes	Others	December 31, 2019
Borrowings	₩ 11,283,346	₩ (176,923)	₩ 65,115	₩ -	₩ 11,171,538
Debentures	16,828,002	(1,161,145)	97,014	55,199	15,819,070
Borrowings from trust accounts	2,816,440	(600,670)	-	-	2,215,770
Lease liabilities	111,824	(72,219)	404	75,067	115,076
	₩ 31,039,612	₩ (2,010,957)	₩ 162,533	₩ 130,266	₩ 29,321,454

Classification	For the year ended December 31, 2018				
	January 1, 2018	Cash flows in financing activities	Exchange rate changes	Others	December 31, 2018
Borrowings	₩ 12,227,485	₩ (1,048,069)	₩ 94,469	₩ 9,461	₩ 11,283,346
Debentures	18,968,727	(2,265,658)	103,281	21,652	16,828,002
Borrowings from trust accounts	2,353,022	463,418	-	-	2,816,440
	₩ 33,549,234	₩ (2,850,309)	₩ 197,750	₩ 31,113	₩ 30,927,788

40. OPERATING LEASE:

Expected schedule of minimum lease payment arising from operating lease contracts and rental contracts as of December 31, 2019 and 2018, is follows (Korean won in millions):

Classification	December 31, 2019	December 31, 2018
Less than one year	₩ 9,668	₩ 9,933
1 year–5 years	3,788	6,059
More than 5 years	593	741
	₩ 14,049	₩ 16,733

41. RESTATEMENT OF COMPARATIVE FINANCIAL STATEMENTS:

In accordance with the application of K-IFRS 1115, the Group should have deducted commission expenses relating to credit cards from interest income or commission income because commission expenses relating to credit cards are regarded as the consideration which is paid to customers. Therefore the Group restated comparative financial statements and the effects in the restated consolidated statements of profit or loss and other comprehensive income are as follows (Korean won in millions):

Classification	Before	Adjustments	Restated
Interest income	₩ 8,368,361	₩ (113,392)	₩ 8,254,969
Commission income	1,112,410	(14,698)	1,097,712
Commission expenses	565,882	(128,090)	437,792
Operating income	1,984,115	-	1,984,115

Independent auditor's report

The Shareholders and Board of Directors
NongHyup Bank

Opinion

We have audited the accompanying consolidated financial statements of NongHyup Bank (the "Bank") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2018 and 2017, and the consolidated statements of profit or loss and other comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2018 and 2017 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

Basis for opinion

We conducted our audits in accordance with Korean Auditing Standards (KGAAS). 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 that are relevant to our audits of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Korean International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of the 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, or has no realistic alternative but to do so.

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 Auditing Standards (KGAAS) 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 Auditing Standards (KGAAS) 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 Group'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/ Ernst & Young Han Young

March 7, 2019

This audit report is effective as of March 7, 2019, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

NongHyup Bank and its subsidiaries
Consolidated statements of financial position
as of December 31, 2018 and 2017

(Korean won in millions)

	Notes	December 31, 2018 (*1)	December 31, 2017 (*1)
Assets			
Cash and due from banks	5, 6, 40, 41, 44	₩ 6,194,718	₩ 7,788,698
Financial assets at FVTPL	5, 7, 40, 41	10,152,290	-
Held-for-trading financial assets	5, 11, 40, 41	-	5,965,461
Derivative assets	5, 11, 25, 40, 41	464,700	1,031,312
Financial assets at FVOCI	5, 8, 40, 41	20,073,081	-
AFS financial assets	5, 12, 40, 41	-	21,006,812
Securities at amortized cost	5, 9, 40, 41	9,336,103	-
HTM financial assets	5, 12, 40, 41	-	8,231,407
Loans at amortized cost	5, 10, 40, 41	232,595,342	-
Loans and receivables	5, 13, 40, 41	-	218,904,533
Investments in associates	14	98,194	69,090
Tangible assets	15	2,675,605	2,645,240
Investment properties	16	581,279	586,242
Intangible assets	17	396,943	372,193
Deferred income tax assets	29	579,121	651,878
Other assets	18, 41	103,252	80,347
Non-current assets classified as held for sale	16, 40	15	15
Total assets		**₩ 283,250,643**	**₩ 267,333,228**
Liabilities			
Deposits	19, 20, 40, 41	₩ 224,230,411	₩ 205,768,316
Financial liabilities at FVTPL	19, 40, 41	13,276	-
Held-for-trading financial liabilities	19, 40, 41	-	51,737
Derivative liabilities	19, 25, 40, 41	521,750	993,510
Borrowings	19, 21, 40, 41	11,283,346	12,227,485
Debentures	19, 22, 40, 41	16,828,002	18,968,727
Provisions	23, 43	462,580	431,964
Current income tax liabilities		161,480	207,213
Net defined benefit liabilities	26	375,165	311,512
Other liabilities	19, 24, 40, 41	13,439,224	13,721,345
Share capital repayable on demand		22	23
Total liabilities		**267,315,256**	**252,681,832**
Equity			
Controlling interests			
Capital stock	27	2,162,191	2,132,779
Other paid-in capital	27	9,848,422	9,677,978
Retained earnings	27	4,573,397	3,283,817
(Regulatory reserve for bad debts as of December 31, 2018 and December 31, 2017 is ₩1,629,809 million and ₩1,486,563 million, respectively. Regulatory reserve for bad debts to be reserved (reversed) as of December 31, 2018 and 2017 is ₩112,487 million and ₩(139,891) million, respectively. Planned provision of regulatory reserve for bad debts as of December 31, 2018 and 2017 is ₩112,487 million and ₩143,246 million, respectively.)			
Other components of equity	27	(648,623)	(443,178)
		15,935,387	14,651,396
Non-controlling interests		-	-
Total equity		**15,935,387**	**14,651,396**
Total liabilities and equity		**₩ 283,250,643**	**₩ 267,333,228**

(*1) The consolidated statement of financial position as of December 31, 2018 is prepared in accordance with KIFRS 1109; however, the comparative consolidated statement of financial position as of December 31, 2017 was not retrospectively restated to apply KIFRS 1109.

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of profit or loss and other comprehensive income
for the years ended December 31, 2018 and 2017
(Korean won in millions)

	Notes	For the year ended December 31, 2018 (*1)	For the year ended December 31, 2017 (*1)
Net interest income	30, 31		
Interest income			
Interest income calculated using the effective interest method		₩ 8,241,014	₩ 7,140,439
Interest income on financial assets at FVTPL		127,347	-
Interest income on financial instruments at FVTPL		-	115,466
		8,368,361	7,255,905
Interest expenses		3,169,275	2,667,981
		5,199,086	4,587,924
Net commission income	34		
Commission income		1,112,410	1,078,653
Commission expenses		565,882	505,169
		546,528	573,484
Gain (loss) on financial instruments at FVTPL, net	30		
Gain on financial instruments at FVTPL		2,058,655	-
Loss on financial instruments at FVTPL		1,867,063	-
		191,592	-
Gain (loss) on held-for-trading financial instruments, net	32		
Gain on held-for-trading financial instruments		-	2,857,802
Loss on held-for-trading financial instruments		-	2,658,493
		-	199,309
Gain (loss) on financial assets at FVOCI, net	30		
Gain on financial assets at FVOCI		21,784	-
Loss on financial assets at FVOCI		22,070	-
		(286)	-
Gain (loss) on financial investment assets, net	32		
Gain on financial investment assets		-	295,692
Loss on financial investment assets		-	99,054
		-	196,638
Gain (loss) on disposal of financial assets at amortized cost, net	30		
Gain on disposal of financial assets at amortized cost		4,255	-
Loss on disposal of financial assets at amortized cost		22,046	-
		(17,791)	-
Other operating expenses, net	35		
Other operating income		821,612	1,349,310
Other operating expenses		1,239,291	2,072,151
		(417,679)	(722,841)
Operating income before expected credit losses and general and administrative expenses		5,501,450	4,834,514
Transfer in allowance for expected credit losses	23, 30	585,482	844,474
Operating income before general and administrative expenses		₩ 4,915,968	₩ 3,990,040

(Continued)

NongHyup Bank and its subsidiaries
Consolidated statements of profit or loss and other comprehensive income (cont'd)
for the years ended December 31, 2018 and 2017

(Korean won in millions)

	Notes	For the year ended December 31, 2018 (*1)	For the year ended December 31, 2017 (*1)
General and administrative expenses			
Employee benefits	36	₩ 1,984,785	₩ 1,891,133
Depreciation and amortization expenses		295,634	293,844
Other selling and administrative expenses	37	651,434	613,222
		2,931,853	2,798,199
Operating income		1,984,115	1,191,841
Gain (loss) on valuation of equity method investments, net	14	8,008	2,015
Other expenses, net	38	(328,568)	(335,558)
Income before income tax expenses		1,663,555	858,298
Income tax expenses	29	440,986	206,225
Net income	27	1,222,569	652,073
(Net income after the provision of regulatory reserve for bad debts for the years ended December 31, 2018 and 2017 are ₩1,137,279 million and ₩791,964 million, respectively)			
Controlling interests		1,222,569	652,073
Non-controlling interests		-	-
		1,222,569	652,073
Other comprehensive income (loss)			
Items not subsequently reclassified to profit or loss			
Remeasurements of net defined benefit liabilities	26, 27	(61,168)	(54,392)
Loss on equity securities at FVOCI	27	(27,474)	-
		(88,642)	(54,392)
Items subsequently reclassified to profit or loss			
Loss on valuation & translation of AFS financial assets	27	-	(76,654)
Gain on valuation of debt securities at FVOCI	27	84,040	-
Exchange differences on translation of foreign operations	27	1,676	(6,920)
Gain (loss) on valuation of investments in associates	14, 27	(24)	1,073
		85,692	(82,501)
		(2,950)	(136,893)
Total comprehensive income			
Controlling interests		1,219,619	515,180
Non-controlling interests		-	-
		₩ 1,219,619	₩ 515,180
Earnings per share			
Basic earnings and diluted earnings per share (Korean won)	39	₩ 2,806	₩ 1,489

(*1) The consolidated statement of profit or loss and other comprehensive income for the year ended December 31, 2018 is prepared in accordance with KIFRS 1109; however, the comparative consolidated statement of profit or loss and other comprehensive income for the year ended December 31, 2017 was not retrospectively restated to apply KIFRS 1109.

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2018 and 2017

(Korean won in millions)

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2017 (*1)	₩ 2,132,779	₩ 9,331,349	₩ (3,019)	₩ 349,648	₩ 2,578,561	₩ (306,285)	₩ 14,083,033	-	₩ 14,083,033
Adjusments due to consolidated tax	-	-	-	-	70,263	-	70,263	-	70,263
Total comprehensive income									
Net income	-	-	-	-	652,073	-	652,073	-	652,073
Other comprehensive income (loss)									
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(54,392)	(54,392)	-	(54,392)
Loss on valuation & translation of AFS financial assets	-	-	-	-	-	(76,654)	(76,654)	-	(76,654)
Exchange differences on translation of foreign operations	-	-	-	-	-	(6,920)	(6,920)	-	(6,920)
Gain on valuation of Investments in associates	-	-	-	-	-	1,073	1,073	-	1,073
Dividends on hybrid equity securities	-	-	-	-	(17,080)	-	(17,080)	-	(17,080)
Balance as of December 31, 2017 (*1)	₩ 2,132,779	₩ 9,331,349	₩ (3,019)	₩ 349,648	₩ 3,283,817	₩ (443,178)	₩ 14,651,396	-	₩ 14,651,396

		Other paid-in capital							
	Capital stock	Capital surplus	Capital adjustment	Hybrid equity securities	Retained earnings	Other components of equity	Controlling interests	Non-controlling interests	Total
Balance as of January 1, 2018 (*1)	₩ 2,132,779	₩ 9,331,349	₩ (3,019)	₩ 349,648	₩ 3,283,817	₩ (443,178)	₩ 14,651,396	-	₩ 14,651,396
Effect of adoption of new accounting standards (Note 2)	-	-	-	-	165,347	(233,671)	(68,324)	-	(68,324)
Balance as of January 1, 2018 under KIFRS 1109	2,132,779	9,331,349	(3,019)	349,648	3,449,164	(676,849)	14,583,072	-	14,583,072
Issuance of capital stock	29,412	170,444	-	-	-	-	199,856	-	199,856
Changes due to consolidated tax	-	-	-	-	139,920	-	139,920	-	139,920
Total comprehensive income									
Net income	-	-	-	-	1,222,569	-	1,222,569	-	1,222,569
Other comprehensive income (loss)									
Remeasurements of net defined benefit liabilities	-	-	-	-	-	(61,168)	(61,168)	-	(61,168)
Gain on valuation of debt securities at FVOCI	-	-	-	-	-	84,040	84,040	-	84,040
Gain (loss) on of equity securities at FVOCI	-	-	-	-	(31,176)	3,702	(27,474)	-	(27,474)
Exchange differences on translation of foreign operations	-	-	-	-	-	1,676	1,676	-	1,676
Loss on valuation of investments in associates	-	-	-	-	-	(24)	(24)	-	(24)
Dividends on hybrid equity securities	-	-	-	-	(17,080)	-	(17,080)	-	(17,080)
Dividends	-	-	-	-	(190,000)	-	(190,000)	-	(190,000)
Balance as of December 31, 2018 (*1)	₩ 2,162,191	₩ 9,501,793	₩ (3,019)	₩ 349,648	₩ 4,573,397	₩ (648,623)	₩ 15,935,387	-	₩ 15,935,387

(*1) The consolidated statement of changes in equity for the year ended December 31, 2018 is prepared in accordance with KIFRS 1109; however, the comparative consolidated statement of changes in equity for the year ended December 31, 2017 was not retrospectively restated to apply KIFRS 1109.

The accompanying notes are an integral part of the consolidated financial statements.

NongHyup Bank and its subsidiaries
Consolidated statements of cash flows
for the years ended December 30, 2018 and 2017

(Korean won in millions)

	Note	For the year ended December 31, 2018 (*1)	For the year ended December 31, 2017 (*1)
Operating activities			
Income before income tax expenses		₩ 1,663,555	₩ 858,298
Adjustments to reconcile income before income tax expenses to net cash provided by operating activities:			
Net interest income		(5,199,086)	(4,587,924)
Dividend income		(12,540)	(88,997)
Gain related to financial assets at FVTPL		(64,872)	-
Gain on valuation of held-for-trading financial assets		-	(6,941)
Loss (gain) on valuation of trading derivatives		30,667	(52,633)
Loss (gain) on valuation of hedging derivatives		(687)	3,761
Loss (gain) on fair value hedge		2,449	(7,253)
Loss related to financial assets at FVOCI		8,747	-
Gain related to AFS financial assets		-	(110,319)
Loss on disposal of financial assets at amortized cost		17,791	-
Gain on disposal of investments in associates		(210)	(2,015)
Gain on valuation of equity method investments		(8,008)	(4,546)
Depreciation and amortization		300,277	298,633
Impairment loss of intangible assets		406	-
Gain on disposal of assets		(383)	(14,590)
Allowance for expected credit losses		585,482	844,474
Other provisions		12,907	78,623
Retirement expenses of net defined benefit liabilities		201,491	220,602
Loss (gain) on transaction of foreign exchange		(111,497)	135,079
Others		28,713	73,803
		(4,208,353)	(3,220,242)
Changes in operating assets and liabilities:			
Due from banks		2,659,047	1,430,248
Derivative assets		544,103	619,372
Financial assets at FVTPL		(236,974)	-
Held-for-trading financial assets		-	49,839
Loans at amortized cost		(14,240,214)	-
Loans and other receivables		-	(12,528,158)
Other assets		(19,265)	(630)
Deposits		18,411,620	11,492,066
Derivative liabilities		(479,784)	(626,758)
Financial liabilities at FVTPL		(38,582)	-
Held-for-trading financial liabilities		-	51,973
Defined benefit liabilities		(187,868)	(152,051)
Plan assets		(47,196)	(199,471)
Provisions		(11,607)	(14,819)
Other liabilities		(933,334)	2,742,587
		5,419,946	2,864,198
Cash provided by operating activities:			
Cash received for interest		8,312,912	7,109,655
Cash received for dividend		12,540	88,997
		8,325,452	7,198,652
Cash used in operating activities:			
Payment of interest expenses		(2,864,533)	(2,843,771)
Payment of income tax		(246,912)	(79,930)
		(3,111,445)	(2,923,701)
Net cash provided by operating activities		₩ 8,089,155	₩ 4,777,205

(Continued)

NongHyup Bank and its subsidiaries
Consolidated statements of cash flows (cont'd)
for the years ended December 31, 2018 and 2017

(Korean won in millions)

	Note	For the year ended December 31, 2018 (*1)	For the year ended December 31, 2017 (*1)
Investing activities			
Cash flows provided by investing activities:			
Disposal of financial assets at FVTPL		₩ 23,036,132	₩ -
Disposal and redemption of financial assets at FVOCI		20,045,835	-
Disposal of AFS financial assets		-	42,369,320
Disposal and redemption of securities at amortized cost		914,309	-
Redemption of HTM financial assets		-	1,404,996
Disposal of tangible assets		6,838	38,464
Disposal of intangible assets		1,495	43,016
Disposal of investment properties		329	3,566
Disposal of investments in associates		12,701	43,264
Dividend of investments in associates		5,294	6,173
		44,022,933	43,908,799
Cash flows used in investing activities:			
Purchase of financial assets at FVTPL		24,252,401	-
Purchase of financial assets at FVOCI		21,603,916	-
Purchase of AFS financial assets		-	48,065,140
Purchase of securities at amortized cost		2,009,376	-
Purchase of HTM financial assets		-	1,467,585
Proceeds from business acquisition, net	46	11,223	-
Purchase of equity method investments in associates		39,401	15,275
Purchase of tangible assets		200,706	189,909
Purchase of intangible assets		149,693	188,348
Purchase of investment properties		4,850	3,610
		(48,271,566)	(49,929,867)
Net cash used in investing activities		₩ (4,248,633)	₩ (6,021,068)
Financing activities			
Cash flows provided by financing activities:			
Issuance of capital stock		₩ 199,856	₩ -
Increase in borrowings, net		-	284,899
Increase in debentures		7,330,662	8,807,144
Increase in borrowings from trust accounts, net		463,418	867,154
		7,993,936	9,959,197
Cash flows used in financing activities:			
Decrease in borrowings, net		1,038,608	-
Decrease in debentures		9,596,321	8,093,538
Dividends		207,080	17,080
		(10,842,009)	(8,110,618)
Net cash provided by (used in) financing activities		₩ (2,848,073)	₩ 1,848,579
Net increase in cash and cash equivalents		992,449	604,716
Cash and cash equivalents at the beginning of the period		2,882,412	2,303,552
Effect of exchange rate changes on cash and cash equivalents		9,405	(25,856)
Cash and cash equivalents at the end of the period	44	₩ 3,884,266	₩ 2,882,412

(*1) The consolidated statement of cash flows for the year ended December 31, 2018 is prepared in accordance with KIFRS 1109; however, the comparative consolidated statement of cash flows for the year ended December 31, 2017 was not retrospectively restated to apply KIFRS 1109.

The accompanying notes are an integral part of the consolidated financial statements.

1. Corporate information

1.1 NongHyup Bank as the parent company

NongHyup Bank (the "Bank") was established by the split-off of the Credit and Banking Business from the National Agricultural Cooperative Federation (the "NACF") on March 2, 2012. The Bank's headquarters is located at 120 Tongil-ro, Jung-gu in Seoul.

As of December 31, 2018, the Bank's capital stock amounts to ₩2,162,191 million with 432,438,179 shares of common stock outstanding, which are wholly owned by NongHyup Financial Group. As of December 31, 2018, the Bank operates 157 regional offices, 683 branches, 295 branch offices, and 6 overseas branches and offices.

1.2 Scope and principles of consolidation

The Bank's consolidated subsidiaries as of December 31, 2018 and 2017 are as follows:

	December 31, 2018			
Subsidiaries	Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small loan business	Myanmar	100.00	December 31, 2018
NongHyup Finance Cambodia Co., Ltd.	Small loan business	Cambodia	100.00	December 31, 2018
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	December 31, 2018
KAMCO Value Recreation 4th Securitization Specialty Ltd.(*2)	Asset securitization business	Korea	15.00	December 31, 2018
Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th and 29 others (*2 and *3)	Beneficiary certificate	Korea	100.00	December 31, 2018
Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23th and another (*2 and *4)	Beneficiary certificate	Korea	99.98	December 31, 2018

(*1) The Bank controls the trust because it has power over the trust to determine the operation performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has ability to use power over the investee to affect performance result.
(*3) The name of the subsidiary changed from NH-CA (NH Securities) Privately-Placed Securities Investment Trust 12-5th to Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 25th.
(*4) The name of the subsidiary changed from Eugene (NH Securities) Zarang Privately-Placed Securities Investment 70th to Samsung (NH Securities) Partner Plus Privately-Placed Securities Investment 23rd.

1. Corporate information (cont'd)

1.2 Scope and principles of consolidation (cont'd)

Subsidiaries	December 31, 2017 Main business	Location	Percentage of ownership (%)	Date of the financial statements
NongHyup Finance Myanmar Co., Ltd.	Small loan business	Myanmar	100.00	December 31, 2017
Personal pension trust and 10 other trusts (*1)	Trust business	Korea	-	December 31, 2017
KAMCO Value Recreation 4th Securitization Specialty Ltd.(*2)	Asset securitization business	Korea	15.00	December 31, 2017
NH-CA (NH Securities) Privately-Placed Securities Investment Trust 12-5th and 30 others (*2)	Beneficiary certificate	Korea	100.00	December 31, 2017
Eugene (NH Securities) Zarang Privately-Placed Securities Investment Trust 70th and another (*2)	Beneficiary certificate	Korea	99.98	December 31, 2017

(*1) The Bank controls the trust because it has power over the trust to determine the operation performance and is exposed to variable returns to absorb loss from the agreement of guarantees of the principal or that of principal and interest.
(*2) The Bank controls these investees because it is exposed to variable returns from its involvement with the investees and has ability to use power over the investee to affect performance result.

The Bank and its subsidiaries (collectively referred to as the "Group") include the structured entities, to which KIFRS 1110 and KIFRS 1112 are applicable, in the consolidation scope and controls the structured entity when the Group has power over the entity, exposure to variable returns from its involvement with the entity and the ability to use power over the entity to affect the amount of those returns.

1.3 Summary of financial information of subsidiaries

A summary of financial information of subsidiaries in consolidation as of December 31, 2018 and 2017 and for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018					
Subsidiaries	Assets	Liabilities	Equity	Operating Income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 21,662	₩ 866	₩ 20,796	₩ 3,828	₩ 572	₩ (529)
NongHyup Finance Cambodia Co., Ltd.	22,057	15,161	6,896	1,693	(180)	(241)
Personal pension trust and 10 other trusts	3,631,343	3,631,343	-	103,735	-	-
KAMCO Value Recreation 4th Securitization Specialty Ltd.	271	83,864	(83,593)	-	(4,505)	(4,505)
Consolidated beneficiary certificate	2,379,701	784,637	1,595,064	636	22,175	22,175

	December 31, 2017					
Subsidiaries	Assets	Liabilities	Equity	Operating Income	Net income (loss)	Total comprehensive income (loss)
NongHyup Finance Myanmar Co., Ltd.	₩ 7,999	₩ 183	₩ 7,816	₩ 418	₩ (480)	₩ (1,206)
Personal pension trust and 10 other trusts	3,565,663	3,565,663	-	96,227	-	-
KAMCO Value Recreation 4th Securitization Specialty Ltd.	275	79,363	(79,088)	134	(4,227)	(4,227)
Consolidated beneficiary certificate	2,041,285	395,402	1,645,883	79,261	38,936	38,936

1. Corporate information (cont'd)

1.4 Consolidated structured entities

Characteristics and intentions of contractual commitments offered by Group to consolidated structured entities are as follows:

Entity	Characteristics	Purpose
KAMCO Value Recreation 4th Securitization Specialty Ltd.	The Group has purchased subordinated bonds amounting to ₩42,165 million issued by its subsidiary, KAMCO Value Recreation 4th Securitization Specialty Ltd.	Credit risk mitigation of liquidation plan
11 trusts including personal pension trust	The Group offers principal and interest conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case of the operation result of trust account standing below the principal.	Credit risk mitigation on financial management of trust account

1.5 Changes in subsidiaries

Tongyang (NH Future) Safe Plus PF Bond (W-4) is no longer a subsidiary of the Bank as the entity was liquidated during the year ended December 31, 2018. NongHyup Finance Cambodia Co., Ltd. became a subsidiary as the Bank acquired its shares during the year ended December 31, 2018.

1.6 Unconsolidated structured entities

A structured entity is designed such that voting rights or similar rights are not the dominant factor in deciding who controls the entity, and the Group is accordingly involved in the structured entity through project financing, asset-backed securitization, investment fund contracts and others as of December 31, 2018. Of the structured entities, the interests and nature of the risks of unconsolidated structured entities, for which the Group does not have control, are as follows.

1.6.1 Asset-backed securitization

The unconsolidated structured entity, whose objective is the securitization of assets, issues asset-backed securities based on the securitized assets and pays the redemption proceeds on such asset-backed securities with profits from the management, operation and sales of the securitized assets. The Group is liable for the risks associated with the issuance of asset-backed securities through the purchase of subordinated bonds, execution of asset-backed securities purchase agreements and granting of credit, and thus recognizes the related interest income and commission income.

1.6.2 Investment funds

Non-consolidated structured entities, which are classified as investment funds, include investment trusts and private equity funds. The structure of an investment trust is formed by funding from various investors, engaging a manager in the trust to operate and distributing proceeds from investments to the investors according to the trust agreements. The structure of a private equity fund is normally established by distributing profit from investment fund of equity securities in order to acquire ownership interests in a target group and implement financial and operational restructuring. The Group recognizes gain and loss on valuation of investments in relation to the Group's interest in investment funds. It is exposed to loss of principals when the value of investment fund decreases.

1. Corporate information (cont'd)

1.6 Unconsolidated structured entities (cont'd)

1.6.3 Project financing

Project financing is the main financing method for large-scale risky project, where investors will make investment decisions based on the project economic feasibility, instead of the credit rating of the principal party driving the project or the physical collateral involved, and will receive the profits that occur upon project progression. For effective implementation of the project financing, structured entities will be established as special-purpose entities (SPEs), funded through investment or lending institutions and participating entities. Structured entities for project financing include investment companies for real estate project-financing, business infrastructure enforcement corporations, special-purpose companies for acquisition of ships and airlines. The Group has an influence on the structured entities investment, loans and granting of credit, and thus recognizes the related interest income, gain and loss on valuation of equity investments and dividend income. Although the entities that provide financial support in the form of funding guarantees, bonds and senior credit facilities, exist, the Group may still be exposed to risk of loss resulting from failure of return on capital investment or discontinuation of the project, joint liabilities on guarantees, etc.

Total asset size of the unconsolidated structured entities, book value for the line items as recognized in the consolidated financial statements, maximum exposure to loss and loss incurred for the year ended December 31, 2018 and 2017 are as follows. The maximum exposure to loss includes investment amounts recognized in the consolidated financial statements and the amounts which are determined in the future by meeting certain condition based on the agreements of purchase, granting credit, etc. (Korean won in millions):

	December 31, 2018			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 63,167,067	₩ 25,650,969	₩ 29,503,996	₩ 118,322,032
Recognized assets related to unconsolidated structured entities:				
Loans	907,108	-	1,468,127	2,375,235
Securities	4,508,577	3,157,037	177	7,665,791
	5,415,685	3,157,037	1,468,304	10,041,026
Recognized liabilities related to unconsolidated structured entities	5,347	-	-	5,347
Loss on unconsolidated structured entity	100	26	-	126
Maximum exposure to loss:				
Commitments and guarantees	1,828,032	-	375	1,828,407
Securities (including derivatives)	4,508,577	3,157,037	177	7,665,791
Loans	907,108	-	1,468,127	2,375,235
	₩ 7,243,717	₩ 3,157,037	₩ 1,468,679	₩ 11,869,433

1. Corporate information (cont'd)

1.6 Unconsolidated structured entities (cont'd)

	December 31, 2017			
	Asset-backed securitization	Investment funds	Project financing	Total
Total assets of unconsolidated structured entity	₩ 51,354,698	₩ 29,045,822	₩ 11,402,193	₩ 91,802,713
Recognized assets related to unconsolidated structured entities:				
Loans	36,677	-	910,301	946,978
Securities	5,334,983	2,484,363	11,600	7,830,946
	5,371,660	2,484,363	921,901	8,777,924
Recognized liabilities related to unconsolidated structured entities	25,235	-	-	25,235
Loss on unconsolidated structured entity	1,206	-	-	1,206
Maximum exposure to loss:				
Commitments and guarantees	2,584,619	-	-	2,584,619
Securities (including derivatives)	5,334,983	2,484,363	11,600	7,830,946
Loans	36,677	-	910,301	946,978
	₩ 7,956,279	₩ 2,484,363	₩ 921,901	₩ 11,362,543

2. Basis of preparation and significant accounting policies

2.1 Basis of preparation

The Group's consolidated financial statements are prepared in accordance with the Korean International Financial Reporting Standards (KIFRS) since the Bank was established on March 2, 2012. The Board of Directors approved the accompanying consolidated financial statements on February 11, 2019.

The significant accounting policies are set out below, and the accounting policies adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2017, except for the new and amended standards adopted as explained below.

The accompanying consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The accompanying consolidated financial statements have been prepared on the historical cost basis except for certain non-current assets and financial assets that are measured at revalued amounts or fair values at the end of the reporting period, as explained in the accounting policies below. Historical cost is generally based on the fair value of the cost of acquiring asset.

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures

The nature and the impact of each new standard, amendments and enactments are described below:

Enactments to KIFRS 1115 *Revenue from Contracts with Customers*

The Group applied KIFRS 1115 *Revenue from Contracts with Customers.* The new standard KIFRS 1115 replaced KIFRS 1018 *Revenue*, KIFRS 1011 *Construction Contracts*, KIFRS 2031 *Revenue: Exchange Transaction of Advertising Services*, KIFRS 2113 *Customer Loyalty Programmes*, KIFRS 2115 *Agreements for the Construction of Real Estate*, KIFRS 2118 *Transfer of Assets from Customers*.

The current KIFRS 1018 provides the criteria for the recognition of revenue relating to: sale of goods, rendering of services, interest, royalties, dividends and construction contracts; however, under the new KIFRS 1115, revenue is recognized by applying a five-stage revenue recognition model (① Identify a contract with a customer. → ② Identify the performance obligations in the contract. → ③ Determine the transaction price → ④ Allocate the transaction price to the separate performance obligations in the contract. → ⑤ Recognize revenue when the entity satisfies a performance obligation) to its all contracts with customers.

The Group retrospectively applies the standard only to contracts yet completed on the date of initial adoption, and applies practical expedient by not retrospectively restating the contracts completed prior to the date of initial adoption. Management believes that the adoption of this new standard did not have any material impact on the Group's consolidated financial statements.

Enactments to KIFRS 1109 *Financial Instruments*

KIFRS 1109, which is effective for annual periods beginning on or after January 1, will replace KIFRS 1039 *Financial Instruments: Recognition and Measurement*. KIFRS 1109 brings together all three aspects of the accounting for financial instruments project: classification and measurement, impairment and hedge accounting. The new KIFRS 1109 is retrospectively applied in principle, but there are some exceptions such as exemption of restatement of comparative information for classification, measurement, impairment of financial instruments. For hedge accounting, the requirements are generally applied prospectively, with some exceptions such as time value accounting of options.

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures (cont'd)

The impacts of the first application of KIFRS 1109 on the classification and measurement of financial assets and liabilities of the Group as of January 1, 2018 are as follows (Korean won in millions):

Classification	December 31, 2017 (Classification under KIFRS 1039)	January 1, 2018 (Classification under KIFRS 1109)	December 31, 2017 (Amount under KIFRS 1039)	January 1, 2018 (Amount under KIFRS 1109)
Held-for-trading financial assets-Equity securities	Financial assets at FVTPL	Financial assets at FVTPL	₩ 322,492	₩ 322,492
Held-for-trading financial assets-Debt securities	Financial assets at FVTPL	Financial assets at FVTPL	5,642,969	5,642,969
Trading deritives assets	Financial assets at FVTPL	Financial assets at FVTPL	1,023,737	1,023,185
Hedging derivatives assets	Hedging derivative assets	Hedging derivative assets	7,575	7,575
AFS financial assets-Equity securities	AFS financial assets	Financial assets at FVOCI	384,950	384,950
AFS financial assets-Equity securities	AFS financial assets	Financial assets at FVTPL	2,633,392	2,633,392
AFS financial assets-Debt securities	AFS financial assets	Financial assets at FVOCI	17,988,470	17,988,470
HTM financial assets	HTM financial assets	Financial assets at amortized cost	8,231,407	8,230,523
Loans and receivables-Cash and due from banks	Loans and receivables	Financial assets at amortized cost	7,788,698	7,781,728
Loans and receivables	Loans and receivables	Financial assets at amortized cost	218,861,709	218,771,188
Loans and receivables	Loans and receivables	Financial assets at FVTPL	42,824	53,110
FVTPL liabilities-Debt securities	Financial liabilities at FVTPL	Financial liabilities at FVTPL	51,737	51,737
Trading derivative liabilities	Financial liabilities at FVTPL	Financial liabilities at FVTPL	967,629	967,629
Hedging derivative liabilities	Hedging derivative liabilities	Hedging derivative liabilities	25,881	25,881

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures (cont'd)

Changes of the first application of KIFRS 1109 on the classification and measurement of financial assets and liabilities of the Group as of January 1, 2018 are as follows (Korean won in millions):

Classification	December 31, 2017 (Amount under KIFRS 1039)	Reclassification	Remeasurement	January 1, 2018 (Amount under KIFRS 1109)
Financial assets:				
Financial assets at FVTPL:				
Beginning balance	₩ 6,989,198	₩ -	₩ -	₩ 6,989,198
Reclassified as financial assets at FVTPL	-	(6,989,198)	-	(6,989,198)
	6,989,198	(6,989,198)	-	-
AFS financial assets:				
Beginning balance	21,006,812	-	-	21,006,812
Reclassified as financial assets at FVOCI (debt securities)	-	(17,988,470)	-	(17,988,470)
Reclassified as financial assets at FVOCI (equity securities)	-	(384,950)	-	(384,950)
Reclassified as financial assets at FVTPL	-	(2,633,392)	-	(2,633,392)
	21,006,812	(21,006,812)	-	-
HTM financial assets:				
Beginning balance	8,231,407	-	-	8,231,407
Reclassified as financial assets at amortized cost	-	(8,231,407)	-	(8,231,407)
	8,231,407	(8,231,407)	-	-
Loans and receivables:				
Beginning balance	226,693,231	-	-	226,693,231
Reclassified as financial assets at amortized cost	-	(226,650,407)	-	(226,650,407)
Reclassified as financial assets at FVTPL (loans)	-	(42,824)	-	(42,824)
	226,693,231	(226,693,231)	-	-
Financial assets at FVTPL:				
Beginning balance	-	-	-	-
Reclassified from financial assets at FVTPL	-	6,989,198	-	6,989,198
Reclassified from AFS financial assets	-	2,633,392	-	2,633,392
Reclassified from loans and receivables	-	42,824	9,734	52,558
	-	9,665,414	9,734	9,675,148
Financial assets at FVOCI:				
Beginning balance	-	-	-	-
Reclassified from AFS financial assets (debt securities)	-	17,988,470	-	17,988,470
Reclassified from AFS financial assets (equity securities)	-	384,950	-	384,950
	-	18,373,420	-	18,373,420
Financial assets at amortized cost:				
Beginning balance	-	-	-	-
Reclassified from HTM financial assets	-	8,231,407	-	8,231,407
Reclassified from loans and receivables	-	226,650,407	-	226,650,407
Expected credit losses	-	-	(98,375)	(98,375)
	-	234,881,814	(98,375)	234,783,439
Deferred income tax:				
Beginning balance	651,878	-	-	651,878
Remeasurement	-	-	25,916	25,916
	651,878	-	25,916	677,794
	₩ 263,572,526	₩ -	₩ (62,725)	₩ 263,509,801

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures (cont'd)

Classification	December 31, 2017 (Amount under KIFRS 1039)	Reclassification	Remeasurement	January 1, 2018 (Amount under KIFRS 1109)
Financial liabilities:				
Financial liabilities at FVTPL:				
Beginning balance	₩ 1,019,366	₩ -	₩ -	₩ 1,019,366
Reclassified as financial liabilities at FVTPL	-	(1,019,366)	-	(1,019,366)
	1,019,366	(1,019,366)	-	-
Financial liabilities at FVTPL:				
Beginning balance	-	-	-	-
Reclassified from financial liabilities at FVTPL	-	1,019,366	-	1,019,366
	-	1,019,366	-	1,019,366
Provisions:				
Beginning balance	431,964	-	-	431,964
Expected credit losses	-	-	5,598	5,598
	431,964	-	5,598	437,562
	₩ 1,451,330	₩ -	₩ 5,598	₩ 1,456,928

Changes of the first application of KIFRS 1109 on allowance for expected credit losses of the Group as of January 1, 2018 are as follows (Korean won in millions):

December 31, 2017 (Classification under KIFRS 1039)	January 1, 2018 (Classification under KIFRS 1109)	December 31, 2017 (Allowance for expected credit losses under KIFRS 1039)	Reclassification	Remeasurement	January 1, 2018(Allowance for expected credit losses under KIFRS 1109)
Loans and receivables	Financial assets at amortized cost	₩ 1,551,300	₩ -	₩ 97,491	₩ 1,648,791
Loans and receivables	Financial assets at FVTPL	8,988	(8,988)	-	-
AFS financial assets	Financial assets at FVOCI	-	-	945	945
HTM financial assets	Financial assets at amortized cost	-	-	884	884
		1,560,288	(8,988)	99,320	1,650,620
Provision for acceptances and guarantees	Provision for acceptances and guarantees	198,550	-	2,358	200,908
Provision for unused credit limit	Provision for unused credit limit	103,491	-	3,240	106,731
		302,041	-	5,598	307,639
		₩ 1,862,329	₩ (8,988)	₩ 104,918	₩ 1,958,259

Changes of the first application of KIFRS 1109 on other comprehensive income (loss) of the Group as of January 1, 2018 are as follows (Korean won in millions):

Classification	Amount
December 31, 2017 (under KIFRS 1039)	₩ (443,178)
Reclassified as financial assets at FVTPL from AFS financial assets	(100,884)
Expected credit losses for debt securities at FVOCI	945
Cancellation of impairment for equity securities at FVOCI	(220,463)
Changes in gain or loss on valuation of investments in associates	(1,902)
Income tax effect	88,634
January 1, 2018 (under KIFRS 1109)	₩ (676,848)

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures (cont'd)

Changes of the first application of KIFRS 1109 on retained earnings of the Group as of January 1, 2018 are as follows (Korean won in millions):

Classification		Amount
December 31, 2017 (under KIFRS 1039)	₩	3,283,817
Reclassified as financial assets at FVTPL from AFS financial assets		100,884
Reclassified as financial assets at FVTPL from Loans and receivables		9,734
Expected credit losses for debt securities at FVOCI		(945)
Cancellation of impairment for equity securities at FVOCI		220,463
Expected credit losses for financial assets at amortized cost		(98,375)
Expected credit losses for provisions		(5,598)
Changes in gain or loss on valuation of investments in associates		1,902
Income tax effect		(62,718)
January 1, 2018 (under KIFRS 1109)	₩	3,449,164

Amendments to KIFRS 1028 *Investments in Associates and Joint Ventures - Clarification that measuring investees at fair value through profit or loss is an investment-by-investment choice*

The amendments clarify that: An entity that is a venture capital organisation, or other qualifying entity, may elect, at initial recognition on an investment-by-investment basis, to measure its investments in associates and joint ventures at fair value through profit or loss.

If an entity, that is not itself an investment entity, has an interest in an associate or joint venture that is an investment entity, the entity may, when applying the equity method, elect to retain the fair value measurement applied by that investment entity associate or joint venture to the investment entity associate's or joint venture's interests in subsidiaries. This election is made separately for each investment entity associate or joint venture, at the later of the date on which: (a) the investment entity associate or joint venture is initially recognized; (b) the associate or joint venture becomes an investment entity; and (c) the investment entity associate or joint venture first becomes a parent. The Group does not expect any material impact of amendments on its consolidated financial statements.

Amendments to KIFRS 1102 *Classification and Measurement of Share-based Payment Transactions*

The KASB issued amendments to KIFRS 1102 *Share-based Payment* that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled.

On adoption, entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. The amendments are effective for annual periods beginning on or after 1 January 2018, with early application permitted. The Group does not expect any material impact of amendments on its consolidated financial statements.

Amendments to KIFRS 1040 *Investment Property —Transfers of Investment Property*

The amendments clarify when an entity should transfer property, including property under construction or development into, or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. The Group does not expect any material impact of amendments on its consolidated financial statements.

2. Basis of preparation and significant accounting policies (cont'd)

2.2 Changes in significant accounting policies and disclosures (cont'd)

Enactments to IFRIC Interpretation 2122 *Foreign Currency Transactions and Advance Consideration*

The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expenses or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine the transaction date for each payment or receipt of advance consideration. The Group does not expect any material impact of enactments on its consolidated financial statements.

2.3 Standards issued but not yet effective

The standards and interpretations that are issued, but not effective, until the issuance day of the Group's consolidated financial statements are as follows.

Amendments to KIFRS 1116 *Leases*
KIFRS 1116 replaces KIFRS 1017 *Leases*, IFRIC Interpretation 2104 *Determining whether an Arrangement contains a Lease*, IFRIC Interpretation 2015 *Operating Leases-Incentives* and IFRIC Interpretation 2027 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.

The Group assesses whether a contract is, or contains, a lease at inception of a contract and also assesses whether a contract is, or contains, a lease at the initial adoption of KIFRS 1116. However, the Group may not reassess all arrangements entered into before the date of initial application of the standard by applying the simplified approach.

For a contract that is, or contains a lease, the Group will account for each lease component within the contract as a lease separately from non-lease components of the contract.

A leases will recognize an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset) and a liability representing the right to make lease payments (i.e., the lease liability). However, in case of short-term leases and leases of 'low-value' assets, the Group may elect to apply the exception under KIFRS 1116. As a practical expedient, a lessee may elect, by class of the 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 component.

The standard is effective for annual periods beginning on or after January 1, 2019. The Group is assessing the potential effect of the amendments on its consolidated financial statements. The Group will apply these amendments on the required effective date.

Amendments to KIFRS 1109 *Prepayment Features with Negative Compensation*
Under amendments to KIFRS 1109, a financial instrument that has prepayment features with negative compensation can be measured at amortized cost. And when financial liabilities measured at amortized cost modify the terms of the contract but are not derecognized, the entity recognizes modification gains or losses in profit or loss. The amendments are effective for periods beginning on or after 1 January 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to KIFRS 1019: *Plan Amendment, Curtailment or Settlement*
An entity is required to determine net interest for the remainder of the period after the plan amendment, curtailment or settlement using: the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event; and the discount rate used to remeasure that net defined benefit liability (asset). Also, the amendments clarify that an entity first determines any past service cost, or a gain or loss on settlement, without considering the effect of the asset ceiling. This amount is recognized in profit or loss. The amendments are effective for periods beginning on or after 1 January 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

2. Basis of preparation and significant accounting policies (cont'd)

2.3 Standards issued but not yet effective (cont'd)

Amendments to KIFRS 1028 *Long-term interests in associates and joint ventures*
The amendments clarify that an entity applies KIFRS 1109 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in KIFRS 1109 applies to such long-term interests.
The amendments should be applied retrospectively and are effective from January 1, 2019, with early application permitted. The comparative information is not restated by applying transitional provisions of KIFRS 1109 and the effect of retrospective application is adjusted to the opening balance of retained earnings (or other components of equity as appropriate). The amendments will not have material impact on the Group's financial statements.

IFRIC Interpretation 2123 *Uncertainty over Income Tax Treatment*
The Interpretation addresses the recognition and measurement of current income taxes and deferred income taxes when it is uncertain whether the tax authorities will approve of the tax treatment applied by an entity. The Interpretation also includes guidance to the situation requiring the accounting unit for the uncertainty and need for reassessment. The interpretation is effective for annual reporting periods beginning on or after January 1, 2019, and the entity may choose between retrospectively restating the comparative information or reflecting the effect of changes on the beginning balance. The Interpretation will not have material impact on the Group's financial statements.

Annual Improvements 2015-2017 Cycle

Amendments to KIFRS 1103 *Business Combinations*
The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation. An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to KIFRS 1111 *Joint Arrangements*
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 as defined in KIFRS 1103. The amendments clarify that the previously held interests in that joint operation are not remeasured. An entity applies those amendments to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

Amendments to KIFRS 1012 *Income Taxes*
KIFRS 1012.57A apply to all income tax consequences of dividends and the amendments apply that an entity recognizes 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. An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application is permitted. These amendments have no impact on the consolidated financial statements of the Group.

KIFRS 1023 *Borrowing Costs*
The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete. An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application permitted. These amendments have no impact on the consolidated financial statements of the Group.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies

The significant accounting policies that the Group adopts in preparing the consolidated financial statements are as follows.

2.4.1 Consolidation

The consolidated financial statements incorporate the financial statements of the Group and entities (including structured entities) controlled by the Group (and its subsidiaries). Control is achieved where the Group 1) has the power over the investee; 2) is exposed, or has rights, to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Income and expenses of subsidiaries that are acquired or disposed of during the year are included in the consolidated statements of profit or loss and other comprehensive income from the effective date of acquisition and up to the effective date of disposal, as appropriate. The carrying amount of non-controlling interests is adjusted to reflect their proportional share of changes in equity subsequent to the initial recognition. Total comprehensive income of subsidiaries is attributed to the owners of the Group and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

If a subsidiary uses accounting policies other than those adopted in the consolidated financial statements for transactions and events in similar circumstances, appropriate adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with those used by the Group.

All intragroup balances and transactions, income and expenses are fully eliminated in consolidation.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the controlling interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received are recognized directly in equity and attributed to owners of the Group.

When the Group loses control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in other comprehensive income and accumulated in equity, the amounts previously recognized in other comprehensive income and accumulated in equity are accounted for as if the Group had directly disposed of the relevant assets (i.e., reclassified to profit or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under KIFRS 1109 or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.2 Business combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:
- deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with KIFRS 1012 Income Taxes and KIFRS 1019, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with KIFRS 1102 Share-Based Payment at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with KIFRS 1105 Non-current Assets Held for Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any), over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another KIFRS.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with KIFRS 1109 *Financial Instruments,* as appropriate, with the corresponding gain or loss being recognized in profit or loss or other comprehensive income or loss. If KIRS 1109 is not applied to contingent consideration, the Group applies another KIFRS to measure.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.2 Business combination (cont'd)

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

2.4.3 Investments in associates

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not having control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with KIFRS 1105. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

Upon disposal of an associate or a joint venture that results in the Group losing significant influence over that associate or joint venture, any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset in accordance with KIFRS 1109. The difference between the previous carrying amount of the associate or joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate or joint venture on the same basis it would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as reclassification adjustment) when it loses significant influence over that associate or joint venture.

When the Group reduces its ownership interest in an associate or a joint venture, but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities. In addition, the Group applies KIFRS 1105*, Non-current Assets Held for Sale and Discontinued Operations*, to a portion of investment in an associate or a joint venture that meets the criteria to be classified as held for sale.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.3 Investments in associates (cont'd)

The requirements of KIFRS 1109 are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with KIFRS 1036 by comparing its recoverable amount (higher of value in use and fair value, less costs to sell) with its carrying amount, and any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with KIFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

When the Group transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

2.4.4 Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying amount and their fair value.

2.4.5 Revenue recognition

Under KIFRS 1115, revenue is recognized by applying a five-stage revenue recognition model (① Identify a contract with a customer. → ② Identify the performance obligations in the contract. → ③ Determine the transaction price → ④ Allocate the transaction price to the separate performance obligations in the contract. → ⑤ Recognize revenue when the entity satisfies a performance obligation) to its all contracts with customers.

1) Dividend and interest income

Dividend income from investments is recognized when the shareholder's right to receive payment has been established.

Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

2) Commission income

According to the imposition purpose of the commission and related accounting standards for financial assets, commission income is classified and accounted for as follows:

Classification	Details
Commission composing effective revenues of the financial instruments	Accounted for as an adjustment to the effective interest rate
Commission by rendering services	Recognized revenue when the services are provided
Commission by performing significant activities	Recognized revenue when significant activities have been completed

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.5 Revenue recognition (cont'd)

3) Customer loyalty program

The Group provides its customers with incentives to buy goods or services by providing awards called (customer loyalty programs) and allocates the fair value of the consideration received or receivable between the award credits granted and the other components of the revenue transaction. The Group supplies the awards, such as discounted payments or free gifts. The consideration allocated to the award credits is measured by reference to their fair value, i.e., the amount for which the award credits could be sold separately. The fair value of the consideration allocated to the award credits is estimated by taking into account expected redemption rates, etc., and recognized as deferred revenue until the Group fulfills its obligations to deliver awards to customers.

The amount of revenue recognized is to be based on the number of award credits that have been redeemed in exchange for awards, relative to the total number expected to be redeemed. If a third party supplies the awards, the Group shall assess whether it is collecting the consideration allocated to the award credits on its own account (as the principal in the transaction) or on behalf of the third party (as agent for the third party). The amount of revenue recognized shall be the net amount retained on its own account.

2.4.6 Foreign currencies

In preparing the Group's consolidated financial statements, transactions in currencies other than the Group's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are recognized in net income in the period in which they arise, except for:

- Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks (see Note 2.4.17 above for hedging accounting policies); and
- Exchange differences on monetary items receivable from or payable to a foreign operation for which, in the foreseeable future, settlement is neither planned nor likely to occur (therefore, forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to net income on disposal or partial disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.7 Retirement benefit costs and termination benefits

The Group operates defined benefit retirement benefit plans. For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with an independent actuary being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, of the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), are recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods. Past service costs are recognized in profit or loss on the earlier of the date of the plan amendment or curtailment, and the date that the Group recognizes restructuring-related costs. Net interest is calculated by applying the discount rate to the defined benefit pension plans or asset. Defined benefit costs are composed of service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income) and remeasurement.

The Group presents the service cost and net interest expense (income) components in profit or loss, and the remeasurement component in other comprehensive income.

The retirement benefit obligation recognized in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognized at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when the Group recognizes any related restructuring costs.

2.4.8 Income tax

Income tax consists of current tax and deferred tax.

1) Current tax

The current tax payable is based on taxable profit for the year. Taxable profit differs from profit in the consolidated statements of profit or loss and other comprehensive income because taxable profit excludes items taxable or deductible for different tax years or not taxable or deductible permanently. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.8 Income tax (cont'd)

Deferred tax assets and liabilities are measured using the tax rates that are expected to be applied in the period in which the liability is settled or the asset realized, 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 assets reflects 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 shall offset deferred tax assets and deferred tax liabilities if, and only if, the Group has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and the deferred 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 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 tax liabilities or assets are expected to be settled or recovered.

If a deferred tax liability or asset arises from investment property that is measured using the fair value model in KIFRS 1040 *Investment Property*, there is a rebuttable presumption that the carrying amount of the investment property will be recovered through sale. Accordingly, unless the presumption is rebutted, the measurement of the deferred tax liability or deferred tax asset shall reflect the tax consequences of recovering the carrying amount of the investment property entirely through sale. This presumption is rebutted if the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment property over time, rather than through sale.

3) Recognization of current and deferred taxes for the year

Current and deferred taxes are recognized in net income, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case the current and deferred taxes are also recognized in other comprehensive income or directly in equity. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2.4.9 Tangible assets

Tangible assets are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of tangible assets is directly attributable to their purchase or construction, which includes any cost 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. It also includes the initial estimate of the costs of dismantling and removing the assets and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of an asset or as an asset separately if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. The carrying amount of those parts that are replaced is derecognized. Routine maintenance and repairs are expensed as incurred.

The Group does not depreciate land. Depreciation expense is computed using the straight-line method, and the estimated useful lives of the assets are as follows:

Classification	Estimated useful life
Buildings	10~60 years
Leasehold improvements	4~5 years
Furniture and equipment	4 years

Each part of property and equipment with a cost that is significant in relation to the total cost is depreciated separately.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.9 Tangible assets (cont'd)

The Group assesses the depreciation method, the estimated useful lives and residual values of property and equipment at the end of each reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate.

A tangible asset is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of tangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in net income in the period in which the asset is derecognized.

2.4.10 Government grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in equal amounts over the expected useful life of the related asset.

When the Group receives grants of non-monetary assets, the asset and the grant are recorded at nominal amounts and released to profit or loss over the expected useful life of the asset, based on the pattern of consumption of the benefits of the underlying asset by equal annual instalments. When loans or similar assistance are provided by the government or related institutions, with an interest rate below the current applicable market rate, the effect of this preferential interest is regarded as a government grant.

2.4.11 Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. The carrying amount of parts that are replaced is derecognized due to subsequent expenditure. Routine maintenance and repairs are expensed as incurred.

While land is not depreciated, all other investment properties are depreciated based on the respective assets' estimated useful lives of 10 to 60 years using the straight-line method.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

An investment property is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of investment properties, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in net income in the period in which the asset is derecognized.

2.4.12 Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.12 Intangible assets (cont'd)

2) Internally generated intangible assets - research and development cost

Expenditure on research activities is recognized as an expense in the period in which it is incurred.
An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. Where no internally generated intangible asset can be recognized, development expenditure is recognized in net income in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses.

3) Derecognition of intangible assets

An intangible asset is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in net income in the period in which the asset is derecognized.

2.4.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to, except for goodwill, determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit (the CGU) to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual CGUs, or otherwise, they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value, less costs to sell, and value in use. If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or the CGU) is reduced to its recoverable amount and the reduced amount is recognized in net income.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the CGU) in prior years. A reversal of an impairment loss is recognized immediately in net income.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.14 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation and the amount of the obligation is reliably estimated.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

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.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

The Group recognizes provisions related to unused credit card point, guarantees and litigations. In addition, provisions for decommissioning or restoration are recognized in relation to restoration of rented assets, which are utilized as the place of business under the rental agreements. Decommissioning or restoration costs are present value of expected costs of restoration using future cash outflows.

2.4.15 Financial assets

A financial asset is recognized when the Group becomes a party to the contract and at initial recognition. A financial asset, excluding a financial asset at FVTPL, is measured at its fair value, plus or minus transaction costs that are directly attributable to the acquisition of the financial asset. Otherwise, the transaction cost that is directly attributable to the acquisition of the financial asset at FVTPL is recognized in profit or loss immediately when it arises.

A regular-way purchase and sale of financial assets is recognized and derecognized at trade date. It is a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

1) Effective interest method

The effective interest rate method is used for calculating the amortized cost of a debt instrument and allocating interest income over the relevant period. The effective interest rate is the interest rate that exactly matches the present value of the estimated future cash outflows or cash inflows of a financial asset to the total carrying amount (or amortized cost) over the expected duration. Estimated cash flows should be estimated taking into account all of the terms and conditions of the financial assets and, in the case of financial assets with impaired credit on acquisition, additional expected credit losses should be considered.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.15 Financial assets (cont'd)

2) Financial assets at FVTPL

Financial assets at FVTPL include financial assets that are held for trading purposes, designated as financial assets at FVTPL or financial assets that are not classified as measured at FVOCI or measured at amortized cost.

The Bank has options to designate on initial recognition any financial asset as measured at fair value through profit or loss if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities on different bases or recognizing the gains and losses on them on different bases.

Financial assets at FVTPL are measured at fair value and the change in value is recognized in income (loss) for the period. Dividend or interest income from financial assets at FVTPL are also recognized in income (loss) for the period.

3) Financial assets at FVOCI

Financial assets at FVOCI include the financial debts that is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. And if the Group invest the financial equities as a 'strategic investment' issued by another entity, the Group designate it as financial assets at FVOCI.

Financial assets at FVOCI are subsequently measured at fair value. Gains and losses arising from changes in fair value are recognized and accumulated in other comprehensive income, with the exception of interest calculated using the effective interest rate method and foreign exchange gains and losses on monetary financial assets at FVOCI, which are recognized in income (loss) for the period.

Where the financial assets at FVOCI are disposed of or are determined to be impaired, the cumulative gains or losses previously accumulated in the other comprehensive income are recognized in income (loss) for the period. But where the financial securities designated at FVOCI are disposed, the cumulative gains or losses previously accumulated in the other comprehensive income are not recognized in income (loss) for the period.

Fair value of monetary financial assets at FVOCI denominated in foreign currencies is measured in foreign currencies and translated at the rates prevailing at the end of the reporting period. Gains on translation of the assets recognized in income (loss) for the period are determined based on amortized cost of the monetary assets and other gains on translation of the assets are recognized in other comprehensive income.

4) Financial assets at amortized cost

The Group measures financial assets at amortized cost if the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. Subsequent to initial recognition, the Group measures the amortized cost using the effective interest rate method and deducts the loss allowance from the amortized cost. Interest income is recognized using the effective interest method.LOCs that incurred from loan origination are deferred and presented as a deduction from the balance of loan and LOF accompanying the future economic benefits that are separately identified and reconciled to the loan transaction is deferred and presented as an addition to the balance of loan. The deferred LOF/LOC is amortized using the effective interest rate method with the amortization recognized as adjustments to interest revenue.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.15 Financial assets (cont'd)

5) Expected credit losses on financial assets

For financial assets except financial assets at FVTPL, impairment loss is calculated by the measurement of expected credit losses ("ECL") at the end of the reporting period. ECL reflects an unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes, the time value of money and reasonable and supportable information that is available without undue cost or effort at the reporting date about past events, current conditions and forecasts of future economic conditions.

- General approach : Financial assets that are not classified as purchased or originated credit-impaired financial assets or off-balance unused credit limits
- Credit-impaired approach : Financial assets that are classified as purchased or originated credit-impaired financial assets

The method of general approach recognition of ECL is different according to whether the credit risk on that financial assets has increased significantly since initial recognition. At the reporting date, if the credit risk on a financial assets has not increased significantly since initial recognition, the Group measures the loss allowance for that financial assets at an amount equal to 12-month expected credit losses. And at each reporting date, the Group measures the loss allowance for a financial assets at an amount equal to the lifetime expected credit losses if the credit risk on that financial instrument has increased significantly since initial recognition. The lifetime refers to the contractual maturity over the expected life of a financial instrument. The information that the Broup may use, on a financial instrument to determine whether there has been significant increase in credit risk since initial recognition, are (but not limited to) as follows:

- Significant change of credit ratings at initial recognition date or the reporting date
- Monitoring ratings by an early alert system
- Adverse or disclaimer opinion on Auditors' report
- Overdue period, etc

a. Forward-looking information
The Group uses forward-looking information on determining whether there has been an increase in credit risk or measuring ECL. The Group assumes that a statistical correlation exists between the risk component and the economic cycle, and recognizes ECL reflecting forward-looking information to measure the risk component by modeling between the macroeconomic environment and the risk component. The forward-looking information used to recognize ECL reflects the analysis of risk situations, etc.

b. Measurement of ECL of financial assets at amortized cost
ECL of financial assets at amortized cost is the present value of the difference between the contractual cash flows that are due under the contract and the cash flows that are expected to be received. For financial assets that are individually significant, the Group calculates future cash flows. For financial assets that are not individually significant, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for measuring ECL.

① Allowance for expected credit losses by individual assessment
Allowance for losses on credit is measured by the best estimate of the cash flows that the Group expects to receive. The Group expects the cash flows by reasonable and supportable information available, considering borrower's future ability to repay the debt, including its management performance and financial position, overdue period and mortgage amount, and etc.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.15 Financial assets (cont'd)

② Allowance for expected credit losses by collective assessment

Allowance for losses on credit is recognized by adjusting probability ECL, based on historical loss data that reflects the forward-looking information. Such approach considers elements, including loan and borrower type, credit ratings, and size of portfolio and collection period, and allowance for losses on credit by collective assessment is recognized by adjusting probability of default ("PD") and loss given default ("LGD"). And the assumptions are consistently applied so as to model the measurement of built-in loss and determine input variables based on historical loss experience and current conditions. This approach and assumptions are regularly conducted to reduce the difference between the allowance for losses for loss and the actual loss.

ECL of financial assets at amortized cost, that is the allowance for expected credit losses, is deducted from the balance of loans and receivables. It is deducted from allowance for expected credit losses when the asset is considered unrecoverable. If it is subsequently recovered, allowance for expected credit losses increases and the changes are recognized in net income.

c. Expected credit losses on financial debts at FVOCI

ECL on financial debts at FVOCI is measured by using the same approach as for the financial assets at amortized cost, and the changes of allowance for losses are recognized in other comprehensive income. Where the financial debts at FVOCI are disposed of or are repaid, allowance for losses are reclassified to net income in the current period.

6) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and recognize a liability for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the carrying amount of the asset and the consideration received shall be recognized as a gain or loss on derecognition in net income in the current period. However, accumulated evaluation gain (loss) from financial assets at FVOCI are not recognized in net income in the current period.

If the transfer of a part of a financial asset is qualified for derecognition, the entire carrying amount of the transferred financial asset shall, between the part that is derecognized and the part that is still recognized, be apportioned according to their respective relative fair value of that part. The difference between (1) the consideration for the part derecognized and (2) the sum of accumulated other comprehensive income and the carrying amount allocated to the part derecognized is recognized in net income in the current period. Accumulated gain (loss) recognized as other comprehensive income (loss) shall, between the part which is derecognized and the part which is still recognized, be apportioned according to its respective relative fair value of those parts.

7) Offset of financial assets and liabilities

Financial assets and liabilities shall be offset only when the Group has the legal right to set off assets and liabilities and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.16 Financial liabilities and equity instruments

1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or equity in accordance with the substance of the contractual arrangement and the definition of financial liabilities and equity instruments.

2) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

3) Financial liabilities

A financial liability is recognized when the Group becomes a party to the contract and at initial recognition. A financial liability other than financial liability at FVTPL is measured at its fair value, plus or minus transaction costs that are directly attributable to the issue of the financial liability. Otherwise, the transaction cost that is directly attributable to the issue of the financial liability at FVTPL is recognized in income (loss) for the period immediately when it arises.

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities.

a. Financial liabilities at FVTPL

Financial liabilities are classified as of FVTPL when the financial liability either is held for trading or is designated as liability at FVTPL.

A financial liability is classified as held for trading if:
- it has been issued principally for the purpose of repurchasing in the near term, or
- on initial recognition, it is a part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated as a hedging instrument and that is ineffective for hedging

A financial liability other than a financial liability held for trading may be designated as of FVTPL upon initial recognition if:
- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- in accordance with the Group's documented risk management or investment strategy, the financial liability forms a part of a group of financial assets or financial liabilities, or both, which is managed, and its performance is evaluated on a fair value basis, and information about the performance is provided internally on that basis; or
- it forms a part of a contract containing one or more embedded derivatives, and KIFRS 1109 permits the entire combined contract to be designated as of FVTPL

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on remeasurement recognized in net income. Changes of fair value for changes in own credit risk on financial liabilities designated at FVTPL are recognized in other comprehensive income. In addition, the transaction costs incurred related to issuance upon initial recognition are recognized in net income.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.16 Financial liabilities and equity instruments (cont'd)

b. Other financial liabilities

Other financial liabilities are subsequently measured at amortized cost using the effective interest rate method, with interest expense recognized on an effective yield basis.

The effective interest rate method is used for calculating the amortized cost of a financial liability, and of allocating interest expense over the relevant period. The effective interest rate is the discounted rate used to estimate the net carrying value of future cash payment, including commission and points to be paid or received, transaction cost and other premium or discounts throughout the expected life of financial liability, or, where appropriate, a shorter period.

c. Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, the Group's obligations are discharged, canceled or expired. The difference between the consideration paid and the carrying amount of a derecognized financial liability is recognized in net income.

4) Hybrid equity securities

Hybrid equity are classified as equity when all requirements for equity classification are satisfied in conformity with contract terms at issuance.

5) Financial guarantee contract

A financial guarantee contract refers to the contract that requires the issuer to pay the specified amounts to reimburse the holder for a loss because the specified debtor fails to make payment when due under original or revised contractual terms of debt instruments. The financial guarantee contract is measured on initial recognition at the fair value, and the fair value is amortized over the financial guarantee contract term.

After initial recognition, financial guarantee contract is measured at the higher of:
- the amount of the obligation under the contract, as determined in accordance with KIFRS 1109 *Financial Instruments* and
- the amount initially recognized, less cumulative amortization recognized in accordance with the KIFRS 1115, *Revenue from Contracts with Customers*

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.17 Derivative financial instruments

The Group enters into a variety of derivative contracts to manage its exposure to interest rate and foreign exchange rate risk associated with the financials instruments, including currency forward contracts, interest rate swaps and cross-currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. Derivatives used for trading purposes are recognized as financial assets and liabilities at FVTPL, and derivatives for hedging purposes are recognized as hedging-purpose derivative assets and liabilities in the consolidated financial statements at fair value.

The resulting gain or loss is recognized in net income immediately, unless the derivative is designated and effective as a hedging instrument, in which case the timing of the recognition in net income depends on the nature of the hedge relationship. The fair value hedge or cash flow hedge accounting is applied to the derivatives when the derivatives meet the certain requirements for hedging.

A derivative with a positive fair value is recognized as a financial asset, and a derivative with a negative fair value is recognized as a financial liability.

1) Embedded derivatives

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss.

2) Hedge accounting

At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

3) Fair value hedges

Changes in the fair value of derivatives that are designated and qualified for fair value hedges are recognized in net income immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Hedge accounting treatment is no longer applied when the Group revokes the hedge designation; when the derivative expires or is sold, terminated or exercised; or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to net income from that date.

2. Basis of preparation and significant accounting policies (cont'd)

2.4 Significant accounting policies (cont'd)

2.4.17 Derivative financial instruments (cont'd)

4) Day 1 profit

When the Group assesses fair values of over-the-counter (OTC) derivatives using inputs that are not based on the observable market data, the Group does not recognize the difference between the transaction price and fair value (a Day 1 profit or loss) in the consolidated statements of net income, but defers and recognizes it as an asset. The difference is depreciated during the trading period of financial instruments using the straight-line method.

2.4.18 Fair values

1) Valuation techniques and assumptions applied in measurement of fair values

Fair values of financial assets or liabilities are determined as follows:

Classification	Fair value measurement
Financial assets and liabilities designated at FVTPL	Financial assets and liabilities designated at FVTPL are measured at fair value based on valuation performed by independent professionals or the estimated amount using valuation model of the Group.
Financial assets / liabilities at FVTPL and financial assets at FVOCI	Government and public bonds and listed stocks in financial assets/liabilities at FVTPL and financial assets at FVOCI are measured at fair value based on the quoted prices in active market. If quoted price in active market or the estimated amount using valuation model of the Group does not exist, the Bank uses fair value based on valuation performed by independent professionals.
Securities at amortized cost	Fair value of securities at amortized cost is based on valuation performed by independent professionals.
Loans at amortized cost	Fair value of loans at amortized cost is computed by discounting expected future cash flows using the market interest rate used for homogeneous loans.
Derivative assets and liabilities	Fair value of derivatives is computed using the quoted prices if they are traded in active market. If quoted price in active market does not exist, fair value of derivatives is computed using internal valuation techniques.
Deposits and borrowings	Fair value of deposits and borrowings is computed by discounting future cash flows using the yield of debentures issued by the Group.
Debentures	In principle, fair values of debentures are computed by discounting future cash flows using the yield of debentures issued by the Group. However, some of them are based on valuation performed by independent professionals.

2) Three-level fair value hierarchy

The Group classifies financial assets or liabilities measured by fair values by reference to the source of inputs used to derive the fair values. The classification is as follows:

Classification	Details
Level 1	Quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2	Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
Level 3	Inputs for the asset or liability that are not based on the observable market data (unobservable inputs)

3. Significant judgements and estimations

Under KIFRS, management is required to make judgments, estimates and assumptions that affect the accounting policies and the reported amounts of assets, liabilities, income and expenses in preparation of consolidated financial statements. When the estimates and associated assumptions based on the management's optimal determination at the end of reporting period are not consistent with the actual environment, actual results may differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

3.1 Critical judgment in applying accounting policies

3.1.1 Effective hedge relationships

As described in Note 2.3.16, the Group designates certain derivatives as hedges when the hedge is expected to be highly effective in offsetting the exposure to changes in the hedged item's fair value or cash flows. The Group continuously assesses the effectiveness of the hedge during the hedging period and determines if the hedge has been highly effective throughout the financial reporting periods for which the hedge was designated, prospectively.

Also, fair value hedge accounting is applied for the purpose of avoiding risk of fair value changes of recognized asset, liabilities or unrecognized confirmed contract as a whole or in part. Cash flow hedge accounting is applied for the purpose of avoiding risk of cash flow changes of recognized asset, liabilities and expected transactions that are highly likely to happen.

3.2 Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk causing a material adjustment to the carrying amounts of assets and liabilities within the next fiscal year.

3.2.1 Determination of fair value

In order to determine fair values of financial assets and liabilities without observable market values, valuation techniques are necessary. Financial instruments for which transactions do not occur frequently and prices are less objective, extensive judgment is required with regard to liquidity, concentration, uncertainty of market factors and assumptions related to price determination and broad range of judgment of other risks. Management believes that valuation techniques and assumptions used in the determination of fair values for financial instruments are reasonable.

3.2.2 Allowance for losses on credit (allowance expected credit losses, provision for acceptances and guarantees and unused credit limits)

It is necessary to record provisions for acceptances and guarantees and unused credit limits and to record the allowance for expected credit losses for loans at amortized cost or financial assets at FVOCI by performing impairment test. The accuracy of allowance for losses on credit is determined by assumptions and variables used in the model to estimate expected cash flows by individual borrowers for individual assessment and estimation of allowance for losses on credit by collective method and guarantees/unused credit limit liabilities.

3.2.3 Measurement of present value of defined benefit obligation

Present value of defined benefit obligation is calculated by performing actuarial valuation using the projected unit credit method at the end of each reporting period. In order to apply actuarial valuation method, it is necessary to estimate the discount rate, rates of future salary increase, mortality, etc. The present value of defined benefit obligation includes significant uncertainty of the ultimate cost of defined benefit plan on such estimation as it may last in the long term.

4. Operating segment information

The Group is organized into four operating segments as follows based on their products and services:

Segment	Main business activities
Personal financing	Personal banking services for general public - lending & borrowing, financial services, and etc.
Corporate financing	Corporate banking services for conglomerates, small & medium-sized companies, institutions - lending & borrowing, import & export supports, financial services, and etc.
Credit card	Credit card services for credit card holders, and etc.
Others	Activities other than the above

Details of net income by operating segment for the years ended December 30, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 2,833,154	₩ 1,715,753	₩ 678,538	₩ 203,801	₩ 5,431,246	₩ (232,160)	₩ 5,199,086
Net commission income (losses)	217,010	237,216	(101,459)	162,649	515,416	31,112	546,528
Net other operating income (losses)	(284,135)	(120,947)	(4,482)	(439,269)	(848,833)	284,109	(564,724)
	2,766,029	1,832,022	572,597	(72,819)	5,097,829	83,061	5,180,890
Operating expenses:							
General and administrative expenses	1,112,651	506,278	260,029	43,002	1,921,960	1,009,893	2,931,853
Operating income before credit losses and income tax expenses	1,653,378	1,325,744	312,568	(115,821)	3,175,869	(926,832)	2,249,037
Allowance for expected credit losses	-	-	-	-	-	585,482	585,482
Income tax expenses	-	-	-	-	-	440,986	440,986
Net income for the period	₩ 1,653,378	₩ 1,325,744	₩ 312,568	₩ (115,821)	₩ 3,175,869	₩ (1,953,300)	₩ 1,222,569

	For year ended December 31, 2017						
	Personal financing	Corporate financing	Credit card	Others	Subtotal	Adjustments	Total
Operating income:							
Net interest income	₩ 2,402,100	₩ 1,409,797	₩ 648,905	₩ 206,016	₩ 4,666,818	₩ (78,894)	₩ 4,587,924
Net commission income (losses)	256,320	223,587	(70,191)	118,765	528,481	45,003	573,484
Net other operating income (losses)	(261,846)	(118,203)	(15,607)	386,957	(8,699)	(651,738)	(660,437)
	2,396,574	1,515,181	563,107	711,738	5,186,600	(685,629)	4,500,971
Operating expenses:							
General and administrative expenses	1,030,520	379,639	328,109	135,576	1,873,844	924,355	2,798,199
Operating income before credit losses and income tax expenses	1,366,054	1,135,542	234,998	576,162	3,312,756	(1,609,984)	1,702,772
Allowance for expected credit losses	-	-	-	-	-	844,474	844,474
Income tax expenses	-	-	-	-	-	206,225	206,225
Net income for the period	₩ 1,366,054	₩ 1,135,542	₩ 234,998	₩ 576,162	₩ 3,312,756	₩ (2,660,683)	₩ 652,073

4. Operating segment information (cont'd)

Revenue from the external customers for the years ended December 31, 2018 and 2017 and non-current assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	Revenue from external customers				Non-current assets			
	For the year ended December 31, 2018		For the year ended December 31, 2017		December 31, 2018		December 31, 2017	
Domestic	₩	12,361,311	₩	12,818,756	₩	3,750,310	₩	3,672,066
Foreign		25,766		18,606		1,711		699
	₩	12,387,077	₩	12,837,362	₩	3,752,021	₩	3,672,765

Trust accounts' assets and operating income of the Group as of or for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	As of or for the year end December 31, 2018				As of or for the year end December 31, 2017			
	Assets		Operating income		Assets		Operating income	
Consolidated trust accounts	₩	3,631,343	₩	103,735	₩	3,565,663	₩	96,227
Unconsolidated trust accounts		34,372,634		697,815		29,174,257		508,410
	₩	38,003,977	₩	801,550	₩	32,739,920	₩	604,637

Receivables and payables between the Group and trust accounts as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		December 31, 2018		December 31, 2017	
Receivables	Accrued fee on trust accounts	₩	17,162	₩	15,347
Payables	Borrowings from trust accounts	₩	1,755,465	₩	1,191,591

Transactions between the Group and trust accounts for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		December 31, 2018		December 31, 2017	
Profit	Fees on trust accounts	₩	87,984	₩	64,149
Loss	Interest expenses	₩	25,147	₩	28,202

5. Financial assets

Details of book value and fair value of financial assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		December 31, 2018 Book value	December 31, 2018 Fair value
Financial assets at FVTPL:			
Financial assets at FVTPL		₩ 10,152,290	₩ 10,152,290
Trading derivative assets		444,447	444,447
		10,596,737	10,596,737
Derivative assets:			
Hedging derivative assets		20,253	20,253
Financial assets at FVOCI:			
Financial assets at FVOCI		20,073,081	20,073,081
Financial assets at amortized cost:			
Deposits (*1)	Deposits in Korean won	2,360,369	2,360,369
	Deposits in foreign currency	1,900,485	1,900,485
		4,260,854	4,260,854
Debt securities (*1)		9,336,103	9,401,223
Loans (*2)	Loans in Korean won	199,625,804	201,197,475
	Loans in foreign currency	1,370,134	1,508,359
	Credit card receivables	6,823,215	6,936,154
	Others	19,497,103	19,566,761
		227,316,256	229,208,749
Receivables (*3 and *4)		5,001,847	4,724,598
		245,915,060	247,595,424
		₩ 276,605,131	₩ 278,285,495

(*1) Deposits and dept securities are presented at net carrying amount after deduction of allowance for expected credit losses.
(*2) Loans are presented at net carrying amount after deduction of allowance for expected credit losses and present value discounts. Deferred LOF/LOC amounting to ₩277,239 million as of December 31, 2018 is excluded. (Note 10. (3))
(*3) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*4) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for expected credit losses and present-value discounts.

5. Financial assets (cont'd)

Classification		December 31, 2017 Book value	December 31, 2017 Fair value
Financial assets at FVTPL:			
Held-for-trading financial assets		₩ 5,965,461	₩ 5,965,461
Trading derivative assets		1,023,737	1,023,737
		6,989,198	6,989,198
Hedging derivative assets		7,575	7,575
AFS financial assets		21,006,812	21,006,812
HTM financial assets		8,231,407	8,177,667
Loans and receivables:			
Deposits	Deposits in Korean won	4,755,463	4,755,463
	Deposits in foreign currency	1,216,427	1,216,427
		5,971,890	5,971,890
Loans (*1)	Loans in Korean won	190,675,378	188,780,147
	Loans in foreign currency	1,336,101	1,385,424
	Credit card receivables	6,254,341	6,296,457
	Others	15,137,092	15,281,557
		213,402,912	211,743,585
Receivables (*2 and *3)		5,229,953	4,933,202
		224,604,755	222,648,677
		₩ 260,839,747	₩ 258,829,929

(*1) Loans are presented at net carrying amount after deduction of allowance for expected credit losses and present value discounts. Deferred LOF/LOC amounting to ₩271,668 million as of December 31, 2017 is excluded. (Note 13. (4))
(*2) Accrued interests included in the calculation of fair value of loans are excluded from fair value of receivables.
(*3) Receivables consist of domestic exchange settlement debits, leasehold deposits, etc. Those amounts are presented in net carrying amount after deduction of allowance for expected credit losses and present-value discounts.

Transferred financial assets derecognized not in their entirety as of December 31, 2018 and 2017 are as follows:

1) Bonds sold under repurchase agreements

Transferred bonds sold under repurchasable agreements with a condition to repurchase at a firm price derecognized not in their entirety as of December 31, 2018 and 2017 are as follow (Korean won in millions):

Classification		December 31, 2018
Transferred assets	Financial assets at FVTPL	₩ 808,031
Related liabilities	Bonds sold under repurchase agreements	769,600

Classification		December 31, 2017
Transferred assets	Held-for-trading financial assets	₩ 344,772
Related liabilities	Bonds sold under repurchase agreements	337,800

5. Financial assets (cont'd)

2) Securities for lending

In case the Group loans securities held by the Group, the ownership of the securities is transferred. However, those loaned securities must be returned at the end of the lending period. Therefore, as the Group holds most of the risks and rewards of the securities, the Group continues to recognize the entire securities for lending.

Securities for lending as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31 , 2017	Lending to
Financial assets at FVTPL - Debt securities	₩ 2,503	₩ -	The Korea Securities Finance Corporation

6. Cash and due from banks

Cash and due from banks as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	Details	Financial institution	Interest rate (%)	December 31, 2018	December 31, 2017
Cash in Korean won	Cash on hand	-	-	₩ 1,586,061	₩ 1,491,561
Cash in foreign currency	Cash on hand	-	-	347,803	325,247
Due from banks in Korean won	Reserve deposits	The Bank of Korea	-	1,384,850	3,007,635
	Bank deposits	Other financial Institutions	1.38~5.42	171,809	42,829
	Non-monetary financial institution deposits	Korea Exchange and others	2.00	170,530	501
	Other deposits	The Bank of Korea and others	1.78	633,271	1,704,498
				2,360,460	4,755,463
Due from banks in foreign currency	Reserve deposits	The Bank of Korea	-	149,173	175,543
	Deposits at other banks	Other financial Institutions	(-)0.40~3.25	1,744,470	1,022,867
	Regular deposits	Other financial Institutions	1.80~8.50	10,968	9,610
	Other deposits	Other financial Institutions	1.91~2.18	13,730	8,407
				1,918,341	1,216,427
Allowance for expected credit losses				(17,947)	-
				₩ 6,194,718	₩ 7,788,698

6. Cash and due from banks (cont'd)

Changes in the total book value of due from banks for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 5,971,890	₩ -	₩ -	₩ 5,971,890
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Financial assets originated or derecognized	(1,775,856)	-	-	(1,775,856)
Business combinations	650	-	-	650
Others (*1)	82,117	-	-	82,117
Ending balance	₩ 4,278,801	₩ -	₩ -	₩ 4,278,801

(*1) Other changes are due to exchange rate fluctuations.

Changes in allowance for expected credit losses of due from banks for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 6,970	₩ -	₩ -	₩ 6,970
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses	10,963	-	-	10,963
Others (*2)	14	-	-	14
Ending balance	₩ 17,947	₩ -	₩ -	₩ 17,947

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) Other changes are due to exchange rate fluctuations.

6. Cash and due from banks (cont'd)

Cash and due from banks in Korean won and in foreign currency that are restricted in use as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	Financial institution	December 31, 2018	December 31, 2017	Reason for restriction
Reserve deposits in Korean won	The Bank of Korea	₩ 1,384,850	₩ 3,007,635	Required under the *Banking Act* and other related regulations
Other deposits in Korean won	The Bank of Korea	620,000	1,700,000	Required by the Bank of Korea for the purpose of liquidity management
Non-monetary financial institution deposits in Korean won	Korea Exchange	501	501	Penalty joint fund related to government bond transaction and guarantee deposit
Reserve deposits in foreign currency	The Bank of Korea	149,173	175,543	Required under the *Banking Act* and other related regulations
Regular deposits in foreign currency	Other financial Institutions	-	5,357	Required under consumption contract of money loan with other foreign exchange banks
Other deposits in foreign currency	Other financial Institutions	13,730	8,407	Deposits related to derivatives trading
Deposit on securities and futures	Samsung Futures Inc. and 3 others	145	61	Reserve securities and futures
Allowance for expected credit losses		(5)	-	
		₩ 2,168,394	₩ 4,897,504	

7. Financial assets at FVTPL

Details of financial assets at FVTPL as of December 31, 2018 are as follows (Korean won in millions):

Classification		December 31, 2018
Equity securities		
Marketable equity securities	₩	71,774
Non marketable equity securities		51,321
		123,095
Debt securities		
Government bonds		1,353,064
Finanacial bonds		3,696,878
Corporate bonds		460,837
Public bonds		435,670
Others		29,588
		5,976,037
Other securities		
Beneficiary certificate		2,556,130
Mutual fund		202,965
Foreign currencies		263,652
Others		1,001,704
		4,024,451
Loans		28,707
	₩	10,152,290

The Group irrevocably designates a financial asset as measured at FVTPL at the time of initial recognition of the financial asset if doing so eliminates or significantly reduces the accounting mismatch. In this case, financial instruments designated as measured at FVTPL cannot be reversed. The Group does not hold financial instruments designated as measured at FVTPL as of December 31, 2018.

Financial assets at FVTPL provided as collaterals as of December 31, 2018 are as follows (Korean won in millions):

		December 31, 2018			
Provided to	Remarks	Pledged amount		Book value of securities provided as collaterals	
KB Asset Management and 22 others	Interinstitutional repurchase sale	₩	805,075	₩	808,031
NH Futures Co., Ltd. and 5 others	Substitute securities for derivative transactions		8,760		9,107
Korea Securities depository and the other	Others		75,200		75,463
		₩	889,035	₩	892,601

8. Financial assets at FVOCI

Details of financial assets at FVOCI as of December 31, 2018 are as follows (Korean won in millions):

Classification	December 31, 2018			
	Book value		Allowance for expected credit losses	
Equity securities:				
Marketable equity securities	₩	162,769	₩	-
Non-marketable equity securities		213,252		-
Foreign currencies		273		-
		376,294		-
Debt securities:				
Government bonds		3,330,236		-
Finanacial bonds		13,014,775		(537)
Corporate bonds		1,399,931		(489)
Public bonds		1,280,436		(108)
Foreign currencies		671,409		(251)
		19,696,787		(1,385)
	₩	20,073,081	₩	(1,385)

Details of financial assets designated as measured at FVOCI at December 31, 2018 are as follows (Korean won in millions):

Classification	December 31, 2018	
Equity securities:		
Marketable equity securities	₩	162,769
Non-marketable equity securities		213,252
Foreign currencies		273
	₩	376,294

The Group designates financial assets that are held for strategic reasons as measured at FVOCI as these financial assets are not held for capital appreciation through investment. In other cases, it is classified as financial assets at FVTPL.

Details of disposal of equity securities at FVOCI at December 31, 2018 are as follows (Korean won in millions):

Classification	December 31, 2018			
	Fair value at the time of disposal		Accumulated profit and loss at the time of disposal	
Equity securities:				
Marketable equity securities (*1)	₩	83,327	₩	(43,001)

(*1) The effect of income tax is not considered.

The Group disposed equity securities at FVOCI for the year ended December 31, 2018 due to disposal of equity securities acquired by debt-equity swap. The Group will reclassify the accumulative profit or loss on equity securities at FVOCI from other comprehensive income to retained earnings at the end of the year.

8. Financial assets at FVOCI (cont'd)

Details of financial assets at FVOCI provided as collaterals as of December 31, 2018 are as follows (Korean won in millions):

Provided to	Remarks	December 31, 2018 Pledged amount	December 31, 2018 Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 2,080,000	₩ 2,091,510
	Daylight overdraft	600,000	601,876
	Borrowing	590,000	592,222
NH Investment & Securities Co., Ltd. and 22 others	Credit enhancement for derivative transactions	240,525	240,760
Korea Securities Depository	Others	1,000	1,014
		₩ 3,511,525	₩ 3,527,382

Changes in the total book value of debt securities at FVOCI for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 17,988,470	₩ -	₩ -	₩ 17,988,470
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	21,538,280	-	-	21,538,280
Disposal or repayment	(19,922,220)	-	-	(19,922,220)
Amortization of effective interest rate	1,114	-	-	1,114
Valuation	64,842	-	-	64,842
Others (*1)	26,301	-	-	26,301
Ending balance	₩ 19,696,787	₩ -	₩ -	₩ 19,696,787

(*1) Other changes are due to exchange rate fluctuations.

8. Financial assets at FVOCI (cont'd)

Changes in allowance for expected credit losses of debt securities at FVOCI for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 945	₩ -	₩ -	₩ 945
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses (*2)	741	-	-	741
Disposal	(311)	-	-	(311)
Others (*3)	10	-	-	10
Ending balance	₩ 1,385	₩ -	₩ -	₩ 1,385

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.
(*3) Other changes are due to exchange rate fluctuations.

9. Securities at amortized cost

Details of securities at amortized cost as of December 31, 2018 are as follows (Korean won in millions):

Classification	December 31, 2018 Book value	December 31, 2018 Allowance for expected credit losses
Debt securities:		
Government bonds	₩ 3,181,042	₩ -
Finanacial bonds	1,419,824	(5)
Corporate bonds	4,026,327	(1,049)
Public bonds	710,042	(78)
	₩ 9,337,235	₩ (1,132)

Details of securities at amortized cost provided as collaterals as of December 31, 2018 are as follows (Korean won in millions):

Provided to	Remarks	December 31, 2018 Pledged amount	December 31, 2018 Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 2,200,000	₩ 2,165,991
	Daylight overdraft	366,000	362,759
	Borrowing	310,000	309,190
NH Futures Co., Ltd. and 4 others	Substituted securities for derivative transaction	36,000	35,997
Korea exchange and another	Others	14,725	14,627
		₩ 2,926,725	₩ 2,888,564

Changes in the total book value for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance	₩ 8,231,407	₩ -	₩ -	₩ 8,231,407
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Acquisition	2,009,376	-	-	2,009,376
Repayment	(914,309)	-	-	(914,309)
Amortization of effective interest rate	10,761	-	-	10,761
Ending balance	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235

9. Securities at amortized cost (cont'd)

Changes in allowance for expected credit losses for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 884	₩ -	₩ -	₩ 884
Transfer to 12-month expected credit losses	-	-	-	-
Transfer to financial assets with a significant increase in credit risk	-	-	-	-
Transfer to credit-impaired financial assets	-	-	-	-
Provision of allowance for expected credit losses (*2)	248	-	-	248
Ending balance	₩ 1,132	₩ -	₩ -	₩ 1,132

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) The amount of reversal of allowance for expected credit losses due to repayment of debt securities is included.

10. Loans at amortized cost

Details of loans at amortized cost as of December 31, 2018 are as follows (Korean won in millions):

Classification	Type	December 31, 2018
Loans in Korean won	Corporate	₩ 87,561,227
	Household	103,173,844
	Public	9,334,527
	Integrated	663,999
		200,733,597
	Allowance for expected credit losses	(1,107,793)
	Book value, net	199,625,804
Loans in foreign currency	Loans	1,485,118
	Off-shore	107,792
		1,592,910
	Allowance for expected credit losses	(222,776)
	Book value, net	1,370,134
Other loans	Credit card receivables	7,057,688
	Bills purchased	886,580
	Bills purchased in foreign currency	1,291,264
	Private placement bonds	30,223
	Payment for acceptances and guarantees	11,048
	Domestic import usance	1,979,422
	Others	15,368,862
		26,625,087
	Allowance for expected credit losses	(304,769)
	Book value, net	26,320,318
Receivables	Receivables	5,023,639
	Allowance for expected credit losses	(6,288)
	Book value, net	5,017,351
Total loans and receivables		233,975,233
Total allowance for expected credit losses		(1,641,626)
Deferred LOF/LOC		277,239
Present value discounts of receivables		(15,504)
Total loans and receivables, net		₩ 232,595,342

Details of receivables at amortized cost as of December 31, 2018 are as follows (Korean won in millions):

Classification	December 31, 2018
Domestic exchange settlement debits	₩ 636,257
Accrued income	690,199
Accounts receivable	1,167,161
Suspense payment	13,198
Guarantee deposits paid	481,651
Unsettled credit card receivables	283,040
Intercompany receivables	1,739,064
Receivables from proxy sale of NACF	1,822
Others	11,247
Total receivables	5,023,639
Allowance for expected credit losses	(6,288)
Present value discounts	(15,504)
Total of receivables, net	₩ 5,001,847

10. Loans at amortized cost (cont'd)

Changes in deferred LOF/LOC for the year ended December 31, 2018 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018			
	January 1, 2018	Increase	Decrease	December 31, 2018
Deferred LOF	₩ (15,643)	₩ (10,892)	₩ (12,108)	₩ (14,427)
Deferred LOC	287,311	214,593	210,238	291,666
Deferred LOC, net	₩ 271,668	₩ 203,701	₩ 198,130	₩ 277,239

Changes in the total book value for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses (*2)		
	12-month expected credit losses (*2)	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 199,593,876	₩ 18,508,774	₩ 2,054,318	₩ 220,156,968
Transfer to 12-month expected credit losses	6,750,851	(6,740,485)	(10,366)	-
Transfer to financial assets with a significant increase in credit risk	(8,734,281)	8,759,137	(24,856)	-
Transfer to credit-impaired financial assets	(723,856)	(456,704)	1,180,560	-
Financial assets originated or derecognized	16,104,693	(981,056)	(371,313)	14,752,324
Write-offs	-	-	(819,101)	(819,101)
Disposals	(109,258)	(140,574)	(67,501)	(317,333)
Debt-equity swap	-	-	(75,425)	(75,425)
Others (*3)	261,417	-	(653)	260,764
Business combinations	17,036	-	-	17,036
Ending balance	₩ 213,160,478	₩ 18,949,092	₩ 1,865,663	₩ 233,975,233

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) Deferred LOF/LOC and present value discounts are not included.
(*3) Others include the amount of changes in exchange rates and restructured loans.

10. Loans at amortized cost (cont'd)

Changes in allowance for expected credit losses for the year ended December 31, 2018 are as follows (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 296,718	₩ 333,696	₩ 1,011,407	₩ 1,641,821
Transfer to 12-month expected credit losses	46,154	(43,157)	(2,997)	-
Transfer to financial assets with a significant increase in credit risk	(38,274)	47,361	(9,087)	-
Transfer to credit-impaired financial assets	(200,324)	(204,693)	405,017	-
Provision of allowance for expected credit losses	227,812	315,943	10,045	553,800
Write-offs	-	-	(819,101)	(819,101)
Recovery of write-offs	-	-	340,869	340,869
Disposals	(757)	(2,800)	(15,772)	(19,329)
Debt-equity swap	-	-	(15,038)	(15,038)
Others (*2)	9,937	-	(51,918)	(41,981)
Business combinations	585	-	-	585
Ending balance	₩ 341,851	₩ 446,350	₩ 853,425	₩ 1,641,626

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) Others include the amount of changes in exchange rates, restructured loans and interest income in impaired loans.

The uncollected contractual amount of financial assets that were written-off but are still under the process of pursuing collection by the Group for the year ended December 31, 2018 amount to ₩819,101 million. The Group holds written-off loans amounting to ₩4,794,495 million as of December 31, 2018. (Note 43.(3))

Modified contractual cash flows for the year ended December 31, 2018 are as follows:

1) The amortized cost before the modification to contractual cash flows for financial assets that measured loss allowance at an amount equal to lifetime expected credit losses is ₩77,203 million and the net loss recognized is ₩1,260 million.

2) There are no financial assets that measured the loss allowance at an amount equal to the lifetime expected credit losses at initial recognition before December 31, 2018 but changed to measuring the loss allowance at an amount equal to the 12-month expected credit losses for the year ended December 31, 2018.

11. Financial assets at FVTPL

Details of financial assets at FVTPL as of December 31, 2017 are as follows (Korean won in millions):

Classification	December 31, 2017
Held-for-trading financial assets:	
Equity securities	₩ 322,492
Debt securities	5,642,969
	5,965,461
Trading derivative assets	1,023,737
	₩ 6,989,198

Held-for-trading financial assets as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017				
Classification	Par value	Acquisition cost	Amortized cost	Book value	Fair value
Equity securities:					
Marketable equity securities	₩ -	₩ 168,856	₩ -	₩ 181,072	₩ 181,072
Beneficiary certificates	-	100,000	-	100,454	100,454
Mutual funds	-	37,623	-	40,966	40,966
	-	306,479	-	322,492	322,492
Debt securities:					
Government and public bonds	1,425,356	1,463,777	1,427,565	1,424,510	1,424,510
Financial bonds	3,251,800	3,309,764	3,246,922	3,242,652	3,242,652
Corporate bonds	545,000	546,409	546,103	545,543	545,543
Public bonds	419,800	425,246	420,694	420,390	420,390
Others	10,088	9,921	9,891	9,874	9,874
	5,652,044	5,755,117	5,651,175	5,642,969	5,642,969
	₩ 5,652,044	₩ 6,061,596	₩ 5,651,175	₩ 5,965,461	₩ 5,965,461

Held-for-trading financial assets provided as collaterals as of December 31, 2017 are as follows (Korean won in millions):

		December 31, 2017	
Provided to	Remarks	Pledged amount	Book value of securities provided a collaterals
Kiwoom Asset Management and 7 others	Interinstitutional repurchase sale	₩ 347,650	₩ 344,772
NH Futures Co., Ltd. and 9 others	Substitute securities for derivative transactions	13,400	13,780
Korea Securities Finance and another	Others	89,000	88,839
		₩ 450,050	₩ 447,391

12. AFS and HTM financial assets

AFS and HTM financial assets as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017				
Classification	Par value	Acquisition cost	Amortized cost	Book value	Fair value
AFS financial assets:					
Equity securities:					
Marketable equity securities	₩ -	₩ 350,145	₩ -	₩ 184,881	₩ 184,881
Non-marketable equity securities	-	267,729	-	270,871	270,871
Beneficiary certificates	-	2,104,711	-	2,096,043	2,096,043
Mutual funds	-	172,507	-	186,782	186,782
Foreign currency	-	98,727	-	52,436	52,436
Others	-	237,091	-	227,329	227,329
	-	3,230,910	-	3,018,342	3,018,342
Debt securities:					
Government bonds	3,090,000	3,083,041	3,083,676	3,059,587	3,059,587
Financial bonds	13,110,000	13,096,591	13,095,803	13,063,963	13,063,963
Corporate bonds	954,700	954,236	954,249	951,050	951,050
Public bonds	280,000	280,274	280,215	278,624	278,624
Foreign currency	636,947	671,358	669,149	635,246	635,246
	18,071,647	18,085,500	18,083,092	17,988,470	17,988,470
Total AFS financial assets	18,071,647	21,316,410	18,083,092	21,006,812	21,006,812
HTM financial assets:					
Debt securities:					
Government bonds	2,186,007	2,158,664	2,156,394	2,156,394	2,152,747
Financial bonds	1,110,000	1,109,697	1,109,712	1,109,712	1,107,386
Corporate bonds	4,425,340	4,425,130	4,425,189	4,425,189	4,375,948
Public bonds	540,000	540,401	540,112	540,112	541,586
Total HTM financial assets	8,261,347	8,233,892	8,231,407	8,231,407	8,177,667
	₩ 26,332,994	₩ 29,550,302	₩ 26,314,499	₩ 29,238,219	₩29,184,479

Details of equity securities measured at cost included in AFS financial assets as of December 31, 2017 are as follows (Korean won in millions):

Classification	December 31, 2017 (*1)
Korea Asset Management Corporation	₩ 6,670
Green GunSan GiKiMi Co., Ltd.	1,287
Others	1,653
	₩ 9,610

(*1) Equity securities above are measured at cost since it is difficult to estimate the future cash flows; since comparable companies, which have similar business and size, do not exist; and it is impossible to have fair values reliably measured by an outside valuation agency.

12. AFS and HTM financial assets (cont'd)

Details of AFS and HTM financial assets provided as collaterals as of December 31, 2017 are as follows (Korean won in millions):

		December 31, 2017	
Provided to	Remarks	Pledged amount	Book value of securities provided as collaterals
The Bank of Korea	Payment risk	₩ 3,600,300	₩ 3,588,276
	Daylight overdraft	968,900	961,549
	Borrowing	1,243,200	1,240,560
NH Futures Co., Ltd. and 4 others	Substituted securities for derivative transaction	77,500	77,504
NH Life Insurance Co., Ltd. and 5 others	Credit reinforcements for derivative transaction	187,835	184,877
Korea Exchange and 3 others	Others	21,721	20,735
		₩ 6,099,456	₩ 6,073,501

Structured securities as of December 31, 2017 are as follows (Korean won in millions):

Classification	December 31, 2017
Callable bonds	₩ 3,925,200

13. Loans and receivables

13.1 Loans and receivables

Loans and receivables as of December 31, 2017 are as follows (Korean won in millions):

Classification	Type	December 31, 2017
Loans in Korean won	Corporate	₩ 82,983,921
	Household	94,189,772
	Public	13,886,365
	Integrated	793,728
		191,853,786
	Allowance	(1,178,408)
	Book value, net	190,675,378
Loans in foreign currency	Loans	1,373,783
	Off-shore	72,193
		1,445,976
	Allowance	(109,875)
`	Book value, net	1,336,101
Other loans	Credit card receivables	6,398,406
	Bills purchased	710
	Bills purchased in foreign currency	1,580,829
	Private placement bonds	84,682
	Payment for acceptances and guarantees	21,122
	Domestic import usance	1,557,220
	Others	11,977,043
		21,620,012
	Allowance	(222,949)
	Book value, net	21,397,063
Receivables	Receivables	5,294,634
	Allowance	(49,056)
	Book value, net	5,245,578
Total loans and receivables		220,214,408
Total allowance for losses on credit		(1,560,288)
Deferred LOF/LOC		271,668
Present value discounts	Loans	(5,630)
	Receivables	(15,625)
Total loans and receivables, net		₩ 218,904,533

13.2 Restructured loans

Details of restructured loans as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017	
Classification	Loans	Allowance
Reorganization and composition	₩ 174,484	₩ (59,854)
Work-out	1,250,492	(474,155)
	₩ 1,424,976	₩ (534,009)

13. Loans and receivables (cont'd)

13.3 Receivables

Details of receivables as of December 31, 2017 are as follows (Korean won in millions):

Classification		December 31, 2017
Domestic exchange settlement debits	₩	1,850,621
Accrued income		693,170
Accounts receivable		1,189,941
Suspense payment		9,506
Guarantee deposits paid		498,098
Unsettled credit card receivables		196,687
Intercompany receivables		845,812
Receivables from proxy sale of NACF		1,696
Others		9,103
Total receivables		5,294,634
Allowance for expected credit losses		(49,056)
Present value discounts		(15,625)
Total of receivables, net	₩	5,229,953

13.4 Changes in deferred LOF/LOC

Changes in deferred LOF/LOC for the year ended December 31, 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2017							
		January 1, 2017		Increase		Decrease		December 31, 2017
Deferred LOF	₩	(14,193)	₩	(12,281)	₩	(10,831)	₩	(15,643)
Deferred LOC		322,212		197,300		232,201		287,311
Deferred LOC, net	₩	308,019	₩	185,019	₩	221,370	₩	271,668

13.5 Changes in allowance for losses on credit

Changes in allowance for losses on credit for the year ended December 31, 2017 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2017
Beginning balance	₩	1,477,079
Provision of Allowance for credit losses		754,044
Write-offs, recovery of write-offs and disposal		(535,015)
Foreign exchange translation		(18,519)
Unwinding effect		(70,234)
Debt-equity swap		(48,082)
Others		1,015
		83,209
Ending balance	₩	1,560,288

14. Investment in associates

Details of investments in associates as of December 31, 2018 and 2017 are as follows (Korean won in millions, shares in thousands):

	December 31, 2018					
	Main business	Location	Date of the financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	September 30, 2018	180	9.00	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.) (*1)	Issuance and sale of lottery tickets	Korea	September 30, 2018	600	9.98	3,919
NHQCP Global Partnership PEF (*2)	Other financial business	Korea	December 31, 2018	9,980,000	24.95	19,510
IBK-NH Smallgiant PEF (*2)	Other financial business	Korea	December 31, 2018	3	44.90	25,714
NH-AJUIB Growth 2013 PEF (*2)	Other financial business	Korea	December 31, 2018	23,092,049	29.95	26,587
Kyunggi-DSC Superman Investment Fund No. 1 (*2)	Other financial business	Korea	December 31, 2018	3	25.00	9,048
NH Agri-Biz Value Creative 1st PEF (*2)	Other financial business	Korea	December 31, 2018	6,004,870	48.04	5,786
						₩ 98,194

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through designation of seniors like directors.
(*2) The capital stock and the number of investment shares have changed due to additional investment and distribution of investment securities.

	December 31, 2017					
	Main business	Location	Date of the financial statements	Number of shares	Percentage of ownership (%)	Book value
Korea Credit Bureaus Co., Ltd. (*1)	Credit investigation and collection agency	Korea	December 31, 2017	180	9.00	₩ 6,886
Nanumlotto Co., Ltd. (*1)	Issuance and sale of lottery tickets	Korea	September 30, 2017	600	9.98	3,355
NH Agri-Best 1st PEF (*2 and *5)	Other financial business	Korea	December 31, 2017	6	70.29	1,897
NHQCP Global Partnership PEF (*3)	Other financial business	Korea	December 31, 2017	-	24.95	7,985
IBK-NH Smallgiant PEF	Other financial business	Korea	December 31, 2017	1	44.90	9,099
NH-AJUIB Growth 2013 PEF	Other financial business	Korea	December 31, 2017	25,547,949	29.95	32,544
Kyunggi-DSC Superman Investment Fund No. 1	Other financial business	Korea	December 31, 2017	5	25.00	4,265
NH Agri-Biz Value Creative 1st PEF	Other financial business	Korea	December 31, 2017	3,364,870	48.07	3,059
Changmyung Shipping Co., Ltd. (*4 and *6)	Overseas car transportation business	Korea	December 31, 2017	121	21.05	-
STX Offshore & Shipbuilding Co., Ltd. (*4 and *6)	Shipbuilding and repair business	Korea	December 31, 2017	7,500	20.10	-
						₩ 69,090

(*1) Although the Group has less than 20% ownership, it has significant influence over the investee through designation of senior management like directors.
(*2) It was excluded from subsidiaries since the Group has no control due to multiple general partners, including the Group.
(*3) Although the Group has no interest in the investee due to the return of the investment, the investee was included as an associate since the Group's ownership to the investee's residual properties is effective based on the contract.
(*4) Changmyung Shipping Co., Ltd. and STX Offshore & Shipbuilding Co., Ltd. were included in the associates during the prior reporting period due to termination of their rehabilitation procedures.
(*5) NH Agri-Best 1st PEF was excluded from the associates as the liquidation procedure was completed for the year ended December 31, 2018.
(*6) Changmyung Shipping Co., Ltd. and STX Offshore & Shipbuilding Co., Ltd. were excluded from the associates as the ownership interest of the Bank has fallen for the year ended December 31, 2018.

14. Investment in associates (cont'd)

Changes in investment in associates for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year end December 31, 2018						
	January 1, 2018	Acquisition	Disposal etc.	Dividend	Gain (loss) on valuation of equity method inverstmets	Share of other comprehensive gain (loss) of associates	December 31, 2018
Korea Credit Bureaus Co., Ltd.	₩ 6,886	₩ -	₩ -	₩ (113)	₩ 857	₩ -	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	3,355	-	-	-	597	(33)	3,919
NH Agri-Best 1st PEF (*1)	1,897	-	(1,005)	-	(892)	-	-
NHQCP Global Partnership PEF	7,985	9,980	-	-	1,545	-	19,510
IBK-NH Smallgiant PEF	9,099	18,813	-	-	(2,198)	-	25,714
NH-AJUIB Growth 2013 PEF	32,544	7,488	(9,943)	(5,181)	1,679	-	26,587
Kyunggi-DSC Superman Investment Fund No. 1	4,265	-	(1,550)	-	6,333	-	9,048
NH Agri-Biz Value Creative 1st PEF	3,059	3,120	(480)	-	87	-	5,786
	₩ 69,090	₩ 39,401	₩ (12,978)	₩ (5,294)	₩ 8,008	₩ (33)	₩ 98,194

(*1) NH Agri-Best 1st PEF was liquidated during the year ended December 31, 2018.

14. Investment in associates (cont'd)

	For the year ended December 31, 2017							
	January 1, 2017	Acquisition	Transfer	Disposal	Dividend	Gain(loss) on valuation of equity method investments	Share of other comprehensive gain (loss) of associates	December 31, 2017
Korea Credit Bureaus Co., Ltd.	₩ 6,683	₩ -	₩ -	₩ -	₩ (149)	₩ 352	₩ -	₩ 6,886
Nanumlotto Co., Ltd.	3,220	-	-	-	(60)	204	(9)	3,355
NH Agri-Best 1st PEF	1,869	-	-	-	-	28	-	1,897
NH - KOLON Green 1st PEF (*1)	1,104	-	-	(705)	-	(197)	(202)	-
NHQCP Global Partnership PEF	37,248	-	-	(26,572)	(2,969)	(335)	613	7,985
IBK-NH Smallgiant PEF	-	9,941	-	-	-	(865)	23	9,099
NH-AJUIB Growth 2013 PEF	37,670	3,894	-	(10,332)	(2,995)	3,353	954	32,544
Kyunggi-DSC Superman Investment Fund No. 1	4,828	-	-	-	-	(336)	(227)	4,265
NH Agri-Biz Value Creative 1st PEF	1,469	1,440	-	-	-	(182)	332	3,059
Resom Resort Co Ltd., (*2)	-	-	-	-	-	-	-	-
STX Offshore & Shipbuilding (*3)	-	-	7	-	-	(7)	-	-
	₩ 94,091	₩ 15,275	₩ 7	₩ (37,609)	₩ (6,173)	₩ 2,015	₩ 1,484	₩ 69,090

(*1) NH - KOLON Green 1st PEF has been liquidated for the year ended December 31, 2017.
(*2) The Group transferred the investee from investments in associates to AFS financial assets since the Group has lost control over the investee due to a receivership of the investee.
(*3) STX Offshore & Shipbuilding is included in the associates in the current period as the corporate rehabilitation procedure came to an end.

A summary of financial information of associates as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 87,193	₩ 22,738	₩ 64,455	₩ 55,505	₩ 9,409	₩ 9,409
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	63,200	25,591	37,609	45,289	5,986	5,656
NHQCP Global Partnership PEF	70,822	125	70,697	9,900	6,192	6,192
IBK-NH Smallgiant PEF	57,738	468	57,270	101	(4,894)	(4,894)
NH-AJUIB Growth 2013 PEF	99,343	10,574	88,769	18,462	5,607	5,607
Kyunggi-DSC Superman Investment Fund No. 1	38,551	2,358	36,193	4,088	25,333	25,333
NH Agri-Biz Value Creative 1st PEF	12,651	608	12,043	752	178	178

14. Investment in associates (cont'd)

	December 31, 2017					
	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Korea Credit Bureaus Co., Ltd.	₩ 75,504	₩ 19,323	₩ 56,181	₩ 68,750	₩ 3,756	₩ 3,756
Nanumlotto Co., Ltd.	51,099	19,147	31,952	43,215	2,018	1,925
NH Agri-Best 1st PEF	3,184	486	2,698	38	38	38
NHQCP Global Partnership PEF	32,043	38	32,005	6,204	(4,171)	(1,715)
IBK-NH Smallgiant PEF	20,593	328	20,265	26	(674)	(623)
NH-AJUIB Growth 2013 PEF	119,173	10,511	108,662	25,907	11,199	14,386
Kyunggi-DSC Superman Investment Fund No. 1	17,181	120	17,061	397	(1,342)	(2,251)
NH Agri-Biz Value Creative 1st PEF	6,490	126	6,364	156	(378)	312
Changmyung Shipping Co., Ltd.	316,505	406,314	(89,809)	44,634	(33,886)	(26,616)
STX Offshore & Shipbuilding (*1)	3,073,470	7,520,862	(4,447,392)	(91,165)	(122,501)	(109,548)

(*1) Gain on exemption of accounts payable due to debt equity swap is excluded.

14. Investment in associates (cont'd)

A reconciliation of the financial information presented in the carrying amount of its interest in the associates as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 64,455	9.00	₩ 5,800	₩ 1,830	₩ 7,630
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	37,609	9.98	3,752	167	3,919
NHQCP Global Partnership PEF	70,697	24.95	17,639	1,871	19,510
IBK-NH Smallgiant PEF	57,270	44.90	25,714	-	25,714
NH-AJUIB Growth 2013 PEF	88,769	29.95	26,587	-	26,587
Kyunggi-DSC Superman Investment Fund No. 1	36,193	25.00	9,048	-	9,048
NH Agri-Biz Value Creative 1st Private Equity Fund	12,043	48.04	5,786	-	5,786

(*1) Others represent the fair value adjustments arising from acquisition of equity interest and so on.

	December 31, 2017				
	Equity	Percentage of ownership (%)	Interest in associates	Others (*1)	Book value
Korea Credit Bureaus Co., Ltd.	₩ 56,181	9.00	₩ 5,056	₩ 1,830	₩ 6,886
Nanumlotto Co., Ltd.	31,952	9.98	3,188	167	3,355
NH Agri-Best 1st PEF	2,698	70.30	1,897	-	1,897
NHQCP Global Partnership PEF	32,005	24.95	7,985	-	7,985
IBK-NH Smallgiant PEF	20,265	44.90	9,099	-	9,099
NH-AJUIB Growth 2013 PEF	108,662	29.95	32,544	-	32,544
Kyunggi-DSC Superman Investment Fund No. 1	17,061	25.00	4,265	-	4,265
NH Agri-Biz Value Creative 1st Private Equity Fund	6,364	48.07	3,059	-	3,059
Changmyung Shipping Co., Ltd.	(89,809)	21.05	(18,905)	18,905	-
STX Offshore & Shipbuilding (*2)	(4,447,392)	20.10	(893,926)	893,926	-

(*1) Others represent the fair value adjustments arising from the acquisition of equity interests and the unrecognized amount of accumulated loss incurred from the discontinuance of equity method on interests in the associates as the investment balance became zero.
(*2) Gain on exemption of accounts payable due to debt equity swap is excluded.

15. Tangible assets

Details of tangible assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018 Acquisition cost	Accumulated depreciation	Subsidy	Book value
Land	₩ 1,431,767	₩ -	₩ -	₩ 1,431,767
Buildings	1,129,676	(195,529)	(444)	933,703
Leasehold improvements	265,383	(212,861)	(376)	52,146
Movable properties	921,190	(669,665)	(134)	251,391
Construction in progress	6,598	-	-	6,598
	₩ 3,754,614	₩ (1,078,055)	₩ (954)	₩ 2,675,605

Classification	December 31, 2017 Acquisition cost	Accumulated depreciation	Subsidy	Book value
Land	₩ 1,417,970	₩ -	₩ -	₩ 1,417,970
Buildings	1,088,346	(160,883)	(468)	926,995
Leasehold improvements	247,753	(202,648)	(502)	44,603
Movable properties	860,226	(610,099)	(210)	249,917
Construction in progress	5,755	-	-	5,755
	₩ 3,620,050	₩ (973,630)	₩ (1,180)	₩ 2,645,240

Changes in acquisition cost of tangible assets for years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018							
Classification	January 1, 2018	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	Business Combinations	December 31, 2018
Land	₩ 1,417,970	₩ 5,102	₩ (4,159)	₩ -	₩ 12,854	₩ -	₩ -	₩ 1,431,767
Buildings	927,464	37,220	(784)	(35,802)	6,118	(69)	-	934,147
Leasehold improvements	45,105	28,245	(502)	(20,315)	-	(11)	-	52,522
Movable properties	250,126	113,249	(71)	(113,529)	2,000	(395)	145	251,525
Construction in progress	5,755	16,890	-	-	(16,047)	-	-	6,598
Subsidy	(1,180)	-	20	206	-	-	-	(954)
	₩ 2,645,240	₩ 200,706	₩ (5,496)	₩ (169,440)	₩ 4,925	₩ (475)	₩ 145	₩ 2,675,605

(*1) Investment properties of ₩4,925 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩3,862 million, ₩7,980 million, ₩2,000 million and ₩2,205 million were transferred to buildings, land, movable properties and investment properties, respectively.

	For the year ended December 31, 2017						
Classification	January 1, 2017	Acquisition	Disposal	Depreciation	Transfer (*1)	Others	December 31, 2017
Land	₩ 1,429,835	₩ 17,716	₩ (31,184)	₩ -	₩ 1,979	₩ (376)	₩ 1,417,970
Buildings	824,381	33,354	(3,066)	(33,103)	107,012	(1,114)	927,464
Leasehold improvements	44,941	21,134	(1,054)	(20,098)	209	(27)	45,105
Movable properties	295,199	72,519	(572)	(117,156)	174	(38)	250,126
Construction in progress	40,597	45,529	-	-	(80,349)	(22)	5,755
Subsidy	(1,038)	(343)	-	201	-	-	(1,180)
	₩ 2,633,915	₩ 189,909	₩ (35,876)	₩ (170,156)	₩ 29,025	₩ (1,577)	₩ 2,645,240

(*1) Investment properties of ₩29,025 million were transferred from/to properties due to changes in the ratio of leased area of land and buildings. Construction in progress amounting to ₩73,633 million, ₩209 million, ₩174 million and ₩6,333 million were transferred to buildings, leasehold improvements, movable properties and investment properties, respectively.

16. Investment properties and non-current assets classified as held for sale

Fair values of investment properties amount to ₩733,109 million and ₩708,130 million as of December 31, 2018 and 2017 respectively. Fair values are measured based on valuation results performed by independent professionals. Rental income from investment properties for the years ended December 31, 2018 and 2017 amounts to ₩16,810 million and ₩18,313 million, respectively. The fair value of investment properties is classified as Level 3 based on the input variables used in the valuation method. Valuation methods for investment properties and input variables, which are significant but unobservable in measurement of fair value, are as follows:

Classification	Valuation methods	Input variables, which are significant but unobservable in measurement of fair value
Investment property	Calculated upon consideration of the yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject, and escalation rate of the construction cost index.	Yearly fluctuation of declared land value of standard sites, fluctuation of land prices for the region under subject, escalation rate of the construction cost index.

Details of investment properties as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018					
	Acquisition cost		Accumulated depreciation		Book value	
Land	₩	452,226	₩	-	₩	452,226
Buildings		156,881		(27,828)		129,053
	₩	609,107	₩	(27,828)	₩	581,279

Classification	December 31, 2017					
	Acquisition cost		Accumulated depreciation		Book value	
Land	₩	457,319	₩	-	₩	457,319
Buildings		152,293		(23,370)		128,923
	₩	609,612	₩	(23,370)	₩	586,242

Changes in investment properties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018													
	January 1, 2018		Acquisition		Disposal		Depreciation		Transfer (*1)		Other		December 31, 2018	
Land	₩	457,319	₩	-	₩	(219)	₩	-	₩	(4,874)	₩	-	₩	452,226
Buildings		128,923		4,850		(17)		(4,643)		(51)		(9)		129,053
	₩	586,242	₩	4,850	₩	(236)	₩	(4,643)	₩	(4,925)	₩	(9)	₩	581,279

(*1) Certain investment properties amounting to ₩4,925 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

Classification	For the year ended December 31, 2017											
	January 1, 2017		Acquisition		Disposal		Depreciation		Transfer (*1)		December 31, 2017	
Land	₩	487,489	₩	106	₩	(28,297)	₩	-	₩	(1,979)	₩	457,319
Buildings		160,259		3,504		(3,005)		(4,789)		(27,046)		128,923
	₩	647,748	₩	3,610	₩	(31,302)	₩	(4,789)	₩	(29,025)	₩	586,242

(*1) Certain investment properties amounting to ₩29,025 million were transferred from/to properties due to changes in the ratio of the leased area of land and buildings.

At the end of the reporting period, the book value of assets held for sale is ₩15 million, and there have been no changes for the years ended December 31, 2018 and 2017.

17. Intangible assets

Details of intangible assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018 Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Goodwill	₩ 4,301	₩ -	₩ -	₩ 4,301
Development cost	577,113	(397,123)	-	179,990
Other intangible assets	823,874	(609,040)	(2,182)	212,652
	₩ 1,405,288	₩ (1,006,163)	₩ (2,182)	₩ 396,943

Classification	December 31, 2017 Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value
Development cost	₩ 371,363	₩ (209,709)	₩ -	₩ 161,654
Other intangible assets	691,924	(478,517)	(2,868)	210,539
	₩ 1,063,287	₩ (688,226)	₩ (2,868)	₩ 372,193

Changes in the book value of intangible assets for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018 January 1, 2018	Acquisition	Disposal	Amortization	Impaired	Other	Business combinations	December 31, 2018
Goodwill	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 36	₩ 4,265	₩ 4,301
Development costs	161,654	62,985	-	(44,629)	-	(20)	-	179,990
Other intangible assets	210,539	86,708	(1,523)	(81,565)	(406)	(1,186)	85	212,652
	₩ 372,193	₩ 149,693	₩ (1,523)	₩ (126,194)	₩ (406)	₩ (1,170)	₩ 4,350	₩ 396,943

Classification	For the year ended December 31, 2017 January 1, 2017	Acquisition	Disposal	Amortization	Other	December 31, 2017
Development cost	₩ 121,134	₩ 81,628	₩ (665)	₩ (40,443)	₩ -	₩ 161,654
Other intangible assets	189,970	106,720	(2,903)	(83,245)	(3)	210,539
	₩ 311,104	₩ 188,348	₩ (3,568)	(123,688)	₩ (3)	₩ 372,193

18. Other assets

Details of other assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Prepaid expenses	₩ 90,628	₩ 68,341
Supplies	3,245	3,734
Guarantee deposits paid	4,430	5,105
Suspense payment	1,846	493
Guarantees	144	171
Telephone and telex rights	1,378	1,393
Others	1,581	1,110
	₩ 103,252	₩ 80,347

19. Financial liabilities

Details of financial liabilities as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018 Book value	December 31, 2018 Fair value
Financial liabilities at FVTPL:		
FVTPL liabilities	₩ 13,276	₩ 13,276
Trading derivative liabilities	479,800	479,800
	493,076	493,076
Derivative liabilities:		
Hedging derivative liabilities	41,950	41,950
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	224,230,411	225,466,141
Borrowings (*2)	11,283,346	11,287,268
Debentures (*2)	16,828,002	17,030,545
Others (*1 and *3)	13,045,701	11,807,619
	265,387,460	265,591,573
	₩ 265,922,486	₩ 266,126,599

(*1) Others consist of domestic exchange settlements credits, trust account liabilities, guarantee deposits received, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation for fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

Classification	December 31, 2017 Book value	December 31, 2017 Fair value
Financial liabilities at FVTPL:		
Held-for-trading financial liabilities	₩ 51,737	₩ 51,737
Trading derivative liabilities	967,629	967,629
	1,019,366	1,019,366
Derivative liabilities:		
Hedging derivative liabilities	25,881	25,881
Financial liabilities measured at amortized cost:		
Deposits due to customers (*2)	205,768,316	206,634,371
Borrowings (*2)	12,227,485	12,227,065
Debentures (*2)	18,968,727	19,053,448
Others (*1 and *3)	13,286,057	12,382,275
	250,250,585	250,297,159
	₩ 251,295,832	₩ 251,342,406

(*1) Others consist of domestic exchange settlement credits, trust account liabilities, guarantee deposits received, etc.
(*2) Interest payables among financial liabilities are included in fair value.
(*3) Interest payables included in the computation for fair value of deposits due to customers, borrowings and debentures are excluded from fair value of other financial liabilities.

There are no financial liabilities designated at FVTPL as of December 31, 2018 and 2017.

20. Deposits due to customers

Details of deposits due to customers as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	Classification	December 31, 2018	December 31, 2017
Demand deposits	Korean won	₩ 31,636,875	₩ 34,479,446
	Foreign currency	1,587,480	1,906,579
		33,224,355	36,386,025
Time deposits	Saving deposits in Korean won	185,280,757	164,903,356
	Saving deposits in foreign currency	1,752,694	1,200,440
	Installment deposits	3,338,610	2,904,738
		190,372,061	169,008,534
Certificates of deposit		633,995	373,757
		₩ 224,230,411	₩ 205,768,316

21. Borrowings

Details of borrowings as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	Provider	Interest rate (%)	December 31, 2018	December 31, 2017
Borrowings in Korean won	The Bank of Korea	0.50~0.75	₩ 730,379	₩ 968,354
	Public sector	(-)1.25~5.15	5,543,981	5,751,162
	Others	0.00~2.00	1,593,161	1,633,961
			7,867,521	8,353,477
Borrowings in foreign currency	Borrowings from banks	2.87~3.79	2,526,669	1,700,298
	Borrowings from government	2.83~3.04	112,995	215,415
			2,639,664	1,915,713
Call money		-	-	1,615,588
Bonds sold under repurchase agreements		1.99~2.25	769,600	337,800
Bills sold		0.50~2.00	6,561	4,907
			₩ 11,283,346	₩ 12,227,485

22. Debentures

Details of debentures as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	Interest rate (%)	December 31, 2018	December 31, 2017
Debentures in Korean won:			
General agricultural financial bonds	1.59~3.77	₩ 10,540,000	₩ 13,080,000
Subordinated agricultural financial bonds	2.52~4.61	4,000,000	3,800,000
Present-value discounts		(26,069)	(35,240)
		14,513,931	16,844,760
Debentures in foreign currency:			
General financial bonds	1.88~3.88	2,348,010	2,154,590
Accumulated loss on fair value hedges		(22,343)	(21,582)
Present-value discounts		(11,596)	(9,041)
		2,314,071	2,123,967
		₩ 16,828,002	₩ 18,968,727

23. Provisions

Details of provisions as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Provision for acceptances and guarantees	₩ 193,747	₩ 198,550
Provision for unused credit limit	137,892	103,491
Provision for mileage	15,167	16,056
Provision for restoration	32,044	28,099
Other provisions	83,730	85,768
	₩ 462,580	₩ 431,964

Acceptances and guarantees (including endorsement bills) as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Confirmed acceptances and guarantees:		
Acceptances and guarantees in Korean won	₩ 370,027	₩ 470,145
Acceptances and guarantees purchased	134,497	148,177
Acceptances and guarantees for imported goods (letter of guarantees)	15,233	47,615
Other acceptances and guarantees in foreign currencies	2,247,519	2,512,116
	2,767,276	3,178,053
Unconfirmed acceptances and guarantees:		
Issuance of local letter of credit	231,415	226,747
Issuance of import letters of credit	1,318,277	1,383,127
Others	761,085	634,844
	2,310,777	2,244,718
Endorsement bills	19,307	5,172
	₩ 5,097,360	₩ 5,427,943

The percentage of provision for acceptances and guarantees to the outstanding balance of acceptances and guarantees as of December 31, 2018 and 2017 is as follows (Korean won in millions):

Classification	Outstanding balance	Provision for acceptances and guarantees	Ratio (%)
December 31, 2018	₩ 5,097,360	₩ 193,747	3.80
December 31, 2017	₩ 5,427,943	₩ 198,550	3.66

The percentage of provision for unused credit limit to the outstanding balance of unused credit limit as of December 31, 2018 and 2017 is as follows (Korean won in millions):

Classification	Outstanding balance	Provision for unused credit limit	Ratio (%)
December 31, 2018	₩ 79,814,779	₩ 137,892	0.17
December 31, 2017	₩ 62,752,897	₩ 103,491	0.16

23. Provisions (cont'd)

Changes in provisions for acceptances and guarantees for the year ended December 31, 2018 are as follow (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 10,658	₩ 73,248	₩ 117, 002	₩ 200,908
Transfer to 12-month expected credit losses	196	(196)	-	-
Transfer to financial assets with a significant increase in credit risk	(467)	482	(15)	-
Transfer to credit-impaired financial assets	-	(48)	48	-
Provision (reversal) of allowance for expected credit losses	(2,729)	2,115	(10,218)	(10,832)
Foreign currency translation	3,922	-	-	3,922
Others	(251)	-	-	(251)
Ending balance	₩ 11,329	₩ 75,601	₩ 106,817	₩ 193,747

(*1) Beginning balance is restated in accordance with KIFRS 1109.

Changes in provision for unused credit limits for the year ended December 31, 2018 are as follow (Korean won in millions):

	For the year ended December 31, 2018			
		Lifetime expected credit losses		
	12-month expected credit losses	Significant increase in credit risk	Credit-impaired financial assets	Total
Beginning balance (*1)	₩ 48,681	₩ 58,050	₩ -	₩ 106,731
Transfer to 12-month expected credit losses	20,986	(20,986)	-	-
Transfer to financial assets with a significant increase in credit risk	(5,585)	5,585	-	-
Transfer to credit-impaired financial assets	(143)	(425)	568	-
Provision (reversal) of allowance for expected credit losses	8,353	22,777	(568)	30,562
Foreign currency translation	640	-	-	640
Others	(41)	-	-	(41)
Ending balance	₩ 72,891	₩ 65,001	₩ -	₩ 137,892

(*1) Beginning balance is restated in accordance with KIFRS 1109.

23. Provisions (cont'd)

Changes in provisions for acceptances and guarantees and unused credit limits for the years ended December 31, 2017 are as follows (Korean won in millions):

Classification	Provision for acceptances and guarantees		Provision for unused credit limits	
January 1, 2017	₩	118,242	₩	105,405
Changes for the period:				
Provision (reversal)		90,587		(157)
Foreign currency translation		(10,279)		(1,757)
December 31, 2017	₩	198,550	₩	103,491

24. Other liabilities

Details of other liabilities as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018		December 31, 2017	
Trust accounts payable	₩	2,816,440	₩	2,353,022
Domestic exchange settlement credits		2,666,621		4,319,638
Foreign exchange settlement credits		21,747		31,460
Accounts payable		1,473,898		1,398,560
Accrued expenses		1,628,674		1,313,917
Guarantee deposit received		199,709		206,889
Agency		1,932,477		1,539,962
Financial guarantee contract		24,666		27,395
Unearned revenue		32,645		28,028
Deferred mileage revenue		83,677		79,545
Suspense receipt		102,467		155,537
Other sundry liabilities		2,456,203		2,267,392
	₩	13,439,224	₩	13,721,345

25. Derivatives and hedge accounting

Details of derivatives as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 256,571	₩ -	₩ 383,080	₩ -
Swap	136,617	-	49,406	-
Options purchased	1,549	-	-	-
Options sold	-	-	1,549	-
	394,737	-	434,035	-
Interest rate:				
Swap	48,522	20,253	44,933	41,950
Options purchased	603	-	-	-
Options sold	-	-	603	-
	49,125	20,253	45,536	41,950
Stock:				
Options purchased	5	-	-	-
Options sold	-	-	20	-
	5	-	20	-
Other	580	-	209	-
	₩ 444,447	₩ 20,253	₩ 479,800	₩ 41,950

	December 31, 2017			
	Derivative assets		Derivative liabilities	
Classification	Trading	Hedging	Trading	Hedging
Currency:				
Forwards	₩ 930,419	₩ -	₩ 794,209	₩ -
Swap	38,534	-	116,707	-
Options purchased	2,629	-	-	-
Options sold	-	-	2,629	-
	971,582	-	913,545	-
Interest rate:				
Swap	51,545	7,575	54,016	25,881
Stock:				
Options purchased	610	-	-	-
Options sold	-	-	68	-
	610	-	68	-
	₩ 1,023,737	₩ 7,575	₩ 967,629	₩ 25,881

25. Derivatives and hedge accounting (cont'd)

The notional amounts outstanding for derivative contracts as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018 Trading	Hedging	Total
Currency:			
Forwards	₩ 37,304,463	₩ -	₩ 37,304,463
Swap	5,898,678	-	5,898,678
Options purchased	572,691	-	572,691
Options sold	572,691	-	572,691
	44,348,523	-	44,348,523
Interest rate:			
Swap	7,056,397	2,852,049	9,908,446
Options purchased	30,000	-	30,000
Options sold	30,000	-	30,000
	7,116,397	2,852,049	9,968,446
Stock:			
Options purchased	8,959	-	8,959
Options sold	9,597	-	9,597
	18,556	-	18,556
Other	23,355	-	23,355
	₩ 51,506,831	₩ 2,852,049	₩ 54,358,880

Classification	December 31, 2017 Trading	Hedging	Total
Currency:			
Forwards	₩ 45,565,880	₩ -	₩ 45,565,880
Futures (*1)	144,371	-	144,371
Swap	2,937,621	-	2,937,621
Options purchased	256,279	-	256,279
Options sold	256,279	-	256,279
	49,160,430	-	49,160,430
Interest rate:			
Swap	6,544,358	2,624,394	9,168,752
Stock:			
Options purchased	58,256	-	58,256
Options sold	15,115	-	15,115
	73,371	-	73,371
	₩ 55,778,159	₩ 2,624,394	₩ 58,402,553

(*1) Futures transactions are settled daily and reflected in deposits.

The timing of outstanding for hedging instruments contracts as of December 31, 2018 is as follows (Korean won in millions):

Classification	Less than 1 year	1 years ~ 5 years	More than 5 years	Total
Interest rate:				
Swap	₩ 379,483	₩ 2,439,023	₩ 33,543	₩ 2,852,049

25. Derivatives and hedge accounting (cont'd)

Details of gain or loss on valuation of derivatives for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 259,643	₩ 383,438	₩ -	₩ -	₩ 259,643	₩ 383,438
Swap	136,277	47,637	-	-	136,277	47,637
Options purchased	1,773	18	-	-	1,773	18
Options sold	262	950	-	-	262	950
	397,955	432,043	-	-	397,955	432,043
Interest rate:						
Swap	29,361	26,038	10,658	9,971	40,019	36,009
Options purchased	353	157	-	-	353	157
Options sold	158	353	-	-	158	353
	29,872	26,548	10,658	9,971	40,530	36,519
Stock:						
Options purchased	-	90	-	-	-	90
Options sold	159	1	-	-	159	1
	159	91	-	-	159	91
Other	29	-	-	-	29	-
	₩ 428,015	₩ 458,682	₩ 10,658	₩ 9,971	₩ 438,673	₩ 468,653

Classification	For the year ended December 31, 2017					
	Trading		Hedging		Total	
	Gain	Loss	Gain	Loss	Gain	Loss
Currency:						
Forwards	₩ 930,585	₩ 794,774	₩ -	₩ -	₩ 930,585	₩ 794,774
Swap	42,283	126,050	-	-	42,283	126,050
Options purchased	2,873	-	-	-	2,873	-
Options sold	-	2,437	-	-	-	2,437
	975,741	923,261	-	-	975,741	923,261
Interest rate:						
Swap	48,768	46,088	6,057	9,818	54,825	55,906
Stock:						
Options purchased	4,583	7,347	-	-	4,583	7,347
Options sold	237	-	-	-	237	-
	4,820	7,347	-	-	4,820	7,347
	₩ 1,029,329	₩ 976,696	₩ 6,057	₩ 9,818	₩ 1,035,386	₩ 986,514

At the end of the reporting period, hedged items applied with fair value hedge accounting include debt securities at FVOCI and debentures. Changes in the fair value of derivatives due to fluctuation in interest rate are recognized in net income immediately. Interest rate swap is used as a hedging instrument in order to offset changes in fair values of hedged items due to fluctuation in interest rate.

25. Derivatives and hedge accounting (cont'd)

Details of the Group's hedged item and types of hedge accounting as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018					
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Book value of hedged item	Fair value hedge accumulated adjustment	Fair value of hedging instrument
Debt securities at FVOCI	Interest rate risk	Interest rate swap	Fair value hedge	₩ 496,524	₩ (9,547)	₩ 11,365
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	2,314,071	22,343	(33,062)

	December 31, 2017			
Hedged item	Hedged risk	Hedging instrument	Type of hedge accounting	Fair value of hedging instrument
AFS financial assets	Interest rate risk	Interest rate swap	Fair value hedge	₩ 7,511
Debentures	Interest rate risk	Interest rate swap	Fair value hedge	(25,817)

Details of gain (loss) on valuation of hedged items and hedging instruments for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018		
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instrument	Ineffective amount for the year ended (*1)
Debt securities at FVOCI	₩ (3,331)	₩ 2,753	₩ (578)
Debentures	1,561	(2,066)	(505)
	₩ (1,770)	₩ 687	₩ (1,083)

(*1) The ineffective portion of the hedge is included in other comprehensive income or other operating income or ewpenses vin the statement of comprehensive income.

	For the year ended December 31, 2017	
Classification	Gain (loss) on valuation of hedged items	Gain (loss) on valuation of hedging instrument
AFS financial assets	₩ (3,395)	₩ 974
Debentures	11,227	(4,735)
	₩ 7,832	₩ (3,761)

26. Net defined benefit liabilities

The Group operates a defined benefit pension plan (the DB plan) in accordance with Employee Retirement Benefits Laws, which is also classified as DB plan under KIFRS. Under DB plan, severance pay is made on a lump-sum basis or entitled to pension when an employee retires, based on the employee's service period and salary at retirement. The Group has purchased retirement benefits insurance, annuity, etc., and made deposits with Industrial Bank of Korea and others. The deposit for retirement insurance and assets for DB plan operation are presented as a deduction from defined benefit obligations under an account of plan assets.

If a retiree is up for quasi-retirement age limit of special retirement, the Group pays quasi-retirement age limit payments separate from general severance payments.

The Group is exposed to investment risk and interest risk.

Actuarial valuation for plan assets and defined benefit obligations related to the general severance payments and quasi-age severance payments is performed by an independent actuary, as of December 31, 2018 and 2017 respectively. Current and past service costs related to present value of defined benefit obligations are measured using the projected unit credit method.

Key assumptions for actuarial valuation as of December 31, 2018 and 2017 are as follows (%):

Classification	December 31, 2018	December 31, 2017
Discount rate	2.33	2.86
Salary increase rate:		
Base-up	2.33	2.37
Empirical promotion rate	Empirical promotion rate by age	

Details of net defined benefit liabilities as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Present value of defined benefit obligations	₩ 1,767,157	₩ 1,637,222
Fair value of plan assets	(1,391,992)	(1,325,710)
Net defined benefit liabilities from DB plan	₩ 375,165	₩ 311,512

26. Net defined benefit liabilities (cont'd)

Changes in net defined benefit liabilities for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2018	₩ 1,637,222	₩ (1,325,710)	₩ 311,512
Current service cost	192,582	-	192,582
Interest expenses (income)	45,788	(36,879)	8,909
Remeasurement elements:			
Return on planned assets (on the net basis of net interest cost)	-	17,793	17,793
Actuarial gain incurred due to changes in financial assumptions	86,811	-	86,811
Actuarial loss incurred due to experience adjustments	(20,234)	-	(20,234)
Employer contributions	-	(241,630)	(241,630)
Payment	(177,420)	192,557	15,137
Transfer from related-party	11,031	-	11,031
Transfer to related-party	(21,479)	-	(21,479)
Other	12,856	1,877	14,733
Present value as of December 31, 2018	₩ 1,767,157	₩ (1,391,992)	₩ 375,165

Classification	For the year ended December 31, 2017		
	Present value of defined benefit obligations	Plan assets	Total
Present value as of January 1, 2017	₩ 1,448,520	₩ (1,111,371)	₩ 337,149
Current service cost	211,968	-	211,968
Interest expenses (income)	36,332	(27,720)	8,612
Remeasurement elements:			
Return on planned assets (on the net basis of net interest cost)	-	12,852	12,852
Actuarial gain incurred due to changes in demographic assumptions	59,733	-	59,733
Actuarial loss incurred due to changes in financial assumptions	(16,003)	-	(16,003)
Actuarial gain incurred due to experience adjustments	48,723	-	48,723
Employer contributions	-	(346,303)	(346,303)
Payment	(149,374)	145,504	(3,870)
Transfer from related-party	12,198	-	12,198
Transfer to related-party	(14,875)	-	(14,875)
Other	-	1,328	1,328
Present value as of December 31, 2017	₩ 1,637,222	₩ (1,325,710)	₩ 311,512

26. Net defined benefit liabilities (cont'd)

Portfolio of plan assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Fixed deposits	₩ 1,391,992	₩ 1,325,710

Investment strategies and policies of plan assets aim to balance risk reduction and pursuit of profit. The objective to minimize the variability of assets in relation to debt is basically achieved through diversified investment of assets, and partial asset-liability matching strategies. In order to reduce (adjust risk) variability of assets in relation to debt and achieve the intended levels of profit, investment is distributed over a vast range of many different types of assets. The distribution of assets is such that a regular income is secured similar to bonds, and partially matches the characteristics of a long maturity period in pension obligations.

The actual return on plan assets is ₩19,086 million and ₩14,867 million for the year ended December 31, 2018 and 2017, respectively.

The effects of reasonable possible changes to significant actuarial assumptions on defined benefit obligation whilst all other assumptions occurring as of December 31, 2018 and 2017 are held constant are as follows (Korean won in millions):

	December 31, 2018		December 31, 2017	
Classification	Increase	Decrease	Increase	Decrease
100 basis point change in discount rate	₩ (169,861)	₩ 199,642	₩ (153,997)	₩ 180,968
1%p change in salary increase rate	189,862	(165,023)	180,000	(156,085)

The sensitivity analysis presented above may not present the actual change in the defined benefit obligation as it is unlikely that the change in assumptions would occur in isolation of one another, since the actuarial assumptions are correlated. Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liabilities recognized in the consolidated statement of financial position.

The Group expects to make a contribution of ₩365,000 million to the defined benefit plans during the next fiscal year.

The weighted average maturity of the defined benefit obligation is 10.06 years at December 31, 2018.

The amount of retirement benefits paid for the defined contribution plan during for the year ended December 31, 2018 and 2017 is ₩178 and ₩232 million, respectively.

27. Equity

Capital stock as of December 31, 2018 and 2017 are as follows (Korean won in millions, shares in units):

Classification	December 31, 2018		December 31, 2017	
Shares authorized (in shares)		1,000,000,000		1,000,000,000
Par value (in Korean won)	₩	5,000	₩	5,000
Shares issued (in shares)		432,438,179		426,555,827
Common stock	₩	2,162,191	₩	2,132,779

Other paid-in capital as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018		December 31, 2017	
Capital surplus:				
Capital in excess of par value	₩	9,465,845	₩	9,295,401
Other capital surplus		35,948		35,948
		9,501,793		9,331,349
Capital adjustments (*1)		(3,019)		(3,019)
Hybrid equity securities (*2)		349,648		349,648
	₩	9,848,422	₩	9,677,978

(*1) Capital adjustment arose from the acquisition of IT department of NACF.
(*2) The Group classifies the hybrid equity securities as capital as the maturity of the hybrid equity securities is over 30 years and the Group holds the right to extend the bond maturity continuously under the same conditions and evade delivering cash or another financial asset to pay the contractual obligation.

Changes in capital stock and paid-in capital in excess of par value for the year ended December 31, 2018 are as follows (Korean won in millions):

Classification	Capital stock		Capital in excess of par value		Total	
January 1, 2018	₩	2,132,779	₩	9,295,401	₩	11,428,180
Issuance of capital stock (*1)		29,412		170,444		199,856
December 31, 2018	₩	2,162,191	₩	9,465,845	₩	11,628,036

(*1) Based on the resolution of Board of Directors dated June 14, 2018, the Group issued 5,882,352 shares of common stock at an issue price of ₩34,000 per share.

There were no changes in capital stock and paid-in capital in excess of par value for the year ended December 31, 2017.

27. Equity (cont'd)

Details of other components of equity, which are recognized as accumulated other comprehensive income, as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		December 31, 2018
Remeasurements of the net defined benefit liabilities	₩	(619,831)
Gain on valuation of debt securities at FVOCI		42,463
Loss on equity securities at FVOCI		(67,188)
Exchange differences on translating foreign operations		(3,807)
Loss on valuation of investments in associates		(260)
	₩	(648,623)

Classification		December 31, 2017
Remeasurements of the net defined benefit liabilities	₩	(558,663)
Gain on valuation & foreign currency translation of AFS financial assets		119,823
Exchange differences on translating foreign operations		(5,482)
Gain on valuation of investments in associates		1,144
	₩	(443,178)

Changes in other components of equity for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018									
Classification		January 1, 2018		Changes for the period		Deferred income tax		Transfer to retained earnings		December 31, 2018
Remeasurements of the net defined benefit liabilities	₩	(558,663)	₩	(84,370)	₩	23,202	₩	-	₩	(619,831)
Gain (loss) on valuation of debt securities at FVOCI (*1)		(41,577)		115,985		(31,945)		-		42,463
Gain (loss) on equity securities at FVOCI (*1)		(70,890)		(37,314)		9,840		31,176		(67,188)
Exchange differences on translating foreign operations		(5,483)		1,676		-		-		(3,807)
Gain (loss) on valuation of investments in associates (*1)		(236)		(33)		9		-		(260)
	₩	(676,849)	₩	(4,056)	₩	1,106	₩	31,176	₩	(648,623)

(*1) Beginning balance is restated in accordance with KIFRS 1109.

	For the year ended December 31, 2017							
Classification		January 1, 2017		Changes for the period		Deferred income tax		December 31, 2017
Gain (loss) on valuation & foreign currency translation of AFS financial assets	₩	196,477		(93,573)	₩	16,919	₩	119,823
Exchange differences on translating foreign operations		1,438		(6,920)		-		(5,482)
Remeasurements of the net defined benefit pension plans		(504,271)	₩	(105,305)		50,913		(558,663)
Gain (loss) on valuation of investments in associates		71		1,484		(411)		1,144
	₩	(306,285)	₩	(204,314)	₩	67,421	₩	(443,178)

27. Equity (cont'd)

Details of retained earnings as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Regulatory reserve for bad debts	₩ 1,629,809	₩ 1,486,563
Legal reserve	157,116	91,984
Voluntary reserve for recapitalization	1,000,000	1,000,000
Voluntary reserve	14	14
Unappropriated retained earnings	1,786,458	705,256
	₩ 4,573,397	₩ 3,283,817

Changes in retained earnings for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Beginning balance	₩ 3,283,817	₩ 2,578,561
Changes in consolidated taxation payment	139,920	70,263
Net income	1,222,569	652,073
Changes in accounting standards	165,347	-
Loss on equity securities at FVOCI	(31,176)	-
Cash dividends	(190,000)	-
Dividends on hybrid equity securities	(17,080)	(17,080)
Ending balance	₩ 4,573,397	₩ 3,283,817

Reserve for bad debts as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Beginning balance	₩ 1,629,809	₩ 1,486,563
Planned reserve for bad debts	112,487	143,246
Expected balance	₩ 1,742,296	₩ 1,629,809

Reversal of provision (provision of reserve) for bad debts and adjusted net income after reflecting reserve for bad debts for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Net income	₩ 1,222,569	₩ 652,073
Reversal of provision (provision of reserve) for bad debts	(85,290)	139,891
Adjusted net income after reserve for bad debts	1,137,279	791,964
Adjusted basic and diluted earnings per share after reserve for bad debts (in Korean won) (*1)	2,608	1,817

(*1) Hybrid equity securities dividends of ₩17,080 million for the years ended December 31, 2018 and 2017, respectively, are deducted from adjusted net income after reserve for bad debts when calculating adjusted basic earnings per share. Adjusted diluted earnings per share are identical to basic earnings per share, as the Group does not retain dilutive common shares.

Dividends for the year ended December 31, 2018 are as follows (Korean won in millions):

Type of stock	Shares of stock	Dividends Per share (in Korean won)	Total dividends
Common stock	426,555,827	₩ 445	₩ 190,000

28. Capital management

28.1 Current state of regulatory capital

The Group reports to the Financial Supervisory Service on a monthly or quarterly basis about Bank for International Settlement (BIS) capital adequacy ratio, common equity ratio based on market risk, basic common equity ratio and their computation evidences. In addition, the Group reviews the soundness of its capital using the capital adequacy ratio representing capital over the risk-weighted asset (BIS capital adequacy ratio).

The Group's regulatory capitals consist of the following two categories:

-Tier 1 capital (basic capital): Basic capital is composed of common equity tier 1 and additional tier 1 capital. Common equity tier 1 is composed of capital stock, additional paid-in capital, retained earnings, non-controlling interests of bank which is the consolidated subsidiary and accumulated other comprehensive income. Additional tier 1 capital is composed of capital securities (including hybrid equity securities) and non-controlling interests of consolidated subsidiaries

-Tier 2 capital (supplementary capital): Supplementary capital is composed of allowance for losses on credit for assets classified as normal or precautionary according to the forward looking criteria, capital securities (such as subordinated bonds) and non-controlling interests of consolidated subsidiaries.

The basic and supplementary capitals listed above have many restrictions to be recognized as capital and regulatory capital is computed reflecting items deducted from capital.

Besides the BIS ratios reported to the Financial Supervisory Service, the Group sets up internal policies on capital management for the criteria of capital adequacy and soundness of finance. In addition, the Group monitors the soundness of finance by allocating the risk appetite of the available capital to the limit of internal capital (the amount of capital that ensures that the Group will be able to continue on its operation, while bearing many risks and the necessary capital amount that covers the unexpected losses (ULs) under specified probability). Internal capital, subject to the management, is to consider interest rate risk and credit-concentrated risk in addition to the credit, market and operating risk managed by regulatory capital. The Group computes on appropriateness of internal capital under regular inspection.

Following the implementation of BASEL III, the Group has calculated the risk-weighted assets on market risk, operating risk via the standard method, and risk-weighted assets on credit risk via the internal ratings-based approach, and are managing the ratios accordingly, as of December 1, 2013. Details of the Group's BIS capital adequacy ratio as of December 31, 2018 and 2017 are as follows (Korean won in millions, %):

Classification	December 31, 2018		December 31, 2017	
Basic capital (A)	₩	13,917,216	₩	12,900,239
Supplementary capital (B)		3,051,045		3,035,837
Equity capital (C)		16,968,261		15,936,076
Risk-weighted assets (D)		109,178,105		108,240,415
Equity capital ratio (C/D*100)		15.54		14.72
Basic capital ratio (A/D*100)		12.75		11.92

28.2 Allocation of shareholder's equity

Allocation of shareholder's equity is determined by approval of the risk management committee within the available capital after the establishment of risk capital management plan reflecting business plan, strategies and analysis of risk situations. Allocated capitals by risk upon the risk capital management plan are divided by tolerance limits of department and business sector, and managed from risk management council.

The risk management committee and council of the Group review the internal capital policies on a regular basis, and have a duty to maintain the stable capital adequacy and the soundness of finance by preliminary authorization process on excess of the limitation of internal capital forecasted due to new or extension of business or exceptionally by an ex-post facto approval.

29. Income tax expenses

The components of income tax expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018		For the year ended December 31, 2017	
Income tax currently payable	₩	406,403	₩	336,743
Adjustments recognized for the current period in relation to the current tax of prior periods		(65,196)		87,573
Change in deferred income tax due to temporary differences (*1)		98,673		(285,512)
Total income tax effect		439,880		138,804
Deferred income taxes directly applied to shareholder's equity		1,106		67,421
Income tax expenses	₩	440,986	₩	206,225
(*1) Net deferred tax assets due to temporary differences as of December 31, 2018 and 2017		579,121		651,878
Net deferred tax assets due to temporary differences as of January 1, 2018 and 2017 (*2)		677,794		366,366
Change in deferred income tax due to temporary differences	₩	(98,673)	₩	285,512

(*2) This is the amount that reflects the effect of application of KIFRS 1109.

A reconciliation of income before income tax and income tax expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018		For the year ended December 31, 2017	
Net income before income tax	₩	1,663,555	₩	858,298
Income tax expenses before adjustments (A) (*1)		447,116		207,246
Adjustments (B):		(6,130)		(1,021)
Non-taxable income		(8,717)		(5,180)
Non-deductible expenses		6,737		9,027
Unrecognized deferred income tax effects		1,239		1,139
Income taxes refund or additional income taxes for prior years		(1,739)		(287)
Others		(3,650)		(5,720)
Income tax expenses (A+B)	₩	440,986	₩	206,225
Effective tax rate		26.51%		24.03%

(*1) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the years ended December 31, 2018 and 2017.

The deferred income tax recognized as other comprehensive income for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	
Loss on valuation of debt securities measured at FVOCI	₩	(31,945)
Gain on equity securities at FVOCI		9,840
Remeasurements of the net defined benefit liabilities		23,202
Gain on valuation of investments in associates		9
	₩	1,106

29. Income tax expenses (cont'd)

Classification		For the year ended December 31, 2017
Gain on valuation & foreign currency translation of AFS financial assets	₩	16,919
Remeasurements of the net defined benefit liabilities		50,913
Loss on valuation of investments in associates		(411)
	₩	67,421

The deferred income tax assets (liabilities) of the Bank as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018							
	Beginning (*1)		Increase		Decrease		Ending	
(Temporary differences):								
Gain (loss) on valuation of securities	₩	300,107	₩	171,054	₩	272,508	₩	198,653
Investments in associates and subsidiaries (*3)		26,931		(3,680)		6,905		16,346
Gain (loss) on valuation of derivatives		(25,389)		59,188		(25,389)		59,188
Accrued income		(52,593)		(201,767)		(109,387)		(144,973)
Allowance for expected credit losses		82,417		-		82,417		-
Deferred LOF/LOC		(271,668)		(277,240)		(271,668)		(277,240)
Defined benefit obligations		1,519,657		304,948		192,557		1,632,048
Accrued expenses		86,833		86,720		91,713		81,840
Provision for acceptances and guarantee		199,724		194,930		200,907		193,747
Other provisions		141,350		174,046		134,244		181,152
Special deposits		(86,983)		(4,494)		(88)		(91,389)
Retirement insurance and assets for DB plan operation		(948,085)		(175,013)		(192,557)		(930,541)
Others		1,492,404		170,753		476,092		1,187,065
	₩	2,464,705	₩	499,445	₩	858,254	₩	2,105,896
Unrealizable temporary differences		-		-		-		-
Realizable temporary differences		2,464,705		499,445		858,254		2,105,896
Tax rate (*2)		27.50%						27.50%
Net deferred income tax asset		677,794						579,121

(*1) This is the amount that reflects the effect of application of KIFRS 1109.
(*2) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the year ended December 31, 2018.
(*3) The income tax effect of equity method is reasonably estimated by considering the applicability and realizability of deferred income tax by each investee.

29. Income tax expenses (cont'd)

Classification	December 31, 2017 Beginning	Increase	Decrease	Ending
(Temporary differences):				
Gain (loss) on valuation of securities	₩ 280,795	₩ 61,196	₩ 46,184	₩ 295,807
Investments in associates and subsidiaries (*2)	34,840	36,866	44,775	26,931
Gain (loss) on valuation of derivatives	17,778	(25,486)	18,234	(25,942)
Accrued income	(106,187)	(52,626)	(106,187)	(52,626)
Deferred LOF/LOC	(308,019)	(271,668)	(308,019)	(271,668)
Defined benefit obligations	1,383,266	340,753	204,362	1,519,657
Accrued expenses	76,681	87,111	76,959	86,833
Provision for acceptances and guarantee	115,503	81,863	-	197,366
Other provisions	90,888	91,350	51,099	131,139
Special deposits	(82,600)	(4,603)	(220)	(86,983)
Retirement insurance and assets for DB plan operation	(743,373)	(385,216)	(180,504)	(948,085)
Others	754,338	802,088	58,390	1,498,036
	₩ 1,513,910	₩ 761,628	₩ (94,927)	₩ 2,370,465
Unrealizable temporary differences	-	-	-	-
Realizable temporary differences	1,513,910	761,628	(94,927)	2,370,465
Tax rate (*1)	24.20%			27.50%
Net deferred income tax asset	366,366			651,878

(*1) Tax at the statutory income tax rate is calculated with the income tax rate of 11% on taxable income below ₩200 million, 22% on taxable income exceeding ₩200 million and below ₩20 billion, 24.2% on taxable income exceeding ₩20 billion and below ₩300 billion, 27.5% on taxable income exceeding ₩300 billion for the year ended December 31, 2017.

(*2) The income tax effect of equity method is reasonably estimated by considering the applicability and realizability of deferred income tax by each investee.

30. Income and expenses by categories of financial instruments

Interest income and expenses for the year ended December 31, 2018 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2018
Interest income:		
Deposits:		
Due from banks	₩	40,192
Due from other financial institutions		15,027
		55,219
Financial assets at FVTPL		127,347
Financial assets at FVOCI		399,078
Securities at amortized cost		203,334
Loans and other receivables at amortized cost		7,573,612
Others		9,771
		8,368,361
Interest expenses:		
Deposits due to customers		2,549,593
Debentures		428,390
Borrowings		138,535
Others		52,757
		3,169,275
Interest income, net	₩	5,199,086

Net gain or loss on financial assets at FVTPL for the year ended December 31, 2018 is as follows (Korean won in millions):

Classification			For the year ended December 31, 2018
Financial assets at FVTPL:			
Gain (loss) on valuation	Gain on valuation of financial assets at FVTPL	₩	93,089
	Loss on valuation of financial assets at FVTPL		(66,961)
			26,128
Gain (loss) on disposal	Gain on disposal of financial assets at FVTPL		259,240
	Loss on disposal of financial assets at FVTPL		(81,558)
			177,682
Gain (loss) on redemption	Gain on redemption of financial assets at FVTPL		11,356
	Loss on redemption of financial assets at FVTPL		(11,229)
			127
Dividend income	Dividend income of financial assets at FVTPL		4,079
Other income	Other income of financial assets at FVTPL		82,108
			290,124
Trading derivatives:			
Gain (loss) on valuation	Gain on valuation of trading derivatives		428,015
	Loss on valuation of trading derivatives		(458,682)
			(30,667)
Gain (loss) on disposal	Gain on disposal of trading derivatives		1,180,768
	Loss on disposal of trading derivatives		(1,248,633)
			(67,865)
			(98,532)
		₩	191,592

30. Income and expenses by categories of financial instruments (cont'd)

Net gain or loss on financial assets at FVOCI for the year ended December 31, 2018 is as follows (Korean won in millions):

	Classification	For the year ended December 31, 2018	
Gain (loss) on disposal	Gain on disposal of financial assets at FVOCI	₩	12,972
	Loss on disposal of financial assets at FVOCI		(21,551)
			(8,579)
Gain (loss) on redemption	Gain on redemption of financial assets at FVOCI		352
	Loss on redemption of financial assets at FVOCI		(519)
			(167)
Dividend income (*1)	Dividend income of financial assets at FVOCI		8,460
		₩	(286)

(*1) Dividend income arising from disposal of financial assets at FVOCI for the year ended December 31, 2018 amounted to ₩639 million.

The amount reclassified from accumulated other comprehensive income to gain (loss) at the time of removal by financial assets at FVOCI for the year ended December 31, 2018 is ₩(-)36,711 million.

Net gain or loss on financial assets at amortized cost for the year ended December 31, 2018 is as follows (Korean won in millions):

	Classification	For the year ended December 31, 2018	
Gain (loss) on disposal (*1)	Gain on disposal of loans at amortized cost	₩	4,255
	Loss on disposal of loans at amortized cost		(22,046)
		₩	(17,791)

(*1) For the purpose of credit risk management, certain loans at amortized cost were disposed of.

Provision of allowance for expected credit losses related gain (loss) on financial assets at FVOCI and financial assets at amortized cost for the year ended December 31, 2018 is as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	
Provision of allowance for expected credit losses of financial assets FVOCI	₩	(741)
Provision of allowance for expected credit losses of securities at amortized cost		(248)
Provision of allowance for expected credit losses of due from banks at amortized cost		(10,963)
Provision of allowance for expected credit losses of loans and receivables at amortized cost		(553,800)
	₩	(565,752)

31. Interest income and expenses

Interest income and expenses for the year ended December 31, 2017 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2017
Interest income:		
Deposits	₩	40,305
Due from banks		5,635
Due from other financial institutions		45,940
		5,907,997
Loans and other receivables		
Financial assets at FVTPL		115,466
AFS financial assets		267,954
HTM financial assets		170,803
Others		747,745
		7,255,905
Interest expenses:		
Deposits due to customers		2,094,607
Debentures		385,722
Borrowings		140,982
Others		46,670
		2,667,981
Interest income, net	₩	4,587,924

Interest income of impaired financial assets for the year ended December 31, 2017 is as follows (Korean won in millions):

Classification		For the year ended December 31, 2017
Loans	₩	67,733
Credit card		2,501
	₩	70,234

32. Gain (loss) on financial investments

Gain (loss) on trading financial instruments for the year ended December 31, 2017 is as follows (Korean won in millions):

Classification		For the year ended December 31, 2017	
Held-for-trading financial assets:			
Gain (loss) on valuation	Gain on valuation of held-for-trading financial assets	₩	19,629
	Loss on valuation of held-for- trading financial assets		(12,688)
			6,941
Gain (loss) on disposal	Gain on disposal of held-for-trading financial assets		53,545
	Loss on disposal of held-for-trading financial assets		(31,260)
			22,285
Gain (loss) on redemption	Gain on redemption of held-for-trading financial assets		2,506
	Loss on redemption of held-for-trading financial assets		(4,826)
			(2,320)
Dividend income	Dividend income of held-for-trading financial assets		2,678
			29,584
Trading derivatives:			1,029,329
Gain (loss) on valuation	Gain on valuation of trading derivatives		(976,696)
	Loss on valuation of trading derivatives		52,633
			1,750,115
Gain (loss) on disposal	Gain on disposal of trading derivatives		(1,633,023)
	Loss on disposal of trading derivatives		117,092
			169,725
		₩	199,309

32. Gain (loss) on financial investments (cont'd)

Gain (loss) on AFS financial assets for the year ended December 31, 2017 is as follows (Korean won in millions):

Classification			For the year ended December 31, 2017
AFS financial assets:			
Gain (loss) on disposal	Gain on disposal of AFS financial assets	₩	132,332
	Loss on disposal of AFS financial assets		(38,942)
			93,390
Gain (loss) on redemption	Gain on redemption of AFS financial assets		77,041
	Loss on redemption of AFS financial assets		(5,445)
			71,596
Dividend income	Dividend income of AFS financial assets		86,319
Impairment loss	Impairment loss on AFS financial assets		(54,667)
		₩	196,638

There was no gain or loss on HTM financial assets for the year ended December 31, 2017.

Dividend income from financial investments for the year ended December 31, 2017 is as follows (Korean won in millions):

Classification		For the year ended December 31, 2017
Held-for-trading financial instruments	₩	2,678
AFS financial assets		86,319
	₩	88,997

33. Impairment loss on financial assets

Impairment loss related to financial assets for the year ended December 31, 2017 is as follows (Korean won in millions):

Classification		For the year ended December 31, 2017
Loans and receivables	₩	754,044
AFS financial assets		54,667
	₩	808,711

34. Commission income and expenses

Commission income and expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Commission income:		
Deposits	₩ 1,390	₩ 1,295
Loans and credits	92,993	103,458
Foreign exchange	34,549	36,241
Credit card	356,547	328,535
Asset management	60,159	70,684
Agency business	152,298	173,073
Guarantee service	34,601	33,904
Trust service	133,246	103,177
Others	246,627	228,286
	1,112,410	1,078,653
Commission expenses:		
Loans and credits	25,329	22,850
Foreign exchange	9,433	9,059
Credit card	458,006	398,726
Agency business	24,314	25,792
Others	48,800	48,742
	565,882	505,169
Commission income, net	₩ 546,528	₩ 573,484

35. Other operating income and expenses

Other operating income and expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Other operating income:		
Gain on derivatives	₩ 11,712	₩ 8,528
Gain on fair value hedge	12,295	11,598
Mileage income	63,741	56,560
Gain from changes in foreign exchange rate	681,014	1,200,266
Transfer from other provisions	331	13,416
Others	52,519	58,942
	821,612	1,349,310
Other operating expenses:		
Loss on derivatives	10,129	10,172
Loss on fair value hedge	14,743	4,345
Mileage expenses	68,177	60,427
Loss from changes in foreign exchange rate	518,548	1,286,420
Fund contribution	494,159	460,369
Transfer to other provisions	13,238	92,039
Others	120,297	158,379
	1,239,291	2,072,151
	₩ (417,679)	₩ (722,841)

36. Employee benefits

Details of employee benefits for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Benefits:		
Employee benefits	₩ 1,279,278	₩ 1,231,716
Fringe benefits	426,794	389,882
	1,706,072	1,621,598
Retirement expenses	201,722	220,834
Termination benefits	76,991	48,701
	₩ 1,984,785	₩ 1,891,133

37. Other general and administrative expenses

Other general and administrative expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2018		For the year ended December 31, 2017
Tax and dues	₩	109,771	₩	101,099
Telecommunications and transportation		29,029		28,500
Supplies		23,540		19,965
Advertising		96,162		86,733
Utilities		24,947		27,134
Rental		121,151		120,361
Service contract		137,161		127,836
Others		109,673		101,594
	₩	651,434	₩	613,222

38. Other income and expenses

Other income and expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2018		For the year ended December 31, 2017
Other income:				
Gain on disposal of assets	₩	2,452	₩	17,309
Rent income		16,810		18,313
Miscellaneous income		27,874		31,114
Gain on disposal of investments in affiliates		210		5,652
Others		2,067		749
		49,413		73,137
Other expenses:				
Loss on disposal of assets		2,069		2,719
Impairment loss of assets		406		-
Expenses related to collecting receivables		6,535		7,053
Depreciation		4,643		4,789
Agricultural support project expenses (*1)		291,454		289,516
Expenses on restoration		1,410		974
Loss on disposal of investments in affiliates		-		1,107
Miscellaneous expenses		70,287		96,463
Others		1,177		6,074
		377,981		408,695
	₩	(328,568)	₩	(335,558)

(*1) Agricultural support project expenses, which is annually paid to the NACF in accordance with the *Agricultural Cooperative Act*, is computed by multiplying the imposed ratio to the average of operating revenue for the recent three years.

39. Earnings per share ("EPS")

Net income and weighted-average number of common shares used for computation are as follows (Korean won in millions, except per-share amounts):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Net income	₩ 1,222,569	₩ 652,073
Dividends on hybrid equity securities	(17,080)	(17,080)
Income attributable to common shares	1,205,489	634,993
Weighted-average number of common shares (in shares)	429,569,525	426,555,827
Basic and diluted earnings per share (in Korean won)	₩ 2,806	₩ 1,489

Diluted EPS equals to basic EPS as there is no dilution effect for the years ended December 31, 2018 and 2017.

40. Risk disclosure of financial instruments

The Group is exposed to various financial risks, such as credit, market and liquidity, associated with financial instruments.

For risk management, the Group has the risk management committee; the top legislative organization; the risk management council; the operational legislative organization; and other executive departments, such as risk management task force department, individual risk management department and independent monitoring department.

The risk management committee consists of within ten directors and deliberates and determines major issues, such as establishment of risk management policies and strategies and determination of risk tolerance limit. Some ordinary and continual issues can be deliberated and determined by the risk management council.

The Group retains various risk management policies and systems, such as establishment of risk tolerance limit, constant monitoring to maintain optimum level of risk and performance evaluation and capital distribution considering the risk. The conditions and results of risk management, including risk management and analysis, are periodically reported to risk management committee and council.

The risk management task force team establishes and manages the risk tolerance limit by business sector and accounting, and those risk measurement and analysis are monthly reported to the risk management council. Also, the Group regularly calculates and monitors the integrated risk to merge exposed risks into a single indicator and manage it comprehensively to be within the reasonable level of risk.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk

Credit risk refers to the risk that counterparty will default on its contractual obligations resulting in non-payment of the principal and interest to the payables and potential financial loss to the Group. Credit risk arises from deposits, securities, loans, off-balance accounts, etc. The purpose of credit risk management is to improve asset soundness and to secure the stable revenue by minimizing the probability of credit risk through the establishment and management of credit risk tolerance limit and the proper management of portfolios.

For credit risk management of loan process, the Group separated operation and underwriting process in the business process and monitored such various segments of its credit risk portfolio. The Group also established and operated a total exposure to credit risk limit management system to reduce concentration of credit risk by specific type of loans or borrowers to acceptable level and to diversify risk in the loan portfolio and manage risks in the individual exposure limit system. Furthermore, a credit risk is managed through an early alert system in the event of non-performance by counterparties and underwriting risk is managed by loan underwriting specialists to maintain the tight underwriting standards.

The Group separately measures expected and unexpected losses. Expected losses ("EL") are expected credit risks based on past experience and computed by multiplying exposure at default by probability of default and loss given default. Unexpected losses ("UL") mean maximum credit losses under certain probability deducting EL.

40.1.1 The Group's maximum level of exposures to credit risk

The Group's maximum level of exposures to credit risk as of December 31, 2018 and 2017 are summarized as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Deposits	₩ 4,260,854	₩ 5,971,890
Loans (*1)	227,622,202	213,674,580
Receivables	5,001,846	5,229,953
Debt securities	35,008,927	31,862,846
Derivative assets	464,700	1,031,312
Loans and credit commitments	78,249,585	60,178,800
Guarantees and endorsed bills	4,867,758	4,904,107
Financial guarantee contracts	1,794,796	3,097,933
	₩ 357,270,668	₩ 325,951,421

(*1) The loans above include the loans measured at FVTPL.

40.1.2 Classification of financial instruments based on credit risk

Measurement credit risk exposures of loans and receivables at amortized cost based on internal risk level as of December 31, 2018 are as follows (Korean won in millions):

Credit risk levels (Internal level)	December 31, 2018					
	Loans in Korean won (*1)			Loans in foreign currency (*1)		
	12-month	Significant increases	Impairment	12 months	Significant increases	Impairment
Rating 1~6	₩ 177,368,273	₩ 9,840,783	₩ -	₩ 960,740	₩ 322,595	₩ -
Rating 7	2,323,678	3,391,708	-	-	37,815	-
Rating 8	955,187	1,798,339	-	166	-	-
Rating 9~10	-	-	2,832,222	-	-	271,594
Unrated	2,223,109	-	298	-	-	-
	₩ 182,870,247	₩ 15,030,830	₩ 2,832,520	₩ 960,906	₩ 360,410	₩ 271,594

(*1) The above amounts of loans and receivables are not including the deferred LOF/LOC and present value discounts.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.2 Classification of financial instruments based on credit risk (cont'd)

	December 31, 2018			
	Others (*1 and *2)			
Credit risk levels (Internal level)	12-month	Significant increases	Impairment	Allowance
Rating 1~6	₩ 22,848,376	₩ 1,124,567	₩ -	₩ (373,212)
Rating 7	140,395	295,305	-	(125,974)
Rating 8	127,185	205,617	-	(155,237)
Rating 9~10	-	-	288,910	(846,595)
Unrated	826,123	725,178	43,430	(134,320)
	₩ 23,942,079	₩ 2,350,667	₩ 332,340	₩ (1,635,338)

(*1) The above amounts of loans and receivables are not including the deferred LOF/LOC and present value discounts.
(*2) Receivables are not included in others.

Loans are classified as overdue when a counterparty cannot pay the principal and interest on the contractual payment date. Impairment occurs when the impairment event has objective evidence of impairment and affects estimated future cash flow. The Group defines the objective evidence of impairment as follows; Significant financial difficulty of obligor, nonfulfillment of obligation, bankruptcy, financial restructuring, etc.

Details of impaired loans as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017				
Classification	Corporate (*1)	Retail (*1)	Others (*1 and *2)	Total	Allowance (*1)
By individual assessment:					
Rating 1~6	₩ 171,628	₩ -	₩ -	₩ 171,628	₩ (32,355)
Rating 7	99,789	-	-	99,789	(4,623)
Rating 8	-	-	-	-	-
Rating 9~10	1,691,958	-	-	1,691,958	(776,378)
	1,963,375	-	-	1,963,375	(813,356)
By collective assessment:					
Rating 1~6	-	-	-	-	-
Rating 7	-	-	-	-	-
Rating 8	-	-	-	-	-
Rating 9~10	208,786	382,202	-	590,988	(255,143)
	208,786	382,202	-	590,988	(255,143)
	₩ 2,172,161	₩ 382,202	₩ -	₩ 2,554,363	₩ (1,068,499)

(*1) These amounts of loans and total allowance for expected credit losses have not reflected deferred LOF/LOC.
(*2) Receivables are not included in others.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.2 Classification of financial instruments based on credit risk (cont'd)

Details of loans, neither overdue nor impaired, as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017									
Classification	Corporate (*1)		Retail (*1)		Others (*1 and *2)		Total		Allowance (*1)	
Rating 1~6	₩	52,267,055	₩	120,875,248	₩	34,708,918	₩	207,851,221	₩	(332,210)
Rating 7		764,097		772,194		151,002		1,687,293		(41,528)
Rating 8		28,331		-		59,910		88,241		(10,179)
Rating 9~10		-		-		-		-		-
Unrated (*3)		40,345		140,256		1,160,893		1,341,494		(1,137)
	₩	53,099,828	₩	121,787,698	₩	36,080,723	₩	210,968,249	₩	(385,054)

(*1) These amounts of loans and total allowance for expected credit losses have not reflected deferred LOF/LOC.
(*2) Receivables are not included in others.
(*3) Loans made without credit evaluation of borrowers, such as loans to public institutions and overseas subsidiaries, and loans of which total amounts are guaranteed by public institutions are classified as unrated.

Details of loans, overdue but not impaired, as of December 31, 2017 are as follows (Korean won in millions):

	December 31, 2017									
Classification	Corporate (*1)		Retail (*1)		Others (*1 and *2)		Total		Allowance (*1)	
Rating 1~6	₩	159,373	₩	226,916	₩	12,668	₩	398,957	₩	(7,332)
Rating 7		104,966		783,677		-		888,643		(26,711)
Rating 8		8,499		100,292		-		108,791		(23,631)
Rating 9~10		-		-		-		-		-
Unrated (*3)		663		57		51		771		(5)
	₩	273,501	₩	1,110,942	₩	12,719	₩	1,397,162	₩	(57,679)

(*1) These amounts of loans and total allowance for expected credit losses have not reflected deferred LOF/LOC.
(*2) Receivables are not included in others.
(*3) Loans made without credit evaluation of borrowers, such as loans to public institutions and overseas subsidiaries, and loans of which total amounts are guaranteed by public institutions are classified as unrated.

Aging analysis of loans, overdue but not impaired, as of December 31, 2017 is as follows (Korean won in millions):

	December 31, 2017									
Classification	Corporate (*1)		Retail (*1)		Others (*1 and *2)		Total		Allowance (*1)	
Less than 30 days	₩	233,856	₩	969,868	₩	12,716	₩	1,216,440	₩	(34,435)
More than 30 days and less than 60 days		28,310		87,177		-		115,487		(13,482)
More than 60 days and less than 90 days		11,335		53,897		3		65,235		(9,762)
	₩	273,501	₩	1,110,942	₩	12,719	₩	1,397,162	₩	(57,679)

(*1) These amounts of loans and total allowance for expected credit losses have not reflected deferred LOF/LOC.
(*2) Receivables are not included in others.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.2 Classification of financial instruments based on credit risk (cont'd)

The level of exposures to credit risk of loan commitment and financial guarantee contract based on internal risk level as of December 31, 2018 are summarized as follows (Korean won in millions):

	December 31, 2018					
	Loan commitment			Financial guarantee contract		
Credit risk levels (internal level)	12-month	Significant increases	Impairment	12-month	Significant increases	Impairment
Rating 1~6	₩ 66,140,536	₩ 7,644,499	₩ -	₩ 1,775,124	₩ 18,449	₩ -
Rating 7	369,877	583,434	-	-	329	-
Rating 8	163,384	310,723	-	-	-	-
Rating 9~10	-	-	463,866	-	-	894
Unrated	2,565,785	3,791	3,690	-	-	-
	₩ 69,239,582	₩ 8,542,447	₩ 467,556	₩ 1,775,124	₩ 18,778	₩ 894

The Group's maximum level of exposures to credit risk of debt securities as of December 31, 2018 is summarized as follows (Korean won in millions):

	December 31, 2018					
		Financial assets at FVOCI				
Credit risk levels (external level)	Financial assets at FVTPL	12-month	Significant increases	Impairment	Total	Allowance
AAA	₩ 3,591,127	₩ 18,108,453	₩ -	₩ -	₩ 18,108,453	₩ (565)
AA+~AA-	2,369,910	1,446,227	-	-	1,446,227	(712)
A~BBB	15,000	142,107	-	-	142,107	(108)
	₩ 5,976,037	₩ 19,696,787	₩ -	₩ -	₩ 19,696,787	₩ (1,385)

	December 31, 2018				
	Securities at amortized cost				
Credit risk levels (external level)	12-month	Significant increases	Impairment	Total	Allowance
AAA	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235	₩ (1,132)
AA+~AA-	-	-	-	-	-
A~BBB	-	-	-	-	-
	₩ 9,337,235	₩ -	₩ -	₩ 9,337,235	₩ (1,132)

	December 31, 2017			
Classification	Held-for-trading financial assets	AFS financial assets	HTM financial assets	Total
AAA	₩ 3,160,056	₩ 16,884,282	₩ 8,211,407	₩ 28,255,745
AA+~AA-	2,457,911	992,082	20,000	3,469,993
A+~BBB	25,002	112,106	-	137,106
Under BBB-	-	-	-	-
Less than BB+	-	-	-	-
	₩ 5,642,969	₩ 17,988,470	₩ 8,231,407	₩ 31,862,847

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.3 Percentage of allowance for expected credit losses of financial instruments

As of December 31, 2018 the percentage of allowance for expected credit losses is as follows (Korean won in millions):

	December 31, 2018							
	Financial assets at		Financial assets at amortized cost					
Classification	FVOCI		Due from banks		Securities		Loans (*1)	
Total amount	₩	19,696,787	₩	4,278,801	₩	9,337,235	₩	228,951,594
Allowance for expected credit losses		1,385		17,947		1,132		1,635,338
Ratio (%)		0.01		0.42		0.01		0.71

(*1) Receivables and deferred LOF/LOC are not included in the above total amounts of loans.

As of December 31, 2017 the percentage of allowance of loans and receivables to total amounts of loans and receivables is as follows (Korean won in millions):

Classification	December 31, 2017	
Total amount of loans and receivables (*1)	₩	220,486,076
Allowance		1,560,288
Ratio (%)		0.71

(*1) Receivables and deferred LOF/LOC are included in the total amounts of loans and receivables.

40.1.4 Classification of financial instruments by industry, country and customer

Loans classified by industry as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018									
Industry	Loans in Korean won (*1)		Loans in foreign currency (*1)		Others (*1 and *2)		Total		Allowance (*1)	
Manufacturing	₩	18,988,061	₩	386,650	₩	2,616,942	₩	21,991,653	₩	(300,318)
Construction		3,563,555		3,504		113,566		3,680,625		(161,413)
Retail and wholesale		13,786,356		60,157		792,673		14,639,186		(97,434)
Finance and insurance		2,779,287		39,693		374,586		3,193,566		(26,618)
Member cooperatives		16,369,860		-		1,614,256		17,984,116		(59,504)
Others		145,246,478		1,102,906		21,113,064		167,462,448		(990,051)
	₩	200,733,597	₩	1,592,910	₩	26,625,087	₩	228,951,594	₩	(1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

	December 31, 2017				
Industry	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Manufacturing	₩ 14,789,938	₩ 390,661	₩ 2,675,474	₩ 17,856,073	₩ (411,025)
Construction	3,337,944	6,603	109,349	3,453,896	(115,673)
Retail and wholesale	4,380,515	67,447	675,913	5,123,875	(72,459)
Finance and insurance	3,088,730	-	393,171	3,481,901	(7,573)
Member cooperatives	15,500,464	-	1,472,695	16,973,159	(23,073)
Others	150,756,195	981,265	16,293,410	168,030,870	(881,429)
	₩ 191,853,786	₩ 1,445,976	₩ 21,620,012	₩ 214,919,774	₩ (1,511,232)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Acceptances and guarantees (including endorsed bills) by industry as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Manufacturing	₩ 2,027,905	₩ 1,515,474	₩ -	₩ 3,543,379	69.51
Construction	67,764	24,234	-	91,998	1.80
Retail and wholesale	257,103	344,979	19,307	621,389	12.19
Finance and insurance	109,665	29,919	-	139,584	2.74
Others	304,839	396,171	-	701,010	13.76
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

	December 31, 2017				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Manufacturing	₩ 2,287,395	₩ 1,356,928	₩ 343	₩ 3,644,666	67.15
Construction	75,314	42,553	-	117,867	2.17
Retail and wholesale	369,949	388,711	4,829	763,489	14.07
Finance and insurance	85,939	9,042	-	94,981	1.75
Others	359,456	447,484	-	806,940	14.86
	₩ 3,178,053	₩ 2,244,718	₩ 5,172	₩ 5,427,943	100.00

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Portfolio of financial assets at FVTPL and FVOCI and securities at amortized cost by industry as of December 31, 2018 is as follows (Korean won in millions):

Classification	Financial assets at FVTPL		Financial assets at FVOCI		Securities at amortized cost	
	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Government and government-sponsored institutions	₩ 2,251,742	22.18	₩ 3,887,984	19.37	₩ 3,311,007	35.46
Finance and insurance	6,956,125	68.52	15,138,462	75.42	5,865,091	62.82
Manufacturing	262,846	2.59	348,801	1.74	-	-
Others	681,577	6.71	697,834	3.47	160,005	1.72
	₩ 10,152,290	100.00	₩ 20,073,081	100.00	₩ 9,336,103	100.00

Portfolio of AFS and HTM financial assets by industry as of December 31, 2017 is as follows (Korean won in millions):

Classification	Held-for-trading financial assets		AFS and HTM financial assets	
	Book value	Ratio (%)	Book value	Ratio (%)
Government and government-sponsored institutions	₩ 1,915,485	32.11	₩ 6,136,245	20.99
Finance and insurance	3,060,590	51.31	13,101,196	44.81
Manufacturing	374,091	6.27	120,142	0.41
Others	615,295	10.31	9,880,636	33.79
	₩ 5,965,461	100.00	₩ 29,238,219	100.00

Loans classified by country as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Country	December 31, 2018				
	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Korea	₩ 200,733,597	₩ 887,675	₩ 22,991,737	₩ 224,613,009	₩ (1,572,609)
China	-	-	378,377	378,377	(6,599)
Japan	-	-	239,363	239,363	(5,267)
USA	-	96,413	790,318	886,731	(10,085)
Indonesia	-	39,256	133,105	172,361	(4,722)
Hong Kong	-	37,755	160,895	198,650	(3,785)
Panama	-	85,885	9,149	95,034	(4,477)
Singapore	-	-	8,438	8,438	(72)
Others	-	445,926	1,913,705	2,359,631	(27,722)
	₩ 200,733,597	₩ 1,592,910	₩ 26,625,087	₩ 228,951,594	₩ (1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

	December 31, 2017				
Country	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Korea	₩ 191,853,786	₩ 888,232	₩ 18,050,281	₩ 210,792,299	₩ (1,431,222)
China	-	20,357	572,581	592,938	(14,625)
Japan	-	-	252,587	252,587	(8,999)
USA	-	56,977	611,261	668,238	(8,406)
Indonesia	-	48,869	31,076	79,945	(854)
Hong Kong	-	35,410	451,822	487,232	(16,125)
Panama	-	114,876	658	115,534	(2,132)
Singapore	-	-	9,327	9,327	(67)
Others	-	281,255	1,640,419	1,921,674	(28,802)
	₩ 191,853,786	₩ 1,445,976	₩ 21,620,012	₩ 214,919,774	₩ (1,511,232)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Acceptances and guarantees (including endorsed bills) by country as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Korea	₩ 878,303	₩ 617,176	₩ -	₩ 1,495,479	29.34
China	33,944	211,051	2,460	247,455	4.85
Japan	94,868	53,941	-	148,809	2.92
USA	75,738	293,596	-	369,334	7.25
Indonesia	7,798	51,958	166	59,922	1.18
Hong Kong	-	544	-	544	0.01
Panama	23,635	3,417	-	27,052	0.53
Singapore	137,236	7,677	-	144,913	2.84
Others	1,515,754	1,071,417	16,681	2,603,852	51.08
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

	December 31, 2017				
Classification	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Korea	₩ 860,178	₩ 381,758	₩ -	₩ 1,241,936	22.88
China	51,243	259,585	4,654	315,482	5.81
Japan	79,935	113,564	-	193,499	3.56
USA	93,449	288,839	-	382,288	7.04
Indonesia	10,568	31,032	-	41,600	0.77
Hong Kong	880	306	-	1,186	0.02
Panama	19,422	19,422	-	38,844	0.72
Singapore	77,398	16,170	-	93,568	1.72
Others	1,984,980	1,134,042	518	3,119,540	57.48
	₩ 3,178,053	₩ 2,244,718	₩ 5,172	₩ 5,427,943	100.00

Portfolio of financial assets at FVTPL and FVOCI and securities at amortized cost in each country as of December 31, 2018 is as follows (Korean won in millions):

Classification	Financial assets at FVTPL		Financial assets at FVOCI		Securities at amortized cost	
	Book value	Ratio (%)	Book value	Ratio (%)	Book value	Ratio (%)
Korea	₩ 10,115,333	99.64	₩ 19,818,324	98.73	₩ 9,336,103	100.00
China	-	-	64,150	0.32	-	-
USA	29,807	0.29	72,674	0.36	-	-
Japan	-	-	16,493	0.08	-	-
Others	7,150	0.07	101,441	0.51	-	-
	₩ 10,152,290	100.00	₩ 20,073,082	100.00	₩ 9,336,103	100.00

Portfolio of held-for-trading financial assets, AFS and HTM financial assets in each country as of December 31, 2017 is as follows (Korean won in millions):

Classification	Held-for-trading financial assets		AFS and HTM financial assets	
	Book value	Ratio (%)	Book value	Ratio (%)
Korea	₩ 5,965,461	100.00	₩ 28,956,350	99.04
China	-	-	131,851	0.45
USA	-	-	87,208	0.30
Japan	-	-	16,155	0.06
Others	-	-	46,655	0.15
	₩ 5,965,461	100.00	₩ 29,238,219	100.00

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Loans classified by customer as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Customer	December 31, 2018				
	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Household	₩ 88,337,677	₩ 34,597	₩ 3,589,494	₩ 91,961,768	₩ (303,265)
Private business	50,583,160	87,108	1,258,343	51,928,611	(152,054)
Corporate	35,779,999	1,444,595	4,522,781	41,747,375	(1,091,052)
Member cooperatives	16,369,860	-	1,614,256	17,984,116	(59,493)
Financial institution	1,422,487	22,362	15,466,251	16,911,100	(25,654)
Government and others	8,240,414	4,248	173,962	8,418,624	(3,820)
	₩ 200,733,597	₩ 1,592,910	₩ 26,625,087	₩ 228,951,594	₩ (1,635,338)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Customer	December 31, 2017				
	Loans in Korean won (*1)	Loans in foreign currency (*1)	Others (*1 and *2)	Total	Allowance (*1)
Household	₩ 81,501,216	₩ 14,847	₩ 3,257,582	₩ 84,773,645	₩ (281,743)
Private business	45,762,357	85,684	1,122,969	46,971,010	(142,550)
Corporate	35,502,208	1,341,466	4,621,538	41,465,212	(1,047,255)
Member cooperatives	15,500,464	-	1,472,695	16,973,159	(23,073)
Financial institution	1,325,675	-	10,985,941	12,311,616	(13,676)
Government and others	12,261,866	3,979	159,287	12,425,132	(2,935)
	₩ 191,853,786	₩ 1,445,976	₩ 21,620,012	₩ 214,919,774	₩ (1,511,232)

(*1) Deferred LOF/LOC is not included.
(*2) Receivables are not included.

Acceptances and guarantees (including endorsed bills) by customer as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018				
	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Corporate	₩ 2,650,332	₩ 1,897,891	₩ 19,307	₩ 4,567,530	89.61
Household	200	-	-	200	0.01
Private business	15,032	7,504	-	22,536	0.44
Member cooperatives	594	36,379	-	36,973	0.73
Financial institutions	39,038	1,436	-	40,474	0.79
Government and others	62,080	367,567	-	429,647	8.42
	₩ 2,767,276	₩ 2,310,777	₩ 19,307	₩ 5,097,360	100.00

40. Risk disclosure of financial instruments (cont'd)

40.1 Credit risk (cont'd)

40.1.4 Classification of financial instruments by industry, country and customer (cont'd)

Classification	December 31, 2017				
	Confirmed acceptances and guarantees	Unconfirmed acceptances and guarantees	Bills endorsed	Total	Ratio (%)
Corporate	₩ 3,056,160	₩ 1,795,347	₩ 5,172	₩ 4,856,679	89.48
Household	915	-	-	915	0.02
Private business	12,145	12,180	-	24,325	0.45
Member cooperatives	544	8,286	-	8,830	0.16
Financial institutions	34,665	535	-	35,200	0.65
Government and others	73,624	428,370	-	501,994	9.24
	₩ 3,178,053	₩ 2,244,718	₩ 5,172	₩ 5,427,943	100.00

40.1.5 Financial impact of collateral on loans

The extent of reducing credit risk due to collateral and other credit enhancements for credit-impaired financial assets as of December 31, 2018 is as follows (Korean won in millions):

Classification	December 31, 2018
Loans	₩ 436,284
Commitment to loans and credit	58,296
Financial guarantee and Notes payable	134
	₩ 494,714

The extent of reducing credit risk due to collateral and other credit enhancements as of December 31, 2017 is as follows (Korean won in millions):

Classification	December 31, 2017
Loans	₩ 2,124,094
Receivables	52,056
Acceptances and guarantees	10,941
Loans and credit commitment	10,384
	₩ 2,197,475

40.1.6 Assets acquired by exercising security rights

Details of assets acquired by exercising security rights as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Property and equipment (*1)	₩ 15	₩ 15

(*1) Property and equipment are presented as non-current assets classified as held for sale in the statements of financial position.

40. Risk disclosure of financial instruments (cont'd)

40.2 Market risk

Market risk is the risk of loss in the value of portfolio and financial instruments caused by adverse movements in market variables, such as interest rates, stock price, currency exchange rate and etc. The Group manages and divides market risk into two risks, generated through trading position or non-trading position. The trading market risk that the Group is mainly exposed to is the interest rate risk arising from the adverse change in the value of debt instruments and interest rate-embedded securities due to changes in market interest rate. The Group is additionally exposed to stock price, foreign exchange rate risk and commodity price risk arising from equity securities, debt securities and derivatives. The Group is exposed to the interest rate risk and liquidity risk.

40.2.1 Trading position

a) The trading position in accordance with 'Regulation of Trading Policy' is subject to the trading market management. The basic requirements of the trading position are as follows:

- The target position is not restricted to the sale. It is evaluated daily at fair value and should be able to be a hedge against important risks in the market.
- The trading position should be controlled by the instruction of the trading policy and managed by a separate trading department.
- The target position is operated in accordance with a documented trading strategy and the limit of trading should be controlled.
- Without the prior approval, a professional dealer or an operation division for the target position should be authorized to handle transactions within the predetermined limit.
- The target position for the risk management should be periodically reported to the management.

b) Details of risk management by risk type

① Interest rate risk

Interest rate risk from trading positions arises mainly from the trades of Korean won-denominated debt securities. As the financial instruments in the trading accounts are marked to market daily, the Group manages the interest rate risk related to its trading accounts using market-value-based tools used to measure risk, such as Value at Risk (VaR) and sensitivity analysis.

② Equity price risk

Equity price risk arises from the Group's equity trading portfolio in Korean won since the Group has no trading position of equity securities denominated in foreign currencies. The equity trading portfolio in Korean won consists of exchange-traded stocks and nearest month or second nearest-month futures contracts under the strict restrictions considering diversification as well as stop-loss limits and position limits.

③ Foreign exchange rate risk

Foreign exchange rate risk arises when the Group has assets and liabilities that are denominated in currencies other than Korean 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 and Euro are typically accounted for the majority of the Group's foreign currency assets and liabilities.

c) Measurement of market risk occurring at the trading position

① VaR measurement

VaR is a statistically estimated maximum amount of loss that could occur in a holding (or trading) period for a given confidence interval due to changes in market variables, such as interest rate, stock price, exchange rate and commodity price. The Group monitors risk arising from trading activities in business sectors and departments, and measures market risk of all the trading assets and liabilities in both Korean won and foreign currencies using VaR.

40. Risk disclosure of financial instruments (cont'd)

40.2 Market risk (cont'd)

40.2.1 Trading position (cont'd)

The Group calculates VaR using historical simulation model when the Group measures market risk arising from the trading position. Under historical simulation model, VaR is calculated as sublevel (1 - confidence level) of a normal distribution of risk resulting from revaluation of loan portfolio applying a scenario of actual profit ratio movements for the past 250 business days to currently holding loan portfolio. The Group discloses 10-day VaR measured at 99% confidence level.

VaR is a commonly used market risk measurement technique with the following limitations. VaR estimates possible loss 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 loss can be different depending on the changes in assumptions made at the time of the calculation. In addition, the time periods used for the model, generally one or 10 days are assumed 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.

② Back testing

The Group conducts back testing of results against daily actual gain (loss) and expected gain (loss) on a daily basis. By performing back testing, the Group checks the validity of the model and any loss that might exceed a predetermined 99% confidence level.

③ Stress testing

The Group conducts stress testing to assess its market risk exposure to abnormal market fluctuations, such as changes in interest rate, equity price, exchange rate and implied volatility of derivatives, subject to the changes in the value of the portfolio. The Group uses not only hypothetical scenarios as a main scenario, but also historical scenarios as a supplementary analysis. Stress testing is conducted on a monthly basis.

The Group calculates VaR based on its consolidated financial statements and the following table shows average VaR, maximum VaR and minimum VaR at a 99% confidence level of interest rate risk, stock price risk and foreign exchange rate risk, commodity price risk and other risk for trading positions with a 10-day holding period as of December 31, 2018 and 2017. (Korean won in millions):

	December 31, 2018			
Classification	Max	Min	Average	December 31, 2018
Interest rate risk	₩ 30,944	₩ 15,974	₩ 27,687	₩ 16,431
Stock price risk	23,983	5,481	16,142	8,034
Foreign currency risk	5,372	117	1,578	490
Other risk	17	-	3	3
Total risk (*1)	31,153	15,110	25,897	15,763

	December 31, 2017			
Classification	Max	Min	Average	December 31, 2017
Interest rate risk	₩ 40,838	₩ 25,076	₩ 36,945	₩ 26,527
Stock price risk	7,245	3,882	5,136	6,512
Foreign currency risk	4,986	326	1,078	809
Other risk	3	-	2	1
Total risk (*1)	42,081	20,041	36,073	20,576

(*1) Total VaR is computed taking into consideration the correlations of the risk factors.

40. Risk disclosure of financial instruments (cont'd)

40.2 Market risk (cont'd)

40.2.2 Non-trading positions

Non-trading positions refer to all positions, excluding trading positions. The Group's principal market risk from non-trading activities is interest rate risk. Interest rate risk refers to the risk of exposure to loss from reduction of net interest income or net asset value as a result of interest rate changes due to mismatched maturities between interest earning assets and interest-bearing liabilities or mismatched interest rate change periods.

The subject for interest rate risk measurement includes non-trading positions, such as interest-bearing assets, interest-bearing liabilities, and transaction of derivatives held for hedging, and others among off-balance transactions. The Group has measured and managed the interest rate risk, which affects the Group's earnings and the economic value of the Group's net assets. From the Group's earnings perspective, the Group has measured and managed interest rate risk through interest rate gap, interest rate accumulated gap ratio, net interest income simulations, interest rate EaR ("Earning at Risk") and others to manage changes in net interest income as a result of interest rate changes. With respect to the economic value of the Group's net assets, the Group has measured and managed interest rate risk through duration gap, net asset value simulations, interest rate VaR and others to manage changes in the value of net assets of future cash flow as a result of interest rate changes.

The objective of interest risk management is to manage changes in interest income at a sustainable level due to change in interest rates, and is to manage stable net asset value through effective management of interest-earning asset and interest-bearing liabilities. The limits for interest rate accumulated gap ratio, interest rate EaR, interest rate VaR and others are approved annually by the risk management committee for interest rate risk management.

Interest rate VaR for non-trading portfolios at December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Interest rate VaR	₩ 100,382	₩ 66,266

40.3 Liquidity risk

40.3.1 General

Liquidity risk is the risk of loss that the Group is unable to meet its payment obligations arising from financial liabilities as they fall due or raise funds with high interest rates and unfavorable disposal of securities to solve the shortage of funds or facing inability to pay due to unexpected cash flows.

The cash flows disclosed in maturity analysis do not correspond to the amounts of discounted principals and interest payments at the contracts in the consolidated statements of financial position.

40.3.2 Liquidity risk management

The Group classifies and discloses contractual maturity of all financial liabilities in relation to liquidity risk into six categories, such as less than one month, one month to three months, three to six months, six months to one year, one year to five years and more than five years. The Group manages liquidity risk by analyzing cash flows of the liabilities in the groups of homogeneous accounts under the appropriate criteria (remaining contractual maturity, contract period, etc.).

40. Risk disclosure of financial instruments (cont'd)

40.3 Liquidity risk (cont'd)

40.3.3 The term structure of financial liabilities

The term structures of liabilities as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018						
Classification (*1 and *2)	Less than 1 month	1 month~ 3 months	3 months~ 6 months	6 months~ 1 year	1 year~ 5 years	More than 5 years	Total
Deposits due to customers	₩ 104,870,767	₩ 25,662,531	₩ 31,389,839	₩ 53,986,950	₩ 8,894,334	₩ 2,060,262	₩ 226,864,683
Financial liabilities at FVTPL	-	2,525	-	10,751	-	-	13,276
Trading derivative liabilities	479,800	-	-	-	-	-	479,800
Hedging derivative liabilities	2,497	4,291	(54)	10,354	26,091	-	43,179
Borrowings	3,413,970	428,001	769,206	1,211,905	4,405,666	1,323,732	11,552,480
Debentures	219,274	1,110,439	3,013,819	2,278,396	9,186,921	2,214,614	18,023,463
Other financial liabilities	12,972,955	3,010	7,443	52,624	10,454	-	13,046,486
	₩ 121,959,263	₩ 27,210,797	₩ 35,180,253	₩ 57,550,980	₩ 22,523,466	₩ 5,598,608	₩ 270,023,367

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

	December 31, 2017						
Classification (*1 and *2)	Less than 1 month	1 month~ 3 months	3 months~ 6 months	6 months~ 1 year	1 year~ 5 years	More than 5 years	Total
Deposits due to customers	₩ 100,830,361	₩ 22,062,473	₩ 31,150,320	₩ 42,377,074	₩ 7,782,430	₩ 2,188,778	₩ 206,391,436
Held-for-trading financial liabilities	-	20,269	10,033	21,435	-	-	51,737
Trading derivative liabilities	967,629	-	-	-	-	-	967,629
Hedging derivative liabilities	(2,295)	(538)	99	2,324	27,810	-	27,400
Borrowings	4,227,127	445,487	591,246	1,262,473	4,348,097	1,614,516	12,488,946
Debentures	31,337	2,588,521	3,104,247	4,204,529	7,484,561	2,799,287	20,212,482
Other financial liabilities	12,474,518	5,190	3,638	41,517	18,628	42	12,543,533
	₩ 118,528,677	₩ 25,121,402	₩ 34,859,583	₩ 47,909,352	₩ 19,661,526	₩ 6,602,623	₩ 252,683,163

(*1) Cash flows of principal and interest are included.
(*2) Unmatured instruments such as deposits that are contractually repayable on demand or on short notice are classified under the 'Less than 1 month' category.

40. Risk disclosure of financial instruments (cont'd)

40.3 Liquidity risk (cont'd)

40.3.4 Maturity analysis of off-balance accounts

Guarantees and loan commitments, including guarantees for debenture issuance and guarantees for loans, which are financial guarantees provided by the Group, have expiration dates. However, under the term of the guarantees and loan commitments, timely payment shall be made upon demand by the counterparty. Details of off-balance accounts as of December 31, 2018 and 2017 are as follows (Korea won in millions):

Classification	December 31, 2018	December 31, 2017
Loan commitment (*1)	₩ 80,981,910	₩ 62,752,897
Guarantees and endorsed bills (*1)	5,097,360	5,427,943
	₩ 86,079,270	₩ 68,180,840

(*1) The amount of financial guarantee contracts is included. The total financial guarantee contracts amount to ₩1,794,796 million and ₩3,097,933 million as of December 31, 2018 and 2017, respectively.

40.4 Currency risk

Currency risk is a risk incurred when the fair value of a financial instrument or value of future cash flows fluctuates due to the changes in foreign exchange rates. Currency risk does not arise from the financial instruments expressed in the functional currency or in non-monetary items measured by using the historical foreign exchange rates. In order to establish the stop loss and limits, the Group manages the foreign exchange net exposure amount of the trading and non-trading portfolios by each currency.

Significant assets and liabilities denominated in foreign currencies as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018					
Classification	USD	JPY	EUR	CNY	Others	Total
Assets:						
Cash and due from banks	₩ 1,757,247	₩ 172,792	₩ 163,761	₩ 57,814	₩ 114,531	₩ 2,266,145
Financial assets at FVTPL	263,652	-	-	-	-	263,652
Derivative assets	27,190	-	-	-	-	27,190
Financial assets at FVOCI	671,409	-	273	-	-	671,682
Financial loans at amortized cost	6,084,636	246,374	264,961	6,520	55,994	6,658,485
Other financial assets	1	-	-	-	223	224
	₩ 8,804,135	₩ 419,166	₩ 428,995	₩ 64,334	₩ 170,748	₩ 9,887,378
Liabilities:						
Deposits	₩ 2,931,675	₩ 104,054	₩ 235,532	₩ 22,581	₩ 101,577	₩ 3,395,419
Derivative liabilities	54,738	-	-	-	-	54,738
Borrowings	2,493,025	75,822	63,429	701	6,687	2,639,664
Debentures	2,314,071	-	-	-	-	2,314,071
Other financial liabilities	633,532	19,842	112,087	1,119	25,137	791,717
	₩ 8,427,041	₩ 199,718	₩ 411,048	₩ 24,401	₩ 133,401	₩ 9,195,609

40. Risk disclosure of financial instruments (cont'd)

40.4 Currency risk (cont'd)

	December 31, 2017					
Classification	USD	JPY	EUR	CNY	Others	Total
Assets:						
Cash and due from banks	₩ 1,030,771	₩ 126,744	₩ 120,148	₩ 23,775	₩ 240,235	₩ 1,541,673
Derivative assets	18,693	-	-	-	-	18,693
AFS financial assets	687,410	-	272	-	-	687,682
Loans	5,095,435	231,537	119,503	3,193	20,082	5,469,750
Receivables	589,182	8,618	10,373	-	13,311	621,484
	₩ 7,421,491	₩ 366,899	₩ 250,296	₩ 26,968	₩ 273,628	₩ 8,339,282
Liabilities:						
Deposits	₩ 2,795,357	₩ 152,346	₩ 153,714	₩ 18,251	₩ 73,062	₩ 3,192,730
Derivative liabilities	36,796	-	-	-	-	36,796
Borrowings	1,769,276	68,815	65,854	2,244	11,412	1,917,601
Debentures	2,005,037	94,911	-	-	24,019	2,123,967
Other financial liabilities	693,150	16,447	35,876	161	70,060	815,694
	₩ 7,299,616	₩ 332,519	₩ 255,444	₩ 20,656	₩ 178,553	₩ 8,086,788

40.5 Offsetting financial assets and liabilities

Details of financial assets that are set off and subject to an enforceable master netting arrangement or similar agreement as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018					
				Non offsetting amount		
Classification	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the consolidated statement of financial position	Financial instruments	Cash collateral received	Net amounts
Derivative assets	₩ 464,700	₩ -	₩ 464,700	₩ 256,075	₩ 14,837	₩ 193,788
Loans-bonds purchased under resale agreements	13,885,700	-	13,885,700	13,885,700	-	-
Receivables-receivable spot exchange	310,940	-	310,940	310,872	-	68
Receivables-receivable spot exchange in foreign currency	721,717	-	721,717	486,431	-	235,286
Receivables-domestic exchange settlement debits	10,033,158	9,396,901	636,257	-	-	636,257
Receivables-intercompany receivables	1,739,195	131	1,739,064	-	-	1,739,064
	₩ 27,155,410	₩ 9,397,032	₩ 17,758,378	₩ 14,939,078	₩ 14,837	₩ 2,804,463

40. Risk disclosure of financial instruments (cont'd)

40.5 Offsetting financial assets and liabilities (cont'd)

Classification	December 31, 2017					
	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities to be set off	Net amounts of financial assets presented in the consolidated statement of financial position	Non offsetting amount: Financial instruments	Non offsetting amount: Cash collateral received	Net amounts
Derivative assets	₩ 990,145	₩ -	₩ 990,145	₩ 474,430	₩ 124,122	₩ 391,593
Loans-bonds purchased under resale agreements	10,403,500	-	10,403,500	10,403,500	-	-
Receivables-receivable spot exchange	402,941	-	402,941	402,895	-	46
Receivables-receivable spot exchange in foreign currency	550,429	-	550,429	446,149	-	104,280
Receivables-domestic exchange settlement debits	11,484,758	9,634,137	1,850,621	-	-	1,850,621
	₩ 23,831,773	₩ 9,634,137	₩ 14,197,636	₩ 11,726,974	₩ 124,122	₩ 2,346,540

Details of financial liabilities that are set off and subject to an enforceable master netting arrangement or similar agreement as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018					
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the consolidated statement of financial position	Non offsetting amount: Financial instruments	Non offsetting amount: Cash collateral provided	Net amounts
Derivative liabilities	₩ 521,750	₩ -	₩ 521,750	₩ 256,075	₩ 12,612	₩ 253,063
Borrowings-bonds sold under repurchase agreements	769,600	-	769,600	769,600	-	-
Other financial liabilities-payable spot exchange	486,517	-	486,517	486,431	-	86
Other financial liabilities-payable spot exchange in foreign currency	546,144	-	546,144	310,872	-	235,272
Other financial liabilities-domestic exchange settlement credits	12,063,522	9,396,901	2,666,621	-	-	2,666,621
Other financial liabilities-intercompany payables	1,029	131	898	-	-	898
	₩ 14,388,562	₩ 9,397,032	₩ 4,991,530	₩ 1,822,978	₩ 12,612	₩ 3,155,940

Classification	December 31, 2017					
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets to be set off	Net amounts of financial liabilities presented in the consolidated statement of financial position	Non offsetting amount: Financial instruments	Non offsetting amount: Cash collateral provided	Net amounts
Derivative liabilities	₩ 537,308	₩ -	₩ 537,308	₩ 474,430	₩ 7,393	₩ 55,485
Borrowings-bonds sold under repurchase agreements	337,800	-	337,800	337,800	-	-
Other financial liabilities-payable spot exchange	446,235	-	446,235	446,149	-	86
Other financial liabilities-payable spot exchange in foreign currency	506,628	-	506,628	402,895	-	103,733
Other financial liabilities-domestic exchange settlement credits	13,953,775	9,634,137	4,319,638	-	-	4,319,638
	₩ 15,781,746	₩ 9,634,137	₩ 6,147,609	₩ 1,661,274	₩ 7,393	₩ 4,478,942

41. Fair value hierarchy of financial instruments

Fair value hierarchy of financial instruments as of December 31, 2018 and 2017 are as follows (Korean won in millions):

All financial instruments at fair value are categorized into one of the following three fair value hierarchy levels:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities
Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
Level 3: Inputs for the asset or liability that are not based on the observable market data (unobservable inputs)

Classification	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩ 1,425,925	₩ 7,166,647	₩ 1,559,718	₩ 10,152,290
Derivative assets	-	463,192	1,508	464,700
Financial assets at FVOCI	3,462,952	16,396,604	213,525	20,073,081
	₩ 4,888,877	₩ 24,026,443	₩ 1,774,751	₩ 30,690,071
Financial liabilities:				
Financial liabilities at FVTPL	₩ -	₩ 13,276	₩ -	₩ 13,276
Derivative liabilities	-	520,764	986	521,750
	₩ -	₩ 534,040	₩ 986	₩ 535,026

Financial assets and liabilities at FVTPL, financial assets at FVOCI and derivative assets and liabilities are recognized at fair value. 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 at the measurement date.

Fair value of financial instruments traded in an active market is determined by using the published price quotations based on market prices. However, if the market for a financial instrument is not active, fair value is determined by using a valuation method.

The fair value of debt securities is calculated by the average of the appraised values of KIS Pricing, Korea Asset Pricing, NICE P&I, and FN Pricing.

Classification	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Held-for-trading financial assets	₩ 1,646,548	₩ 4,318,913	₩ -	₩ 5,965,461
Derivative assets	-	1,026,509	4,803	1,031,312
AFS financial assets	3,136,100	17,249,377	621,335	21,006,812
	₩ 4,782,648	₩ 22,594,799	₩ 626,138	₩ 28,003,585
Financial liabilities:				
Held-for-trading financial liabilities	₩ -	₩ 51,737	₩ -	₩ 51,737
Derivative liabilities	-	990,077	3,433	993,510
	₩ -	₩ 1,041,814	₩ 3,433	₩ 1,045,247

In principle, AFS financial assets are measured subsequently at fair value, but since there are no market prices quoted in the active market and the fair value cannot be reliably measured, the AFS financial assets measured at cost are ₩9,610 million as of December 31, 2017.

The AFS financial assets have been measured at cost since the financial information necessary for the evaluation of investments, in special-purpose entities, which is classified as non-marketable or unlisted securities, could not be sufficiently obtained, and even if the information was obtained, the variance in the estimated cash flows was significant or the probabilities for the various estimates of cash flows could not be reliably measured.

41. Fair value hierarchy of financial instruments (cont'd)

Financial assets and liabilities designated at FVTPL, held-for-trading financial assets and liabilities, AFS financial assets and derivative assets and liabilities are recognized at fair value. 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 at the measurement date.

Fair value of financial instruments traded in an active market is determined by using the published price quotations based on market prices. However, if the market for a financial instrument is not active, fair value is determined by using a valuation method.

The fair value of debt securities is calculated by the average of the appraised values of KIS Pricing, Korea Asset Pricing, NICE P&I, and FN Pricing.

The following table gives information about how the fair values of these financial assets and financial liabilities included in the Level 2 and Level 3 are determined (in particular, the valuation method, significant unobservable inputs and relationship of unobservable inputs to fair value).

Classification	Valuation techniques	Input variables, which are significant but unobservable in measurement of fair value	Range
Financial instruments that are measured at fair value:			
Financial assets at FVTPL	Discounted cash flow, FCFE model, Dividend discount model, Net asset value method, Binomial model, etc.	Expected growth rate Discount rate Volatility of the underlying assets	0.00% 3.78%~12.40% 21.93%~25.62%
Derivatives	Discounted cash flow, Intrinsic forward rate, Option-pricing model, Monte Carlo simulation	Risk-free rate of return Forward rate Volatility of the underlying assets Discount curve	- - 4.43%~34.92% 0.41%~21.47%
Financial assets at FVOCI	Discounted cash flow, Comparable companies valuation method, Dividend discount model, Net asset value method, etc.	Expected growth rate Discount rate	0.00% 10.21%~14.52%
Financial instruments that not measured at fair value (but fair value disclosures are required):			
Debt securities at amortized cost	Discounted cash flow	Market yield	-
Loans at amortized cost	Discounted cash flow	Market yield, Credit spread, Liquidity risk premium and other spread	-
Deposits and borrowings	Discounted cash flow	Market yield, Other spread	-
Debentures	Discounted cash flow	Risk-free rate of return, Credit spread	-

Financial assets and financial liabilities that are classified as Level 3 are measured at fair value based on the valuation performed by independent professionals or the estimated amount using the valuation model of the Group. Unobservable input variables are calculated from an internal system, and suitability of the unobservable input variables is reviewed at all times. The valuation council of fair value reviews the valuation model of the Group, and reviews and approves the suitability of the valuation model.

The following table shows the sensitivity analysis of the fair value of Level 3 financial instruments.

The sensitivity analysis of the financial instruments has been performed by classifying them as favorable and unfavorable changes based on how changes in unobservable assumptions have effects on the fluctuations of financial instruments' value. When the fair value of a financial instruments is affected by more than one input variable, the results from assuming the most favorable and the most unfavorable changes are shown in the table below. The sensitivity analysis was performed for two types of Level 3 financial instruments: (a) interest rate derivatives, equity derivatives, equity securities and loans that fair value changes are recognized in net incomes and (b) equity securities that fair value changes are recognized in other comprehensive income.

41. Fair value hierarchy of financial instruments (cont'd)

Sensitivity analysis by type of financial instruments as a result of changes in input parameters as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Financial assets at FVTPL (*1)	₩ 1,559,718	₩ 4,892	₩ (3,545)	₩ -	₩ -
Derivative assets (*2)	1,508	835	(73)	-	-
Financial assets at FVOCI (*1)	213,525	-	-	13,439	(6,516)
	₩ 1,774,751	₩ 5,727	₩ (3,618)	₩ 13,439	₩ (6,516)
Financial liabilities:					
Derivative liabilities (*2)	₩ 986	₩ 126	₩ (846)	₩ -	₩ -

(*1) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0~1%) and the discount rate or the correlation between liquidation value (-1~1%) and discount rate.
(*2) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20%, interest by 2% and exchange rate by 10%.

The Group assesses financial instruments on a quarterly basis, and as of December 31, 2018, financial assets at FVTPL and financial assets at FVOCI that cannot be calculated using the sensitivity analysis amount to ₩1,479,517 million and ₩24,251 million, respectively.

	December 31, 2017				
		Net income (loss)		Other comprehensive income (loss)	
Classification	Book value	Favorable	Unfavorable	Favorable	Unfavorable
Financial assets:					
Derivative assets (*1)	₩ 4,803	₩ 4,299	₩ (1,922)	₩ -	₩ -
Equity securities (*2)	621,335	-	-	18,142	(10,263)
	₩ 626,138	₩ 4,299	₩ (1,922)	₩ 18,142	₩ (10,263)
Financial liabilities:					
Derivative liabilities (*1)	₩ 3,433	₩ 4,247	₩ (1,936)	₩ -	₩ -

(*1) Fair value changes of derivatives are calculated by increasing or decreasing historical fluctuation rate of stock price by 20%, interest by 2% and exchange rate by 10%.
(*2) Fair value changes of equity securities are calculated by increasing or decreasing the growth rate (0~1%) and the discount rate or the correlation between liquidation value (-1~1%) and discount rate.

41. Fair value hierarchy of financial instruments (cont'd)

Changes in Level 3 financial instruments for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018							
	Beginning	Gain (loss)	Other comprehensive income	Purchase/ issue	Disposal/ settlement	Business Combinations	Transfer from or to Level 3 (*2)	Ending
Financial instruments:								
Financial assets at FVTPL (*1)	₩ 1,457,204	₩ 163,179	₩ -	₩ 218,166	₩ (278,852)	₩ 21	₩ -	₩ 1,559,718
Net derivative assets (*1)	817	(118)	-	-	(177)	-	-	522
Financial assets at FVOCI (*1)	200,195	-	11,921	1,144	-	-	265	213,525
	₩ 1,658,216	₩ 163,061	₩ 11,921	₩ 219,310	₩ (279,029)	₩ 21	₩ 265	₩ 1,773,765

(*1) Beginning balance is restated in accordance with KIFRS 1109.
(*2) Financial assets at FVOCI were transferred out of level 1 to level 3, as they were delisted.

For the year ended December 31, 2018, gain (loss) related to financial assets and liabilities is included in gain (loss) on financial instruments at FVTPL in the consolidated statements of profit or loss and other comprehensive income.

Total valuation gain and loss, which are recognized as other comprehensive income (loss), are related to unlisted equity securities for strategic purposes as of December 31, 2018.

	For the year ended December 31, 2017						
	Beginning	Gain (loss)	Other comprehensive income	Purchase/ issue	Disposal/ settlement	Transfer from or to Level 3 (*1)	Ending
Financial instruments:							
AFS financial assets	₩ 473,998	₩ (8,361)	₩ 3,896	₩ 78,781	₩ (93,788)	₩ 166,809	₩ 621,335
Net derivative assets	162	(2,511)	-	301	3,418	-	1,370
	₩ 474,160	₩ (10,872)	₩ 3,896	₩ 79,082	₩ (90,370)	₩ 166,809	₩ 622,705

(*1) As the variables used for the valuation related to AFS financial assets were not observable in the market, such AFS financial assets were transferred from level 2 to level 3.

For the year ended December 31, 2017, gain (loss) related to financial assets and liabilities is included in gain (loss) on held-for-trading financial instruments, gain (loss) on financial instruments designated as measured at FVTPL and gain (loss) on financial investments in the consolidated statements of profit or loss and other comprehensive income.

Total valuation gain and loss, which are recognized as other comprehensive income (loss), are related to unlisted equity securities as of December 31, 2017, and are recognized as changes in valuation gain (loss) of AFS financial assets.

41. Fair value hierarchy of financial instruments (cont'd)

Gain or loss recognized from changes in Level 3 financial instruments for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018	
Classification	Income or loss during the reporting period	Income or loss related to financial instruments held as of December 31, 2018
Gain on financial assets at FVTPL	₩ 163,061	₩ 15,575

	For the year ended December 31, 2017	
Classification	Income or loss during the reporting period	Income or loss related to financial instruments held as of December 31, 2017
Gain (loss) on held-for-trading financial assets	₩ (2,511)	₩ 137
Other income related to AFS financial assets	4,734	-
Impairment loss on AFS financial assets	(13,095)	(13,095)
	₩ (10,872)	₩ (12,958)

The Groups recognize transfers between the fair value hierarchy levels as of the event or change in circumstances that caused the transfer. There are no changes in valuation techniques, which are used as measurement methods of fair value of financial instruments, which are classified as Level 2 and Level 3. There are no significant changes to the business environment or economic environment, which affect the fair value of financial instruments owned by the Groups for the years ended December 31, 2018 and 2017.

Fair value and carrying amount of financial assets and liabilities that are recorded at amortized cost as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	December 31, 2018				
Classification	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 1,933,864	₩ 4,260,854	₩ -	₩ 6,194,718	₩ 6,194,718
Securities at amortized cost	494,214	8,907,009	-	9,401,223	9,336,103
Loans at amortized cost	-	-	234,210,586	234,210,586	232,595,342
Other financial assets	222	-	207	429	429
	₩ 2,428,300	₩ 13,167,863	₩ 234,210,793	₩ 249,806,956	₩ 248,126,592
Financial liabilities:					
Deposits	₩ -	₩ -	₩ 225,466,141	₩ 225,466,141	₩ 224,230,411
Borrowings	-	-	11,287,268	11,287,268	11,283,346
Debentures	-	17,030,545	-	17,030,545	16,828,002
Other financial liabilities (*1)	-	-	11,807,619	11,807,619	13,045,701
	₩ -	₩ 17,030,545	₩ 248,561,028	₩ 265,591,573	₩ 265,387,460

(*1) Interest payables included in the computation for fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

41. Fair value hierarchy of financial instruments (cont'd)

	December 31, 2017				
Classification	Level 1	Level 2	Level 3	Fair value	Book value
Financial assets:					
Cash and due from banks	₩ 1,816,808	₩ 5,971,890	₩ -	₩ 7,788,698	₩ 7,788,698
HTM financial assets	525,757	7,651,910	-	8,177,667	8,231,407
Loans and receivables	-	-	216,948,455	216,948,455	218,904,533
Other financial assets	-	-	214	214	214
	₩ 2,342,565	₩ 13,623,800	₩ 216,948,669	₩ 232,915,034	₩ 234,924,852
Financial liabilities:					
Deposits	₩ -	₩ -	₩ 206,634,371	₩ 206,634,371	₩ 205,768,316
Borrowings	-	-	12,227,065	12,227,065	12,227,485
Debentures	-	19,053,448	-	19,053,448	18,968,727
Other financial liabilities (*1)	-	-	12,382,275	12,382,275	13,286,057
	₩ -	₩ 19,053,448	₩ 231,243,711	₩ 250,297,159	₩ 250,250,585

(*1) Interest payables included in the computation for fair value of deposits, borrowings and debentures are excluded from fair value of other financial liabilities.

42. Related-party transactions

Details of related-party of the Group as of December 31, 2018 are as follows:

Classification	Company
Ultimate parent company	NACF
Parent company	NH Financial Group Inc.
Associates	Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.); Korea Credit Bureau Co., Ltd.; NH-AJUIB Growth 2013 PEF; NH-QCP Global Partnership PEF; IBK-NH Smallgiant PEF; Kyunggi-DSC Superman Investment Fund No.1; NH Agri-Biz Value Creative 1st PEF
Other related parties	NH Life Insurance Co., Ltd.; NH Property and Casualty Insurance Co., Ltd.; NH Investment & Securities Co., Ltd.; NH Nonghyup Capital Co., Ltd.; NH Savings Bank Co., Ltd.; NH REITs Management Co., Ltd.; MMT; Tongyang Global REF Private Mixed Investment Trust; NH-CA (NH Futures) PEF VA10 and 7 others; NH Futures Co., Ltd.; Principal Guaranteed Trust of NH Investment & Securities; NH Investment & Securities (H.K.) Ltd.; NH Absolute Global Opportunity Fund; NH Absolute Return Investment Strategies Fund; NH Securities Vietnam Co., Ltd.; NH Securities America Inc.; NH Absolute Return Partners Pte., Ltd.; PT. NH Korindo Securities Indonesia; Beijing NH Investment Advisory Co., Ltd.; KoFC Woori Growth Champ 2010 No.3; NH Absolute Return PEF No.1; N.H. Bio First New Technology Association; N.H. Hightech First New Technology Association; RG HVL overseas resources development Fund No.1; IBS 11th SPC Inc.; Woori Credit 3rd Co., Ltd.; Woori Credit 6th Co., Ltd.; Cube 4th Co., Ltd.; Cube 5th Co., Ltd.; New start JH Co., Ltd.; New Harmony 2nd Co., Ltd.; New Harmony sinnae 1st Co., Ltd; New Harmony sinnae 2nd Co., Ltd; Honey Dream 1st Co., Ltd.; TL Independence Co., Ltd.; Daechi Park 1st Co., Ltd.; New Real Two 2nd Co., Ltd.; New Real Two Namdaemun Co., Ltd.; Spes 9th Co., Ltd.; Precious 6th Co., Ltd.; Biangko 2nd Co., Ltd.; Biangko 3rd Co., Ltd.; Biangko 6th Co., Ltd.; NH Dongtan 1st Co., Ltd.; Biangko 7th Co., Ltd.; Biangko 8th Co., Ltd.; Warmachine 1st Co., Ltd.; Warmachine 8th Co., Ltd.; Warmachine 9th Co., Ltd.; Warmachine 10th Co., Ltd.; Warmachine 12th Co., Ltd.; Warmachine 11th Co., Ltd.; Warmachine 13th Co., Ltd.; Green Power 1st Co., Ltd.; Green Power 2nd Co., Ltd.; Green Power 3rd Co., Ltd.; Renewable Energy 9th Co., Ltd.; D Best 1st Co., Ltd.; D Best 2nd Co., Ltd.; Merigogo 2nd co., Ltd.; Merigogo 4th co., Ltd.; New Real Two TSQ Co., Ltd.; The shop oncheon 3rd co., Ltd.; Gochon Logis 2nd Co., Ltd.; Gochon Logis 1st Co., Ltd.; Park One Alpha 7th Co. Ltd.; Park One Beta 1st Co. Ltd.; Gwanggyo SK 2nd Co., Ltd.; Gwanggyo SK 1st Co., Ltd.; New Songdo NH 1st co., Ltd.; JSK 1st Co., Ltd.; N-First Realty 3rd Co., Ltd.; Ulsan PS 1ST Co., Ltd.; Warmachine 15th Co., Ltd.; Puren Gwacheon 2nd Co., Ltd.; NH-Amundi Asset Management Co., Ltd.; Blue Ocean Corporate’s Financial Stabilization PEF No.1; NH-LB Growth Champ 2011-4 PEF; NH-QCP HNC KD-1 PEF; INIAS NH Private Equity Joint Venture; KDBC-EUM Corporate's Financial Stabilization PEF No.4; Presto PEF No.4; Ace Soosung New Technology Investment No. 2; Truben Global Healthcare Private Equity Joint Venture; Oracle 1st LP; ENF Ember 2nd Private Equity Joint Venture; Yeouido munhwa broadcasting PFV; NH Special Purpose Acquisition 10 Co., Ltd.; NH Special Purpose Acquisition 11 Co., Ltd.; NH Special Purpose Acquisition 12 Co., Ltd.; NH Special Purpose Acquisition 13 Co., Ltd.; Stassets DA value Investment Association No.2; Stassets DA value Investment Association No.3; Midas PEF No.1; Global Opportunity Private Equity Joint Venture; Glenwood Co-investment PEF No.1;, Bric-Obit New Technology Investment No. 1; Medical Investment Management Inc.; Sandonghansangchieop Co., Ltd.; Seoulseongbochieop Co., Ltd.; Daguang Real Estate Developing Co., Ltd.; Edupalace Inc.; Edupalace Co., Ltd.; ACFSMC(Tianjin) International Financial Leasing Co., Ltd.; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.1; Dt & Investment NHC-DTNI Agirfood ABC Investment Association No.2; Sinyeong NO.2 Private Equity Joint Venture; Attila Infra PEF No.1; NH Agribusiness Group Inc.; NH Networks Co., Ltd.; NH Information System Co., Ltd.; Agricultural Cooperative Asset Management Co., Ltd.; NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning); Nonghyup Foundation; Nonghyup Hanaro Mart Inc.; Agricultural Corporation Nonghyup Food Grain Inc.; Korea Agriculture Cooperative Marketing Inc.; Agricultural Cooperative Pusan Gyeongnam Marketing Inc.; Agricultural Cooperative Chungbuk Marketing Co., Ltd.; Daejeon Agricultural Products Marketing Co., Ltd.; Nonghyup Logistics Service Inc.; Nonghyup Chemical Co., Ltd.; NH Nonghyup Trading Co., Ltd.; Nonghyup-Agro Inc.; Nonghyup Red Ginseng Co., Ltd.; Namhae Chemical Corporation; Nonghyup Moguchon Inc.; Nonghyup Feed Inc.; Nongwoo BIO Co., Ltd.; NH Heuk Sarang Co., Ltd.; NongHyup Food Inc.; Kongyoung Homeshopping Co., Ltd.; Home and Shopping Co., Ltd.; Agricultural Corporation Orion Nonghyup Inc.; NH-Hay Inc.; Nonghyup TMR Co., Ltd.; PT Nonghyup feed Indonesia; Nisso-namhae Agro Co., Ltd.; Agricultural BIO Field Co., Ltd.; Yoesu Green Energy Co., Ltd.; Korea Nonghyup International; Nonghyup America Inc.; NH Sanghai Trade Co., Ltd.; Sanglim Agricultural Co., Ltd.; Beijing Shinong Seed Co., Ltd.; Nongwoo Seed America Inc.; PT Koreana Seed Indonesia; Nongwoo Seed INDIA PVT. Ltd.; Beijing Shinong International Trading Limited.; Nongwoo Seed Myanmar Co., Ltd.; Tolya Tohum Tarim Sanayi Ticaret Anonim Sirketi; Daewoo Logistics Corp.; HND Logistics Co., Ltd.; Gwangyang International Container Terminal
Others (*1)	Eco-TV Co., Ltd.

(*1) The companies in conglomerate group except for the parent company, jointly controlled entities, associates, and other related parties, are included in the others category.

42. Related-party transactions (cont'd)

Details of related-party transactions of the Group as of December 31, 2018 and 2017 are as follows (Korean Won in millions):

	December 31, 2018						
Company	Receivables	Derivative assets	Allowances	Deposits	Derivative liabilities	Debentures	Other liabilities
Ultimate parent company:							
NACF	₩ 9,406	₩ 46,416	₩ 3	₩ 426,792	₩ 39,582	₩ -	₩ 16
Parent company:							
NH Financial Group Inc.	333	-	14	417	-	-	161,746
Associates:							
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	46	-	-	64	-	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	2,427	-	-	13
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	3,961	-	-	6
NH Agri-Biz Value Creative 1st PEF	61	-	-	-	-	-	-
Other related parties:							
NH Investment & Securities Co., Ltd.	3,153	5,651	14	420,503	7,118	69,997	6,791
NH Nonghyup Capital Co., Ltd.	4,803	-	3	29,640	-	-	-
NH-Amundi Asset Management Co., Ltd.	118	-	11	95,646	-	-	685
Nongwoo BIO Co., Ltd.	520	-	1	4,388	-	-	-
NH Life Insurance Co., Ltd.	1,888	119,960	1	51,948	7,315	-	3,888
NH Property and Casualty Insurance Co., Ltd.	1,219	14,092	1	16,001	1,028	-	-
NH REITs Management Co.,Ltd.	19	-	-	4,119	-	-	-
NH Agribusiness Group Inc.	683,813	-	183	76,705	-	-	209
Namhae Chemical Corporation	30,118	1	97	16,205	28	-	176
NH Heuk Sarang Co., Ltd.	22	-	-	-	-	-	-
Nisso-namhae Agro Co., Ltd.	18	-	-	10,599	-	-	2
Daejeon Agricultural Products Marketing Co., Ltd.	41	-	3	488	-	-	-
Agricultural Corporation Nonghyup Food Grain Inc.	35,100	-	164	4,426	-	-	-
Nonghyup Moguchon Inc.	63,732	-	149	2,079	-	-	-
Nonghyup Logistics Service Inc.	11,240	-	-	1,487	-	-	1,555
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	94	-	-	2,001	-	-	2,705
Nonghyup Feed Inc.	302,688	639	969	9,022	187	-	-

42. Related-party transactions (cont'd)

Company	December 31, 2018						
	Receivables	Derivative assets	Allowances	Deposits	Derivative liabilities	Debentures	Other liabilities
Other related parties:							
Nonghyup-Agro Inc.	₩ 46	₩ -	₩ -	₩ 266	₩ -	₩ -	₩ -
Nonghyup Hanaro Mart Inc.	74,913	-	34	8,314	-	-	7,706
Korea Agriculture Cooperative Marketing Inc.	203	-	-	6,278	-	-	2,656
NH Information System Co., Ltd.	179	-	-	38,313	-	-	366
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	1,953	-	4	93	-	-	606
Nonghyup Chemical Co., Ltd.	49,430	-	36	542	-	-	-
Nonghyup Red Ginseng Co., Ltd.	19,353	-	278	2,015	-	-	15
NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)	148	-	-	2,659	-	-	461
NH Networks Co., Ltd.	771	-	3	26,644	-	-	2,393
NH Nonghyup Trading Co., Ltd.	15,817	27	89	4,740	215	-	-
Nonghyup Foundation	18	-	2	58,053	-	-	63
Agricultural Cooperative Asset Management Co., Ltd.	159,528	-	80	671	-	-	366
NH Futures Co., Ltd.	96	-	31	48,832	-	-	42
NH Savings Bank Co., Ltd.	206	-	14	-	-	-	-
NongHyup Food Inc.	28	-	2	1,864	-	-	-
Kongyoung Homeshopping Co., Ltd.	66	-	-	217	-	-	-
Home and Shopping Co., Ltd.	-	-	-	441	-	-	-
NH SL Special Purpose Acquisition Co., Ltd.	-	-	-	1	-	-	-
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	1,707	-	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	1,725	-	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	1,722	-	-	13
Agricultural Corporation Orion Nonghyup Inc.	4,136	-	-	1,284	-	-	-
Yoesu Green Energy Co., Ltd.	1	-	-	53	-	-	-
Sanglim Agricultural Co., Ltd.	2,526	-	1	32	-	-	-
Daewoo Logistics Corp.	-	-	-	54	-	-	-

42. Related-party transactions (cont'd)

	December 31, 2017						
Company	Receivables	Derivative assets	Allowances	Deposits due to customers	Derivative liabilities	Debentures	Other liabilities
Ultimate parent company:							
NACF	₩ 15,001	₩ -	₩ 1	₩ 1,516,450	₩ 213,610	₩ -	₩ 147
Parent company:							
NH Financial Group Inc.	284	-	10	153	-	-	207,613
Associates:							
Nanumlotto Co., Ltd.	226	-	-	11,796	-	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	6,904	-	-	21
NH Agri-Best 1st PEF	-	-	-	3,162	-	-	13
Kyunggi-DSC Superman Investment Fund No.1	-	-	-	2,762	-	-	2
NH Agri-Biz Value Creative 1st PEF	63	-	-	-	-	-	-
Chang Myung Shipping Co., Ltd.	68,453	-	-	18,209	-	-	41
Other related parties:							
NH Investment & Securities Co., Ltd.	202,912	21,468	-	475,564	17,796	100,006	13,140
NH Nonghyup Capital Co., Ltd.	2,482	-	1	8,810	-	-	-
NH- Amundi Asset Management Co., Ltd. (formerly known as NH-CA Asset Management Co., Ltd.)	129	-	5	91,466	-	-	505
Nongwoo BIO Co., Ltd.	35,353	-	32	4,059	-	-	-
NH Life Insurance Co., Ltd.	2,720	-	1	26,933	162,252	-	7,563
NH Property and Casualty Insurance Co., Ltd.	1,526	-	1	7,285	23,717	-	-
NH Agribusiness Group Inc.	1,183,368	-	170	55,283	-	-	1
Namhae Chemical Corporation	40,796	22	37	31,196	2	-	64
NH Heuk Sarang Co., Ltd.	32	-	-	16	-	-	-
Nisso-namhae Agro Co., Ltd.	13	-	-	6,233	-	-	1
Daejeon Agricultural Products Marketing Co., Ltd.	39	-	-	20	-	-	-
Agricultural Corporation Nonghyup Food Grain Inc.	24,243	-	26	842	-	-	-
Nonghyup Moguchon Inc.	50,629	-	21	1,743	-	-	-
Nonghyup Logistics Service Inc.	15,162	-	2	1,610	-	-	1,526
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	86	-	-	1,490	-	-	2,699
Nonghyup Feed Inc.	227,101	3,639	382	35,700	-	-	-
Nonghyup-Agro Inc.	30	-	-	118	-	-	-
Nonghyup Hanaro Mart Inc.	22,984	-	15	954	-	-	6,020

42. Related-party transactions (cont'd)

Company	December 31, 2017						
	Receivables	Derivative assets	Allowances	Deposits due to customers	Derivative liabilities	Debentures	Other liabilities
Other related parties:							
Korea Agriculture Cooperative Marketing Inc.	₩ 198	₩ -	₩ -	₩ 8,351	₩ -	₩ -	₩ 2,538
NH Information System Co., Ltd.	1,459	-	1	33,057	-	-	1,427
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	2,806	-	1	1,964	-	-	712
Nonghyup Chemical Co., Ltd.	28,407	-	16	2	-	-	-
Nonghyup Red Ginseng. Co., Ltd.	28,782	-	156	3,645	-	-	15
NH Hyupdong Planning	186	-	-	2,856	-	-	418
NH Networks Co., Ltd. (formerly known as NH Development Co., Ltd.)	778	-	3	5,407	-	-	915
NH Nonghyup Trading Co., Ltd. (formerly known as NH Trading Co., Ltd.)	7,689	338	45	5,042	164	-	-
Nonghyup Foundation (formerly known as Nonghyup Culture Welfare Foundation)	24	-	1	38,845	-	-	292
Agricultural Cooperative Asset Management Co., Ltd.	172,745	-	58	810	-	-	420
NH Futures Co., Ltd.	86	-	-	42,473	-	-	4
NH Savings Bank Co., Ltd.	110	-	-	-	-	-	-
Kongyoung Homeshopping Co., Ltd.	64	-	-	5,509	-	-	48
Home and Shopping Co., Ltd.	-	-	-	763	-	-	-
NH SL Special Purpose Acquisition Co., Ltd.	-	-	-	820	-	-	9
NH Special Purpose Acquisition 7 Co., Ltd.	-	-	-	1,390	-	-	3
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	1,727	-	-	4
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	1,731	-	-	4
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	1,748	-	-	13
Daewoo Logistics Corp.	-	-	-	54	-	-	-
Agricultural Corporation Orion Nonghyup Inc. (formerly known as Agricultural Corporation K-Food Inc.)	5	-	-	10	-	-	-
Yoesu Green Energy Co., Ltd.	7	-	-	301	-	-	-
NongHyup Food Inc.	21	-	1	5,155	-	-	31
Sanglim Agricultural Co., Ltd.	2,906	-	4	79	-	-	-
Others (*1):							
Resom Resort Co., Ltd.	73,949	-	45,663	9,081	-	-	19

(*1) The companies in conglomerate group except for the parent company, jointly controlled entities, associates, and other related parties, are included in the others category.

42. Related-party transactions (cont'd)

Significant transactions with related parties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 295	₩ 18	₩ 92,668	₩ 1	₩ 1,567	₩ -	₩ 357,117
Parent company:							
NH Financial Group Inc.	-	-	786	2	-	-	-
Associates:							
Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)	-	1,577	-	-	5	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	-	74	-	2,697
Kyunggi-DSC Superman Investment Fund No. 1	-	-	-	-	20	-	-
NH Agri-Biz Value Creative 1st PEF	-	314	-	-	-	-	-
Chang Myung Shipping Co., Ltd.	-	9	2	23,393	264	-	-
Other related parties:							
NH Investment & Securities Co., Ltd.	1	33	17,495	13	2,981	45	48,815
NH Nonghyup Capital Co., Ltd.	-	160	-	1	8	-	2,574
NH-Amundi Asset Management Co., Ltd.	-	18	-	4	1,462	-	1,264
Nongwoo BIO Co., Ltd.	414	2	-	(59)	17	-	10
NH Life Insurance Co., Ltd.	3	11,704	260,132	-	6	-	18,971
NH Property and Casualty Insurance Co., Ltd.	2	3,091	15,810	-	9	-	21,369
NH REITs Management Co., Ltd.	-	-	-	-	1	-	-
NH Agribusiness Group Inc.	22,478	2	718	(25)	216	-	2,596
Namhae Chemical Corporation	899	911	1	26	543	-	28
NH Heuk Sarang Co., Ltd.	-	1	-	-	-	-	6
Nisso-namhae Agro Co., Ltd.	-	-	-	-	22	-	-
Daejeon Agricultural Products Marketing Co., Ltd.	-	1	-	1	-	4	5
Agricultural Corporation Nonghyup Food Grain Inc.	137	-	182	149	2	-	72
Nonghyup Moguchon Inc.	1,219	5	380	132	1	-	151
Nonghyup Logistics Service Inc.	447	2	554	(2)	9	-	24,545
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	-	-	281	-	33	-	72
Nonghyup Feed Inc.	1,267	1,197	857	513	9	-	187
Nonghyup Hanaro Mart Inc.	381	9	425	20	5	21	853
Korea Agriculture Cooperative Marketing Inc.	-	7	1,272	-	77	-	223

42. Related-party transactions (cont'd)

	For the year ended December 31, 2018						
Company	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
NH Information System Co., Ltd.	₩ -	₩ 1	₩ 2,883	₩ (1)	₩ 190	₩ -	₩ 64,017
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	70	15	-	3	-	-	196
Nonghyup Chemical Co., Ltd.	2,904	163	-	22	7	-	-
Nonghyup Red Ginseng Co., Ltd.	630	10	16	192	1	-	319
NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)	-	30	146	-	37	-	29,708
NH Networks Co., Ltd.	69	1	157	1	6	-	27,759
NH Nonghyup Trading Co., Ltd.	386	114	231	57	6	-	215
Nonghyup Foundation	-	-	-	-	64	-	-
Agricultural Cooperative Asset Management Co., Ltd.	4,409	-	168	13	8	4,687	-
NH Futures Co., Ltd.	260	24	-	31	92	504	-
NH Savings Bank Co., Ltd.	-	143	77	9	-	-	-
NongHyup Food Inc.	-	1	-	(1)	15	-	2
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	-	25	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	-	24	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	13	-	-
Agricultural Corporation Orion Nonghyup Inc.	30	2	-	-	1	-	-
Sanglim Agricultural Co., Ltd.	27	1	-	(1)	-	-	-
Others (*1)							
Resom Resort Co., Ltd.	-	-	-	(31,626)	6	-	-
NH Agri-Best 1st PEF	-	1	-	-	18	-	-

(*1) The companies in conglomerate group except for the parent company, jointly controlled entities, associates, and other related parties, are included in the others category.

42. Related-party transactions (cont'd)

Company	For the year ended December 31, 2017						
	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Ultimate parent company:							
NACF	₩ 707	₩ 43	₩ 65,988	₩ (304)	₩ 525	₩ -	₩ 618,639
Parent company:							
NH Financial Group Inc.	-	-	610	(7)	-	-	-
Associates:							
Nanumlotto Co., Ltd.	-	1	-	-	12	-	-
Korea Credit Bureau Co., Ltd.	-	-	-	-	62	-	-
NH Agri-Best 1st PEF	-	1	-	-	38	-	-
NH Agri-Biz Value Creative 1st PEF	-	250	-	-	-	-	-
CHANGMYUNG SHIPPING Co., LTD.	-	11	1	(12,044)	157	-	-
Kyunggi-DSC Superman Investment Fund No. 1	-	-	-	-	15	-	-
Other related parties:							
NH Investment & Securities Co., Ltd.	48	37	37,824	(1)	12,105	168	33,762
NH NongHyup Capital Co., Ltd.	-	112	-	-	8	-	2,069
NH- Amundi Asset Management Co., Ltd. (formerly known as NH-CA Asset Management Co., Ltd.)	-	16	-	(2)	1,208	-	850
Nongwoo BIO CO., Ltd	690	15	-	24	7	-	2
NH Life Insurance Co., Ltd.	8	12,315	18,113	-	12	-	402,081
NH Property and Casualty Insurance Co., Ltd.	2	3,682	1,880	-	8	-	48,560
NH Agribusiness Group Inc.	27,571	19	945	155	174	-	1,702
Namhae Chemical Corporation	129	405	30	21	195	-	2
NH heuk sarang Co., Ltd.	5	2	-	-	-	-	4
Nisso-namhae Agro Co., Ltd.	-	1	1	-	47	-	-
Daejeon Agricultural Products Marketing Co., Ltd.	-	-	-	-	61	2	38
Agricultural Corporation Nonghyup Food Grain Inc.	80	2	206	(6)	-	-	428
Nonghyup Moguchon Inc.	898	5	373	(6)	1	-	122
Nonghyup Logistics Service Inc.	523	2	554	(2)	13	7,501	16,434
Agricultural Cooperative Pusan Gyeongnam Marketing, Inc.	-	13	312	-	31	-	66
Nonghyup Feed Inc.	1,108	870	3,896	(102)	4	-	-
Nonghyup-Agro	2	-	-	-	15	-	-
Nonghyup Hanaro Mart Inc.	15	26	349	15	8	8	934
Korea Agriculture Cooperative Marketing Inc.	-	26	1,272	-	10	-	246
NH Information System Co., Ltd.	-	1	2,333	-	216	-	32,847
Agricultural Cooperative Chungbuk Marketing Co., Ltd.	53	13	-	(1)	1	-	301
NongHyup Chemical Co., Ltd.	1,400	161	-	(13)	4	-	-
NongHyup RedGinseng. Co., Ltd.	625	1	14	(32)	1	-	47
NH Hyupdong Planning	-	27	91	-	39	-	24,851
NH Networks Co., Ltd. (formerly known as NH Development Co., Ltd.)	47	-	180	-	18	17	11,618

42. Related-party transactions (cont'd)

Company	For the year ended December 31, 2017						
	Interest income	Commission income	Other income	Provision (reversal) of allowance	Interest expenses	Commission expenses	Other expenses
Other related parties:							
NH Nonghyup Trading Co., Ltd. (formerly known as NH Trading Co., Ltd.)	₩ 215	₩ 80	₩ 418	₩ 14	₩ 4	₩ -	₩ 165
Nonghyup Foundation (formerly known as Nonghyup Culture Welfare Foundation)	-	-	-	-	292	-	-
Agricultural Cooperative Asset Management Co., Ltd.	2,757	1	171	5	8	4,608	-
NH Futures Co., Ltd.	215	14	-	-	50	627	-
NH Savings Bank Co., Ltd.	-	95	119	-	-	-	-
Kongyoung Homeshopping Co., Ltd.	-	-	-	(2)	120	-	-
NH-CA (NH Futures) PEF VA10 and 7 others	-	51	-	-	224	-	-
Home and Shopping Co., Ltd.	-	-	-	-	1	-	-
NH SL Special Purpose Acquisition Co., Ltd.	-	-	-	-	20	-	-
NH Special Purpose Acquisition 7 Co., Ltd.	-	-	-	-	39	-	-
NH Special Purpose Acquisition 10 Co., Ltd.	-	-	-	-	65	-	-
NH Special Purpose Acquisition 11 Co., Ltd.	-	-	-	-	50	-	-
NH Special Purpose Acquisition 12 Co., Ltd.	-	-	-	-	20	-	-
Daewoo Logistics Corp.	-	-	-	-	-	-	-
Agricultural Corporation Orion Nonghyup Inc. (formerly known as Agricultural Corporation K-Food Inc.)	-	8	-	-	-	-	-
Yoesu Green Energy Co., Ltd.	-	-	-	-	9	-	-
NongHyup Food Inc	-	1	-	1	33	-	8
Sanglim Agricultural Co.,Ltd.	-	-	-	4	-	-	-
Tongyang Global REF private mixed investment trust	-	-	-	-	-	-	-
Nonghyup TMR Co., Ltd.	-	1	-	-	-	-	-
Others (*1)							
Resom Resort	-	-	-	57,688	44	-	-
Resom construction Co., Ltd	-	-	-	-	-	-	-

(*1) The companies in conglomerate group except for the parent company, jointly controlled entities, associates, and other related parties, are included in the others category.

42. Related-party transactions (cont'd)

The Bank's acceptances, guarantees and unused credit limits with related parties as of December 31, 2018 and 2017 are summarized as follows (Korean won in millions):

	December 31, 2018	
Classification	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 2,113,643	NACF
Unused credit limit in Korean won	591	NH Financial Group Inc.
Unused credit limit in Korean won	83,472	NH Life Insurance Co., Ltd
Unused credit limit in Korean won	32,281	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	465,737	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	17,746	NH Nonghyup Capital Co., Ltd.
Unused credit limit in Korean won	444	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	882	NH-Amundi Asset Management Co., Ltd.
Unused credit limit in Korean won	204	NH Futures Co., Ltd.
Unused credit limit in Korean won	454	Donghang Lottery Co., Ltd. (formerly known as Nanumlotto Co., Ltd.)
Unused credit limit in Korean won	411,563	NH Agribusiness Group Inc.
Acceptances and guarantees in Korean won	729	NH Agribusiness Group Inc.
Unused credit limit in Korean won	159	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	1,033	Nonghyup Red Ginseng. Co., Ltd.
Unused credit limit in Korean won	7,974	NH Nonghyup Trading Co., Ltd.
Unused credit limit in foreign currencies	8,887	NH Nonghyup Trading Co., Ltd.
Acceptances and guarantees in foreign currencies	16,859	NH Nonghyup Trading Co., Ltd.
Unused credit limit in Korean won	34	Nonghyup-Agro Inc.
Unused credit limit in Korean won	10,979	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	158,765	Namhae Chemical Corporation
Unused credit limit in foreign currencies	209,256	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,862	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	40,087	Namhae Chemical Corporation
Unused credit limit in Korean won	161,972	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	24,172	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	6,894	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	391	Agricultural Cooperative Pusan Gyeongnam Marketing Inc.
Unused credit limit in Korean won	4,010	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	599	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	20,780	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	559	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	7,264	NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)
Acceptances and guarantees in Korean won	2,988	NH Partners Co., Ltd. (formerly known as NH Hyupdong Planning)
Unused credit limit in Korean won	45,993	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	224,552	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	91,587	Nonghyup Feed Inc.
Unused credit limit in Korean won	29,294	NH Networks Co., Ltd.
Unused credit limit in Korean won	14,017	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	3,321	NH Information System Co., Ltd.
Unused credit limit in Korean won	338	NH Heuk Sarang Co., Ltd.
Unused credit limit in Korean won	182	Nonghyup Foundation
Unused credit limit in Korean won	22	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	7,036	Nongwoo BIO Co., Ltd.
Unused credit limit in Korean won	43	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	80,316	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	134	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	52	NH REITs Management Co., Ltd.
Unused credit limit in Korean won	3,951	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in foreign currencies	950	Agricultural Corporation Orion Nonghyup Inc.
Acceptances and guarantees in foreign currencies	168	Agricultural Corporation Orion Nonghyup Inc.
Unused credit limit in Korean won	72	NongHyup Food Inc.
Unused credit limit in Korean won	716	Sanglim Agricultural Co., Ltd.
Unused credit limit in Korean won	48	Yoesu Green Energy Co., Ltd.
Unused credit limit in foreign currencies	7,827	Nonghyup Finance Cambodia Co., Ltd.

42. Related-party transactions (cont'd)

Classification	December 31, 2017	
	Credit limit	Counterparty
Unused credit limit in Korean won	₩ 1,915,029	NACF
Unused credit limit in Korean won	542	NH Financial Group Inc.
Unused credit limit in Korean won	82,540	NH Life Insurance
Unused credit limit in Korean won	31,974	NH Property and Casualty Insurance Co., Ltd.
Unused credit limit in Korean won	445,547	NH Investment & Securities Co., Ltd.
Unused credit limit in Korean won	5,594	NH NongHyup Capital Co., Ltd.
Unused credit limit in Korean won	540	NH Savings Bank Co., Ltd.
Unused credit limit in Korean won	871	NH- Amundi Asset Management Co., Ltd. (formerly known as NH-CA Asset Management Co., Ltd.)
Unused credit limit in Korean won	214	NH Futures Co., Ltd.
Unused credit limit in Korean won	275	Nanumlotto Co., Ltd.
Unused credit limit in Korean won	194,172	NH Agribusiness Group Inc.
Acceptances and guarantees in Korean won	729	NH Agribusiness Group Inc.
Unused credit limit in Korean won	161	Daejeon Agricultural Products Marketing Co., Ltd.
Unused credit limit in Korean won	1,104	NongHyup RedGinseng. Co., Ltd.
Unused credit limit in Korean won	17,088	NH Nonghyup Trading Co., Ltd. (formerly known as NH Trading Co., Ltd.)
Unused credit limit in foreign currencies	377	NH Nonghyup Trading Co., Ltd. (formerly known as NH Trading Co., Ltd.)
Acceptances and guarantees in foreign currencies	16,297	NH Nonghyup Trading Co., Ltd. (formerly known as NH Trading Co., Ltd.)
Unused credit limit in Korean won	50	Nonghyup-Agro Inc.
Unused credit limit in Korean won	21,049	Korea Agriculture Cooperative Marketing Inc.
Unused credit limit in Korean won	148,881	Namhae Chemical Corporation
Unused credit limit in foreign currencies	227,103	Namhae Chemical Corporation
Acceptances and guarantees in Korean won	2,884	Namhae Chemical Corporation
Acceptances and guarantees in foreign currencies	49,699	Namhae Chemical Corporation
Unused credit limit in Korean won	145,869	Nonghyup Chemical Co., Ltd.
Unused credit limit in foreign currencies	29,803	Nonghyup Chemical Co., Ltd.
Acceptances and guarantees in foreign currencies	6,755	Nonghyup Chemical Co., Ltd.
Unused credit limit in Korean won	409	Agricultural Cooperative Pusan Gyeongnam Marketing, Inc.
Unused credit limit in Korean won	5,259	Agricultural Cooperative Chungbuk Marketing Co., Ltd.
Unused credit limit in Korean won	902	Nonghyup Logistics Service Inc.
Unused credit limit in Korean won	20,702	Nonghyup Moguchon Inc.
Unused credit limit in foreign currencies	536	Nonghyup Moguchon Inc.
Unused credit limit in Korean won	45,930	Nonghyup Feed Inc.
Unused credit limit in foreign currencies	330,058	Nonghyup Feed Inc.
Acceptances and guarantees in foreign currencies	65,563	Nonghyup Feed Inc.
Unused credit limit in Korean won	29,288	NH Networks Co., Ltd. (formerly known as NH Development Co., Ltd.)
Unused credit limit in Korean won	10,317	Agricultural Cooperative Asset Management Co., Ltd.
Unused credit limit in Korean won	2,041	NH Information System Co., Ltd.
Unused credit limit in Korean won	328	NH heuk sarang Co., Ltd.
Unused credit limit in Korean won	177	Nonghyup Foundation (formerly known as Nonghyup Culture Welfare Foundation)
Unused credit limit in Korean won	2,814	NH Hyupdong Planning
Acceptances and guarantees in Korean won	7,400	NH Hyupdong Planning
Unused credit limit in Korean won	27	Nisso-namhae Agro Co., Ltd.
Unused credit limit in Korean won	9,826	Nongwoo Bio Co., Ltd.
Unused credit limit in Korean won	2,180	Agricultural Corporation Nonghyup Food Grain Inc.
Unused credit limit in Korean won	91,932	Nonghyup Hanaro Mart Inc.
Unused credit limit in Korean won	136	Kongyoung Homeshopping Co., Ltd.
Unused credit limit in Korean won	15	Agricultural Corporation Orion Nonghyup Inc. (formerly known as Agricultural Corporation K-Food Inc.)
Unused credit limit in foreign currencies	5,178	Agricultural Corporation Orion Nonghyup Inc. (formerly known as Agricultural Corporation K-Food Inc.)
Acceptances and guarantees in foreign currencies	1,299	Agricultural Corporation Orion Nonghyup Inc. (formerly known as Agricultural Corporation K-Food Inc.)
Unused credit limit in Korean won	79	NongHyup Food Inc.
Unused credit limit in Korean won	706	Sanglim Agricultural Co.,Ltd.
Unused credit limit in foreign currencies	188,281	STX Offshore & Shipbuilding Co., Ltd.
Acceptances and guarantees in foreign currencies	61,609	STX Offshore & Shipbuilding Co., Ltd.
Unused credit limit in Korean won	93	Yoesu Green Energy Co., Ltd.
Unused credit limit in Korean won	1	Resom construction Co., Ltd. (*1)

(*1) The companies in conglomerate group except for the parent company, jointly controlled entities, associates, and other related parties, are included in the others category.

42. Related-party transactions (cont'd)

Details of commitments related to derivative instruments with related parties as of December 31, 2018 and 2017 are summarized as follows (Korean won in millions):

Company	Classification	December 31, 2018	December 31, 2017
NACF	Open interest	₩ 7,255,616	₩ 5,635,312
NH Nonghyup Trading Co., Ltd.	Open interest	17,198	15,380
NH Investment & Securities Co., Ltd.	Open interest	1,128,331	1,378,733
Namhae Chemical Corporation	Open interest	13,417	6,428
Nonghyup Feed Inc.	Open interest	192,791	101,573
NH Life Insurance Co., Ltd.	Open interest	5,188,246	3,569,445
NH Property and Casualty Insurance Co., Ltd.	Open interest	522,934	525,531

Details of fixed asset transactions with related parties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018		For the year ended December 31, 2017	
	Purchase of tangible assets	Purchase of intangible assets	Purchase of tangible assets	Purchase of intangible assets
NACF	₩ 5	₩ -	₩ -	₩ -
NH Networks Co., Ltd.	62,858	11	49,710	-
NH Information System Co., Ltd.	2,627	35,597	1,846	28,965
Agricultural Cooperative Pusan Gyeongnam Marketing Inc.	1	-	-	-
Nonghyup Hanaro Mart Inc.	77	-	-	-

Details of the collateral provided from related parties as of December 31, 2018 are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NACF	Securities	₩ 1,120,000
NH Life Insurance Co., Ltd.	Securities	208,120
NH Life Insurance Co., Ltd.	Property and equipment	93
NH Property and Casualty Insurance Co., Ltd.	Securities	40,000

Details of the collateral provided to related parties as of December 31, 2018 are summarized as follows (Korean won in millions):

Company	Classification	Pledged amount
NH Nonghyup Capital Co., Ltd.	Securities	₩ 4,725
NH Investment & Securities Co., Ltd.	Securities	5,123
NH Futures Co., Ltd.	Securities	13,560

The key management compensations for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018	For the year ended December 31, 2017
Short-term employee benefits	₩ 2,494	₩ 2,475
Retirement expenses	674	569
	₩ 3,168	₩ 3,044

43. Commitments and contingencies

Details of agreements that the Group has made as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	December 31, 2018	December 31, 2017
Loan commitment	₩ 77,986,747	₩ 59,448,772
Credit guarantee (*1)	1,827,657	1,890,249
CP purchase agreement (*1)	375	683,848
Securities purchase agreement	1,167,131	730,028
	₩ 80,981,910	₩ 62,752,897

(*1) As of December 31, 2018, the Group provided the credit line with the limit of ₩1,827,657 million and made the commercial paper purchase agreement with the limit of ₩375 million as collaterals to repay the principals and interests of debentures and commercial papers issued by Bavarian Sky Korea 3rd Asset Securitization Speciality Company LTD. and 48 other SPEs.

The Group is involved in various pending legal proceedings arising in the normal course of business. As of December 31, 2018, the Group is named as a plaintiff in 154 cases with related aggregate claims amounting to ₩101,074 million, and as a defendant in 193 cases with related aggregate claims amounting to ₩88,685 million. Accordingly, the Group accrued for a litigation-related liability of ₩14,152 million in other liabilities. Except for accrued litigations-related liabilities, the Group believes that the outcome of litigations will not have a material impact on the consolidated financial statements.

The Group holds written-off loans, on which the statute of limitation was not completed or the Group has not lost its claim rights to borrowers and guarantors, amounting to ₩4,794,495 million and ₩4,714,524 million as of December 31, 2018 and 2017, respectively.

44. Consolidated statements of cash flows

44.1 Cash and cash equivalents

Cash and cash equivalents in the consolidated statement of cash flows consist of cash and due from banks (excluding restricted due from banks) from the consolidated statement of financial position. Cash and cash equivalents as of December 31, 2018 and 2017 are adjusted as follows (Korean won in millions):

Classification (*1)	December 31, 2018	December 31, 2017
Cash and due from banks	₩ 6,212,665	₩ 7,788,698
Less: Restricted due from bank (Refer to Note 6)	(2,168,399)	(4,897,504)
Less: Due from banks with a maturity of three months or more at acquisition	(160,000)	(8,782)
	₩ 3,884,266	₩ 2,882,412

(*1) Allowance for expected credit losses is not included.

44.2 Non-cash transactions

Significant non-cash transactions not included in the consolidated statement of cash flows for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification	For the year ended December 31, 2018
Decrease in loans at amortized cost due to write-off	₩ 819,101
Changes in gain (loss) on valuation of financial assets at FVOCI	121,672
Transfer between property and investment property	4,925
Change in loan due to debt-equity swap	68,190

44. Consolidated statements of cash flows (cont'd)

Classification		For the year ended December 31, 2017
Decrease in loans due to write-off	₩	761,610
Increase in gain (loss) on valuation and exchange of AFS financial assets		93,573
Transfer between property and investment property		29,025
Change investments in associates due to debt-equity swap		8
Change in loans due to debt-equity swap		9,611

Changes in liabilities arising from financing activities for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	For the year ended December 31, 2018									
Classification		January 1, 2018		Cash flows in financing activities		Exchange rate changes		Others		December 31, 2018
Borrowings	₩	12,227,485	₩	(1,048,069)	₩	94,469	₩	9,461	₩	11,283,346
Debentures		18,968,727		(2,265,658)		103,281		21,652		16,828,002
Borrowings from trust accounts		2,353,022		463,418		-		-		2,816,440
	₩	33,549,234	₩	(2,850,309)	₩	197,750	₩	31,113	₩	30,927,788

	For the year ended December 31, 2017											
Classification		January 1, 2017		Cash flows in financing activities		Exchange rate changes		Fair value changes		Others		December 31, 2017
Borrowings	₩	12,185,991	₩	284,899	₩	(243,405)	₩	-	₩	-	₩	12,227,485
Debentures		18,717,527		713,606		(498,558)		-		36,152		18,968,727
Borrowings from trust accounts		1,485,868		867,154		-		-		-		2,353,022
	₩	32,389,386	₩	1,865,659	₩	(741,963)	₩	-	₩	36,152	₩	33,549,234

45. Operating lease

The Group uses Automatic Teller's Machines through operating lease. The lease term ranges from 12 to 33 months.

Lease expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

Classification		For the year ended December 31, 2018		For the year ended December 31, 2017
Minimum lease payment	₩	3,792	₩	7,895

Expected schedule of lease payment as of December 31, 2018 and 2017 is as follows (Korean won in millions):

Classification		December 31, 2018		December 31, 2017
Less than one year	₩	1,542	₩	3,819
1~5 years		71		2,092
	₩	1,613	₩	5,911

46. Business combinations

The Group acquired a 100% stake in SAMIC PLC, a local corporation engaged in the small loan business in Cambodia in cash and changed the name of the company to NongHyup Finance Cambodia Co., Ltd. in August 30, 2018.

The Group expects to expand its global business through the business combinations, and its long-term leap to become a global agricultural commercial bank.

Goodwill arising from the acquisition of SAMIC PLC amounted to ₩4,266 million based on the synergy created by combining the Group's operations with the acquired corporation and the acquired customer base, and there are no intangible assets other than goodwill.

The assets acquired and liabilities assumed at the acquisition date other than the consideration transferred are as follows (Korean won in millions):

Classification		August 30, 2018
Consideration transferred :		
Cash	₩	11,282
Amounts recognized as identifiable assets and liabilities :		
Cash and due from banks		710
Loans at amortized cost		16,451
Tangible/intangible assets		229
Other assets		103
Borrowings		(9,461)
Other liabilities		(1,016)
Subtotal (Fair value of identifiable assets and liabilities)		7,016
Goodwill	₩	4,266

The Group incurred legal and due diligence costs and others of ₩519 million related to the business combination and recognized the costs as general and administrative expenses in the statements of profit or loss and other comprehensive income of the Group.

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