Supplemental Listing Document

If you are in any doubt as to any aspect of this document, you should consult your stockbroker or other registered dealer in securities, bank manager, solicitor, accountant or other professional adviser.

Application has been made to the Singapore Exchange Securities Trading Limited (the "**SGX-ST**") for permission to deal in and for quotation of the Warrants (as defined below). The SGX-ST takes no responsibility for the contents of this document, makes no representation as to its accuracy or completeness and expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of this document. Admission to the Official List of the SGX-ST is not to be taken as an indication of the merits of UBS AG, acting through its London branch, the Index (as defined below) or the Warrants.

20,000,000 European Style Index Call Warrants relating to the Hang Seng Index

UBS AG

(Incorporated with limited liability in Switzerland)
acting through its London Branch

Issue Price: S$0.20 per Warrant

This document is published for the purpose of obtaining a listing of all the above warrants (the "**Warrants**") to be issued by UBS AG (the "**Issuer**") acting through its London branch, and is supplemental to and should be read in conjunction with a base listing document dated 28 June 2020 (the "**Base Listing Document**"), including its supplements and addenda as executed from time to time, for the purpose of giving information with regard to the Issuer and the Warrants. Information relating to the Hang Seng Index (the "**Index**") is contained in this document.

This document does not constitute or form part of any offer, or invitation, to subscribe for or to sell, or solicitation of any offer to subscribe for or to purchase, Warrants or other securities of the Issuer, nor is it calculated to invite, nor does it permit the making of, offers by the public to subscribe for or purchase for cash or other consideration the Warrants or other securities of the Issuer. Restrictions have been imposed on offers and sales of the Warrants and on distributions of documents relating thereto in the United States, the United Kingdom, the European Economic Area, Singapore and Hong Kong (see "Placing and Sale" contained herein).

The Warrants are complex products. You should exercise caution in relation to them. Investors are warned that the price of the Warrants may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment.

The Warrants are classified as capital markets products other than prescribed capital markets products[1] and Specified Investment Products (SIPs)[2], and may only be sold to retail investors with

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[1] As defined in the Securities and Futures (Capital Markets Products) Regulations 2018.

[2] As defined in the MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products.

enhanced safeguards, including an assessment of such investors' investment knowledge or experience.

Prospective purchasers should therefore ensure that they understand the nature of the Warrants and carefully study the risk factors set out in the Base Listing Document and pages 18 to 21 of this document before they invest in the Warrants.

Application has been made to the SGX-ST for permission to deal in and for quotation of the Warrants and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Warrants. It is expected that dealings in the Warrants will commence on or about 17 May 2021.

As at the date hereof, the Issuer's long term credit rating by S&P Global Ratings Europe Limited is A+, by Moody's Deutschland GmbH is Aa3 and by Fitch Ratings Limited is AA-.

The Issuer is regulated by, among others, the Swiss Federal Banking Commission. In the United Kingdom, it is authorised by the Prudential Regulatory Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulatory Authority.

14 May 2021

Subject as set out below, the Issuer accepts full responsibility for the accuracy of the information contained in this document and the Base Listing Document in relation to itself and the Warrants. To the best of the knowledge and belief of the Issuer (which has taken all reasonable care to ensure that such is the case), the information contained in this document and the Base Listing Document for which it accepts responsibility (subject as set out below in respect of the information contained herein with regard to the Index) is in accordance with the facts and does not omit anything likely to affect the import of such information. The information with regard to the Index as set out herein is extracted from publicly available information. The Issuer accepts responsibility only for the accurate reproduction of such information. No further or other responsibility or liability in respect of such information is accepted by the Issuer.

No person has been authorised to give any information or to make any representation other than those contained in this document in connection with the offering of the Warrants, and, if given or made, such information or representations must not be relied upon as having been authorised by the Issuer. Neither the delivery of this document nor any sale made hereunder shall under any circumstances create any implication that there has been no change in the affairs of the Issuer or its subsidiaries and affiliates since the date hereof.

This document does not constitute an offer by, or an invitation on behalf of, the Issuer to purchase or subscribe for any of the Warrants. The distribution of this document and the offering of the Warrants may, in certain jurisdictions, be restricted by law. The Issuer requires persons into whose possession this document comes to inform themselves of and observe all such restrictions. In particular, the Warrants have not been and will not be registered under the United States Securities Act of 1933, as amended (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 (as defined in Regulation S under the Securities Act) unless the Warrants are registered under the Securities Act or any exemption from registration is available. Subject to certain exemptions, Warrants, or interests therein, may not at any time be offered, sold, resold or delivered within the United States or to, or for the account or benefit of, U.S. persons. A further description of certain restrictions on offering and sale of the Warrants and distribution of this document is given in the section headed "Placing and Sale" contained herein.

The SGX-ST has made no assessment of, nor taken any responsibility for, the financial soundness of the Issuer or the merits of investing in the Warrants, nor have they verified the accuracy or the truthfulness of statements made or opinions expressed in this document.

The Issuer and/or any of its affiliates may repurchase Warrants at any time on or after the date of issue and any Warrants so repurchased may be offered from time to time in one or more transactions in the over-the-counter market or otherwise at prevailing market prices or in negotiated transactions, at the discretion of the Issuer. Investors should not therefore make any assumption as to the number of Warrants in issue at any time.

References in this document to the "**Conditions**" shall mean references to the Terms and Conditions of the European Style Index Call Warrants contained in the Base Listing Document. Terms not defined herein shall have the meanings ascribed thereto in the Conditions.

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TERMS AND CONDITIONS OF THE WARRANTS

The following are the terms and conditions of the Warrants and should be read in conjunction with, and are qualified by reference to, the other information set out in this document and the Base Listing Document.

The Conditions are set out in the section headed "Terms and Conditions of the European Style Index Call Warrants" in the Base Listing Document. For the purposes of the Conditions, the following terms shall have the following meanings:

Warrants:	20,000,000 European Style Index Call Warrants relating to the Hang Seng Index ("**Index**")
Index:	Hang Seng Index (Reuters Instrument Code: .HSI)
Index Sponsor:	Hang Seng Indexes Company Limited
Conversion Ratio (number of Index units per Warrant):	0.001 (i.e. every 1,000 Warrants initially relate to one Index unit)
Reference Level[3] and Source:	28,532.96 (out of the money) (Reuters)
Strike Level:	30,000
Gearing[3]:	9.4x
Premium[3]:	9.23**%**
Volatility[3]:	Implied: 35.00% Historical: 21.50%
Launch Date:	5 May 2021
Closing Date:	14 May 2021
Dealing Commencement Date:	17 May 2021
Last Trading Date:	The fifth Business Day immediately preceding the Expiry Date, currently being 22 July 2021
Expiry Date:	29 July 2021 (if the Expiry Date is not a Business Day, then the Expiry Date shall fall on the immediately preceding Business Day)
Board Lot:	100 Warrants
Valuation Date:	The Expiry Date, or if such day is not a Relevant Stock Exchange

[3] These figures are calculated as at, and based on information available to the Issuer on or about, the date of the termsheet in respect of the Warrants. The Issuer is not obliged, and undertakes no responsibility to any person, to update or inform any person of any changes to the figures after the date of the termsheet in respect of the Warrants.

	Business Day, the immediately preceding Relevant Stock Exchange Business Day
Exercise:	Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by the Closing Level of the Index. If the Closing Level of the Index is greater than the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day. The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) of the Warrants. In the event the Closing Level of the Index is less than or equal to the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, and Warrantholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.
Index Currency Amount:	HK$1.00
Cash Settlement Amount:	In respect of each Warrant, is the amount (if positive) calculated as follows: [(Closing Level - Strike Level) x Conversion Ratio x Index Currency Amount] ÷ Exchange Rate
Closing Level:	The average of quotations of the Index compiled, computed and disseminated by the Index Sponsor taken at (i) five minute intervals from five minutes after the start of, and up to five minutes before the end of, the continuous trading session of The Stock Exchange of Hong Kong Limited ("**HKEX**"), and (ii) the close of trading on HKEX on the Valuation Date, rounded down to the nearest whole number, subject to the Issuer's right to determine the closing level in good faith upon the occurrence of a Market Disruption Event on the Valuation Date, as described further in Condition 4(c) of the Warrants.
Exchange Rate:	The rate of exchange between the Reference Currency and the Settlement Currency (expressed as the number of units of the Reference Currency per one unit of the Settlement Currency) on the Expiry Date (if it is not a Relevant Stock Exchange Business Day, the next following day which is a Business Day and a Relevant Stock Exchange Business Day) at or about 5:00 p.m. (Singapore time), as determined by the Issuer by reference to such source(s) as the Issuer may reasonably determine to be appropriate at such time.

Adjustments and Extraordinary Events:	The Issuer has the right to make adjustments to the terms of the Warrants in the event of certain changes affecting the Index, including the cancellation of the Index, change in the computation methodology of the Index and disruption of publication of the Index (as more specifically set out in the Conditions in the Global Warrant and the Base Listing Document). For the avoidance of doubt, no notice will be given if the Issuer determines that adjustments will not be made.
Reference Currency:	Hong Kong dollars
Settlement Currency:	Singapore dollars
Exercise Expenses:	Holders of Warrants will be required to pay all charges which are incurred in respect of the exercise of the Warrants.
Relevant Stock Exchange:	HKEX
Relevant Stock Exchange Business Day:	A day (other than a Saturday, Sunday, or public holiday) on which the Relevant Stock Exchange is open for dealings in Hong Kong during its normal trading hours and banks are open for business in Hong Kong
Exchange Business Day:	A day (excluding Saturdays, Sundays and public holidays) on which the Singapore Exchange Securities Trading Limited ("**SGX-ST**") and HKEX are open for dealings during its normal trading hours and banks are open for business in Singapore and Hong Kong
Warrant Agent:	The Central Depository (Pte) Limited ("**CDP**")
Clearing System:	CDP
Fees and Charges:	Normal transaction and brokerage fees shall apply to the trading of the Warrants on the SGX-ST. Investors should note that they may be required to pay stamp taxes or other documentary charges in accordance with the laws and practices of the country where the Warrants are transferred. Investors who are in any doubt as to their tax position should consult their own independent tax advisers. In addition, investors should be aware that tax regulations and their application by the relevant taxation authorities change from time to time. Accordingly, it is not possible to predict the precise tax treatment which will apply at any given time.

The Conditions set out in the section headed "Terms and Conditions of the European Style Index Call Warrants" in the Base Listing Document are set out below. This section is qualified in its entirety by reference to the detailed information appearing elsewhere in this document which shall, to the extent so specified or to the extent inconsistent with the relevant Conditions set out below, replace or modify the relevant Conditions for the purpose of the Warrants.

TERMS AND CONDITIONS OF THE EUROPEAN STYLE INDEX CALL WARRANTS

1. Form, Status, Transfer and Title

(a) *Form*. The Warrants (which expression shall, unless the context otherwise requires, include any further warrants issued pursuant to Condition 10) are issued subject to and with the benefit of:-

(i) an instrument by way of deed poll (the "**Instrument**") dated the Closing Date, made by UBS AG (the "**Issuer**") acting through its London Branch; and

(ii) a warrant agent agreement (the "**Master Warrant Agent Agreement**" or "**Warrant Agent Agreement**") dated any time on or before the Closing Date, made between the Issuer and the Warrant Agent for the Warrants.

Copies of the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement are available for inspection at the specified office of the Warrant Agent.

The Warrantholders (as defined below) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement.

(b) *Status*. The Warrants constitute direct, general and unsecured contractual obligations of the Issuer and rank, and will rank, equally among themselves and *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer (save for statutorily preferred exceptions). The Warrants provide for cash settlement on exercise and, in particular, the Warrants will not be secured by any underlying assets.

(c) *Transfer*. The Warrants are represented by a global warrant certificate ("**Global Warrant**") which will be deposited with The Central Depository (Pte) Limited ("**CDP**"). Warrants in definitive form will not be issued. Transfers of Warrants may be effected only in Board Lots or integral multiples thereof. All transactions in (including transfers of) Warrants, in the open market or otherwise, must be effected through a securities account with CDP. Title will pass upon registration of the transfer in the records maintained by CDP.

(d) *Title*. Each person who is for the time being shown in the records maintained by CDP as entitled to a particular number of Warrants shall be treated by the Issuer and the Warrant Agent as the holder and absolute owner of such number of Warrants, notwithstanding any notice to the contrary. The expression "**Warrantholder**" shall be construed accordingly.

2. Warrant Rights and Exercise Expenses

(a) *Warrant Rights*. Every Warrant entitles each Warrantholder, upon due exercise and on compliance with Condition 4, to payment by the Issuer of the Cash Settlement Amount (if any) in the manner set out in Condition 4.

The "**Cash Settlement Amount**", in respect of each Warrant, shall be an amount (if positive) payable in the Settlement Currency equal to (1) multiplied by (2) MULTIPLIED by (3), where:

(1) is the Index Currency Amount;

(2) is equal to (i) the Closing Level LESS (ii) the Strike Level; and

(3) is the Conversion Ratio.

"**Closing Level**" means, means the level specified as such in the relevant Supplemental Listing Document subject to any adjustment in accordance with Condition 6.

"**Conversion Ratio**" means the ratio (expressed as the number of Index units to which one Warrant relates) specified by the Issuer, subject to adjustments in accordance with these Conditions.

(b) *Exercise Expenses*. Warrantholders will be required to pay all charges which are incurred in respect of the exercise of the Warrants (the "**Exercise Expenses**"). An amount equivalent to the Exercise Expenses will be deducted by the Issuer from the Cash Settlement Amount in accordance with Condition 4. Notwithstanding the foregoing, the Warrantholders shall account to the Issuer on demand for any Exercise Expenses to the extent that they were not or could not be deducted from the Cash Settlement Amount prior to the date of payment of the Cash Settlement Amount to the Warrantholders in accordance with Condition 4.

3. Expiry Date

Unless automatically exercised in accordance with Condition 4(b), the Warrants shall be deemed to expire at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day (as defined below), the immediately preceding Business Day.

4. Exercise of Warrants

(a) *Exercise*. Warrants may only be exercised on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, in accordance with Condition 4(b).

(b) *Automatic Exercise*. Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by whether the Cash Settlement Amount (less any Exercise Expenses) is positive. If the Closing Level of the Index is greater than the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day. The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) below. In the event the Closing Level of the Index is less than or equal to the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a

Business Day, the immediately preceding Business Day, and Warrantholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.

(c) *Settlement*. In respect of Warrants which are automatically exercised in accordance with Condition 4(b), the Issuer will pay to the Warrant Agent who will then pay to the relevant Warrantholder the Cash Settlement Amount (if any) in the Settlement Currency. The aggregate Cash Settlement Amount (less any Exercise Expenses) shall be dispatched by the Warrant Agent as soon as practicable and no later than five Business Days following the Valuation Date by way of crossed cheque or other payment in immediately available funds drawn in favour of the Warrantholder only (or, in the case of joint Warrantholders, the first-named Warrantholder) appearing in the records maintained by CDP. Any payment made pursuant to this Condition 4(c) shall be delivered at the risk and expense of the Warrantholder and posted to the Warrantholder's address appearing in the records maintained by CDP (or, in the case of joint Warrantholders, to the address of the first-named Warrantholder appearing in the records maintained by CDP). If the Cash Settlement Amount is equal to or less than the determined Exercise Expenses, no amount is payable.

If the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event has occurred, then the Issuer shall determine the Closing Level on the basis of its good faith estimate of the Closing Level that would have prevailed on that day but for the occurrence of the Market Disruption Event provided that the Issuer, if applicable, may, but shall not be obliged to, determine such Closing Level by having regard to the manner in which futures contracts relating to the Index are calculated.

"**Market Disruption Event**" means:

(i) the occurrence or existence, on a Valuation Date, of any of:-

(A) the suspension or limitation of the trading of a material number of securities/commodities from time to time comprising the Index; or

(B) the suspension or limitation of the trading of securities/commodities (1) on the SGX-ST or the Relevant Stock Exchange or (2) generally; or

(C) the suspension or limitation of the trading of (1) options or futures relating to the Index on any options or futures exchanges or (2) options or futures generally on any options and/or futures exchanges on which options or futures relating to the Index are traded; or

(D) the imposition of any exchange controls in respect of any currencies involved in determining the Cash Settlement Amount; or

(E) failure from the Index Sponsor to compute, publish and disseminate the level of the Index or material limitation to access the level of the Index.

(ii) a limitation or closure of the SGX-ST or the Relevant Stock Exchange due to any unforeseen circumstances.

For the purposes of this definition, (aa) the limitation on the number of hours or days of trading will not constitute a Market Disruption Event if it results from an announced change in the regular business hours of any exchange, and (bb) a limitation imposed on trading (including but not limited to unforeseen circumstances such as by reason of the movements in price exceeding the levels permitted by any relevant exchange or any act of God, war, riot, public disorder, explosion, terrorism or otherwise due to any unforeseen circumstances) on the relevant exchange will constitute a Market Disruption Event.

"**Valuation Date**" means, the date on which the Closing Level is determined or such other date as may be specified in the relevant Supplemental Listing Document.

The Issuer's obligations to pay the Cash Settlement Amount shall be discharged by payment to the Warrant Agent in accordance with the Master Warrant Agent Agreement or Warrant Agent Agreement.

(d) *CDP not liable*. CDP shall not be liable to any Warrantholder with respect to any action taken or omitted to be taken by the Issuer or the Warrant Agent in connection with the exercise of the Warrants or otherwise pursuant to or in connection with these Conditions.

(e) *Business Day*. In these Conditions, a "**Business Day**" shall be a day (excluding Saturdays, Sundays and public holidays) on which the SGX-ST is open for dealings in Singapore during its normal trading hours and banks are open for business in Singapore and an "**Index Business Day**" shall be a day on which the Index is published by the Index Sponsor or, as the case may be, the Successor Index Sponsor and where the Index closes at the normal trading hours.

5. Warrant Agent

(a) *Warrant Agent*. The Issuer reserves the right, subject to the appointment of a successor, at any time to vary or terminate the appointment of the Warrant Agent and to appoint another Warrant Agent provided that it will at all times maintain a Warrant Agent which, so long as the Warrants are listed on the SGX-ST, shall be in Singapore. Notice of any such termination or appointment and of any change in the specified office of the Warrant Agent will be given to the Warrantholders in accordance with Condition 9.

(b) *Agent of Issuer*. The Warrant Agent will be acting as agent of the Issuer and will not assume any obligation or duty to or any relationship of agency or trust for the Warrantholders. All determinations and calculations by the Warrant Agent under these Conditions shall (save in the case of manifest error) be final and binding on the Issuer and the Warrantholders.

6. Adjustments to the Index

(a) *Successor Sponsor Calculates and Reports Index*. If the Index is (i) not calculated and announced by the Index Sponsor but is calculated and published by a successor to the Index Sponsor (the "**Successor Index Sponsor**") acceptable to the Issuer or (ii) replaced by a successor index using, in the determination of the Issuer, the same or a substantially similar formula for and method of calculation as used in the calculation of the Index, then the Index will be deemed to be the index so calculated and announced by the Successor Index Sponsor or that successor index, as the case may be.

(b) *Modification and Cessation of Calculation of Index*. If:-

(i) on or prior to the Valuation Date the Index Sponsor or (if applicable) the Successor Index Sponsor makes a material change in the formula for or the method of calculating the Index or in any other way materially modifies the Index (other than a modification prescribed in that formula or method to maintain the Index in the event of changes in constituent stocks, contracts or commodities and other routine events); or

(ii) on a Valuation Date the Index Sponsor or (if applicable) the Successor Index Sponsor fails to calculate and publish the Index (other than as a result of a Market Disruption Event),

then the Issuer shall determine the Closing Level using, in lieu of a published level for the Index, the level for the Index as at that Valuation Date as determined by the Issuer in accordance with the formula for and method of calculating the Index last in effect prior to that change or failure, but using only those securities/commodities that comprised the Index immediately prior to that change or failure (other than those securities that have since ceased to be listed on the relevant exchange).

(c) *Other Adjustments*. Except as provided in this Condition 6, adjustments will not be made in any other circumstances, subject to the right reserved by the Issuer (such right to be exercised in the Issuer's sole and unfettered discretion and without any obligation whatsoever) to make such adjustments and amendments as it believes appropriate in circumstances where an event or events (including the events as contemplated in Conditions 6(a) to 6(b)) occur which it believes in its sole discretion and irrespective of, in substitution for, or in addition to the provisions contemplated in Conditions 6(a) to 6(b) should, in the context of the issue of the Warrants and the obligations of the Issuer, give rise to such adjustment or as the case may be, amendment provided that such adjustment or as the case may be, amendment is considered by the Issuer not to be materially prejudicial to the Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such adjustment or amendment in any particular jurisdiction).

(d) *Notice of Adjustments*. All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Warrantholders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective in accordance with Condition 9. For the avoidance of doubt, no notice will be given if the Issuer determines that adjustments will not be made.

7. Purchases

The Issuer or its related corporations may at any time purchase Warrants at any price in the open market or by tender or by private treaty. Any Warrants so purchased may be held or resold or surrendered for cancellation.

8. Meetings of Warrantholders; Modification

(a) *Meetings of Warrantholders*. The Master Warrant Agent Agreement or Warrant Agent Agreement contains provisions for convening meetings of the Warrantholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution (as defined in the Master Warrant Agent Agreement or Warrant Agent Agreement) of a modification of the provisions of the Warrants or of the Master Warrant Agent Agreement or Warrant Agent Agreement.

At least 21 days' notice (exclusive of the day on which the notice is given and of the day on which the meeting is held) specifying the date, time and place of the meeting shall be given to the Warrantholders.

Such a meeting may be convened by the Issuer or by Warrantholders holding not less than ten per cent. of the Warrants for the time being remaining unexercised. The quorum at any such meeting for passing an Extraordinary Resolution will be two or more persons holding or representing not less than 25 per cent. of the Warrants for the time being remaining unexercised, or at any adjourned meeting two or more persons being or representing Warrantholders whatever the number of Warrants so held or represented.

A resolution will be an Extraordinary Resolution when it has been passed at a duly convened meeting by not less than three-quarters of the votes cast by such Warrantholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warrantholders shall be binding on all the Warrantholders whether or not they are present at the meeting. Resolutions can be passed in writing if passed unanimously.

(b) *Modification*. The Issuer may, without the consent of the Warrantholders, effect (i) any modification of the provisions of the Warrants or the Instrument which is not materially prejudicial to the interests of the Warrantholders or (ii) any modification of the provisions of the Warrants or the Instrument which is of a formal, minor or technical nature, which is made to correct an obvious error or which is necessary in order to comply with mandatory provisions of Singapore law. Any such modification shall be binding on the Warrantholders and shall be notified to them by the Warrant Agent before the date such modification becomes effective or as soon as practicable thereafter in accordance with Condition 9.

9. Notices

(a) *Documents*. All cheques and other documents required or permitted by these Conditions to be sent to a Warrantholder or to which a Warrantholder is entitled or which the Issuer shall have agreed to deliver to a Warrantholder may be delivered by hand or sent by post addressed to the Warrantholder at his address appearing in the records maintained by CDP or, in the case of joint Warrantholders, addressed to the joint holder first named at his address appearing in the records maintained by CDP, and airmail post shall be used if that address is not in Singapore. All documents delivered or sent in accordance with this paragraph shall be delivered or sent at the risk of the relevant Warrantholder.

(b) *Notices.* All notices to Warrantholders will be validly given if published in English on the website of the SGX-ST. Such notices shall be deemed to have been given on the date of the first such publication. If publication on the website of the SGX-ST is not practicable, notice will be given in such other manner as the Issuer may determine. The Issuer shall, at least one month prior to the expiry of any Warrant, give notice of the date of expiry of such Warrant in the manner prescribed above.

10. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Warrantholders, to create and issue further warrants so as to form a single series with the Warrants.

11. Early Termination

(a) *Early Termination for Illegality etc.* The Issuer shall have the right to terminate the Warrants if it shall have determined in its absolute discretion that a Regulatory Event (as defined below) has occurred and, for reasons beyond its control its performance thereunder shall have become unlawful in whole or in part under any applicable present or future law, rule, regulation, judgment, order or directive of any governmental, administrative, legislative or judicial authority or power ("**Applicable Law**").

For the purposes of this Condition:

"**Regulatory Event**" means, following the occurrence of a Change in Law (as defined below) with respect to the Issuer and/or any of its affiliates involved in the issue of the Warrants (hereafter the "**Relevant Affiliates**" and each of the Issuer and the Relevant Affiliates, a "**Relevant Entity**") that, after the Warrants have been issued, (i) any Relevant Entity would incur a materially increased (as compared with circumstances existing prior to such event) amount of tax, duty, liability, penalty, expense, fee, cost or regulatory capital charge however defined or collateral requirements for performing its obligations under the Warrants or hedging the Issuer's obligations under the Warrants, including, without limitation, due to clearing requirements of, or the absence of, clearing of the transactions entered into in connection with the issue of, or hedging the Issuer's obligation under, the Warrants, (ii) it is or will become for any Relevant Entity impracticable, impossible (in each case, after using commercially reasonable efforts), unlawful, illegal or otherwise prohibited or contrary, in whole or in part, under any law, regulation, rule, judgement, order or directive of any governmental, administrative or judicial authority, or power, applicable to such Relevant Entity (a) to hold, acquire, issue, reissue, substitute, maintain, settle, or as the case may be, guarantee, the Warrants, (b) to acquire, hold, sponsor or dispose of any asset(s) (or any interest thereof) of any other transaction(s) such Relevant Entity may use in connection with the issue of the Warrants or to hedge the Issuer's obligations under the Warrants, (c) to perform obligations in connection with the Warrants or any contractual arrangement entered into between the Issuer and any Relevant Affiliate (including without limitation to hedge the Issuer's obligations under the Warrants) or (d) to hold, acquire, maintain, increase, substitute or redeem all or a substantial part of its direct or indirect shareholding in the Issuer's capital or the capital of any Relevant Affiliate or to directly or indirectly sponsor the Issuer or any Relevant Affiliate, or (iii) there is or may be a material adverse effect on a Relevant Entity in connection with the issue of the Warrants.

"**Change in Law**" means (i) the adoption, enactment, promulgation, execution or ratification of any applicable new law, regulation or rule (including, without limitation, any applicable tax law, regulation or rule) after the Warrants have been issued, (ii) the implementation or application of any applicable law, regulation or rule (including, without limitation, any applicable tax law, regulation or rule) already in force when the Warrants have been issued but in respect of which the manner of its implementation or application was not known or unclear at the time, or (iii) the change of any applicable law, regulation or rule existing when the Warrants are issued, or the change in the interpretation or application or practice relating thereto, existing when the Warrants are issued of any applicable law, regulation or rule, by any competent court, tribunal, regulatory authority or any other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any additional or alternative court, tribunal, authority or entity, to that existing when the Warrants are issued).

(b) *Early Termination for not being able to find a successor to the Index Sponsor or a successor to the Index.* If (i) the Index Sponsor is not able to calculate and announce the Index and the Issuer is not able to find an acceptable successor to the Index Sponsor or (ii) the Index becomes unavailable and the Issuer is not able to find a successor to the Index, the Issuer may at its sole discretion and without obligation terminate the Warrants in accordance with Condition 11(d).

(c) *Early Termination for other reasons.* The Issuer reserves the right (such right to be exercised in the Issuer's sole and unfettered discretion and without any obligation whatsoever) to terminate the Warrants in accordance with Condition 11(d) where an event or events occur which it believes in its sole discretion should, in the context of the issue of the Warrants and the obligations of the Issuer, give rise to such termination provided that such termination is considered by the Issuer not to be materially prejudicial to the interests of Warrantholders generally (without considering the circumstances of any individual Warrantholder or the tax or other consequences of such termination in any particular jurisdiction).

(d) *Termination.* If the Issuer terminates the Warrants early, then the Issuer will give notice to the Warrantholders in accordance with Condition 9. The Issuer will, if and to the extent permitted by the Applicable Law, pay to each Warrantholder in respect of each Warrant held by such Warrantholder an amount calculated by it as the fair market value of the Warrant immediately prior to such termination (ignoring such illegality) less the cost to the Issuer of unwinding any related hedging arrangements. Payment will be made to the Warrantholder in such manner as shall be notified to the Warrantholder in accordance with Condition 9.

12. Governing Law

The Warrants, the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement will be governed by and construed in accordance with Singapore law. The Issuer and each Warrantholder (by its purchase of the Warrants) shall be deemed to have submitted for all purposes in connection with the Warrants, the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement to the non-exclusive jurisdiction of the courts of Singapore.

13. Prescription

Claims against the Issuer for payment of any amount in respect of the Warrants will become void unless made within six years of the Expiry Date and, thereafter, any sums payable in respect of such Warrants shall be forfeited and shall revert to the Issuer.

14. Contracts (Rights of Third Parties) Act, Chapter 53B of Singapore

Unless otherwise expressly provided in the Global Warrant, the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement, a person who is not a party to any contracts made pursuant to the Global Warrant, the Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement has no rights under the Contracts (Rights of Third Parties) Act, Chapter 53B of Singapore to enforce any terms of such contracts. Except as expressly provided herein, the consent of any third party is not required for any subsequent agreement by the parties hereto to amend or vary (including any release or compromise of any liability) or terminate such contracts.

SUMMARY OF THE ISSUE

The following is a summary of the issue and should be read in conjunction with, and is qualified by reference to, the other information set out in this document and the Base Listing Document. Terms used in this Summary are defined in the Conditions.

Issuer:	UBS AG, acting through its London Branch
Index:	Hang Seng Index
The Warrants:	European Style Index Call Warrants
Number:	20,000,000 Warrants
Form:	The Warrants will be issued subject to, and with the benefit of, an instrument by way of deed poll dated 14 May 2021 (the "**Instrument**") and executed by the Issuer and a master warrant agent agreement dated 27 February 2008 (the "**Master Warrant Agent Agreement**") and made between the Issuer and the Warrant Agent.
Conversion Ratio (number of Index units per Warrant):	0.001 (i.e. every 1,000 Warrants initially relate to one Index unit)
Board Lot:	100 Warrants
Cash Settlement Amount:	In respect of each Warrant, is the amount (if positive) calculated as follows: [(Closing Level - Strike Level) x Conversion Ratio x Index Currency Amount] ÷ Exchange Rate
Denominations:	Warrants are represented by a global warrant in respect of all the Warrants
Exercise:	Warrantholders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by the Closing Level of the Index. If the Closing Level of the Index is greater than the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is positive, all Warrants shall be deemed to have been automatically exercised at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day. The Cash Settlement Amount less the Exercise Expenses in respect of the Warrants shall be paid in the manner set out in Condition 4(c) of the Warrants. In the event the Closing Level of the Index is less than or equal to the Strike Level and the Cash Settlement Amount (less any Exercise Expenses) is zero or negative, all Warrants shall be deemed to have expired at 5:00 p.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, and Warrantholders shall not be entitled to

	receive any payment from the Issuer in respect of the Warrants.
Exercise and Trading Currency:	Singapore dollars
Transfers of Warrants:	Warrants may only be transferred in Board Lots (or integral multiples thereof). All transfers in Warrants, in the open market or otherwise, must be effected through a securities account with CDP. Title will pass upon registration of the transfer in the records of CDP.
Listing:	Application has been made to the SGX-ST for permission to deal in and for quotation of the Warrants and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Warrants. Issue of the Warrants is conditional on such listing being granted. It is expected that dealings in the Warrants on the SGX-ST will commence on or about 17 May 2021.
Governing Law:	The laws of Singapore
Warrant Agent:	The Central Depository (Pte) Limited 11 North Buona Vista Drive #06-07 The Metropolis Tower 2 Singapore 138589
Further Issues:	Further issues which will form a single series with the Warrants will be permitted.

The above summary is qualified in its entirety by reference to the detailed information appearing elsewhere in this document and the Base Listing Document.

RISK FACTORS

The following risk factors are relevant to the Warrants:-

(a) investment in Warrants involves substantial risks including market risk, liquidity risk, and the risk that the Issuer will be unable to satisfy its/their obligations under the Warrants. Investors should ensure that they understand the nature of all these risks before making a decision to invest in the Warrants. You should consider carefully whether Warrants are suitable for you in light of your experience, objectives, financial position and other relevant circumstances. Warrants are not suitable for inexperienced investors;

(b) the Warrants constitute direct, general and unsecured contractual obligations of the Issuer and if you purchase the Warrants you are relying upon the creditworthiness of the Issuer and have no rights under the Warrants against any other person. In particular, it should be noted that the Issuer issues a large number of financial instruments, including Warrants, on a global basis and, at any given time, the financial instruments outstanding may be substantial. If you purchase the Warrants you are relying upon the creditworthiness of the Issuer and have no rights under the Warrants against the sponsor of the Index or any companies forming part of the Index to which the Warrants relate. The Issuer has substantially no obligation to a Warrantholder other than to pay amounts in accordance with the terms thereof as set forth herein and in the Base Listing Document. The Issuer does not in any respect underwrite or guarantee the performance of any Warrant. Any profit or loss realised by a Warrantholder in respect of a Warrant upon exercise or otherwise due to changes in the value of such Warrant, or the Index, is solely for the account of such Warrantholder. In addition, the Issuer shall have the absolute discretion to put in place any hedging transaction or arrangement which it deems appropriate in connection with any Warrant or the Index or any shares comprising the Index. A reduction in the rating, if any, accorded to outstanding debt securities of the Issuer by any one of its rating agencies could result in a reduction in the trading value of the Warrants;

(c) certain events relating to the Index or such shares comprising the Index may cause adverse movements in the level and price of the Index or the shares comprising the Index, as a result of which, the Warrantholders (as defined in the Conditions) may, in certain circumstances, sustain a total loss of their investment if the level of the Index falls below or is equal to the strike level on the relevant expiry date;

(d) due to their nature, the Warrants can be volatile instruments and may be subject to considerable fluctuations in value. The price of the Warrants may fall in value as rapidly as it may rise due to, including but not limited to, variations in the frequency and magnitude of the changes in the level of the Index, the time remaining to expiry and the creditworthiness of the Issuer;

(e) fluctuations in the Index level or the price of the shares comprising the Index will affect the price of the Warrants but not necessarily in the same magnitude and direction, therefore, prospective investors intending to purchase Warrants to hedge their market risk associated with investing in the shares comprising the Index or other securities/derivatives relating to the Index which may be specified herein, should recognise the complexities of utilising the Warrants in this manner;

(f) a Warrantholder must tender a specified number of Warrants at any one time in order to exercise. Thus, Warrantholders with fewer than the specified minimum number of Warrants in a particular series will either have to sell their Warrants or purchase additional Warrants, incurring transactions costs in each case, in order to realise their investment;

(g) if, whilst any of the Warrants remain unexercised, trading of options or futures relating to the relevant Index on any options or futures exchanges is suspended, or options or futures generally on any options and/or futures exchanges on which options or futures relating to the relevant Index are traded is suspended, or if the relevant Index for whatever reason is not calculated, trading in the relevant Warrants may be suspended for a similar period;

(h) investors should note that the Issuer's obligations to pay amounts in accordance with the terms thereof as set forth herein shall be discharged by delivery of the aggregate Cash Settlement Amount (if positive) to all Warrantholders in accordance with the agreement with the Warrant Agent;

(i) certain events relating to Index permit the Issuer to make certain determinations in respect of the Index and thus, permit the Issuer to make certain adjustments or amendments to the Conditions;

(j) a level for the Index may be published by the Index Sponsor at a time when one or more shares comprised in the Index are not trading. If this occurs on a Valuation Date and there is no Market Disruption Event under the terms of the relevant Warrants then the value of such shares may not be included in the closing level of the Index. In addition, certain events relating to the Index (including a material change in the formula or the method of calculating the Index or a failure to publish the Index) permits the Issuer to determine the level of the Index on the basis of the formula or method last in effect prior to such change of formula;

(k) a Warrant is only exercisable on its respective expiry date and may not be exercised by Warrantholders prior to such expiry date. Accordingly, if on such expiry date the Cash Settlement Amount (where applicable) is zero or negative, a Warrantholder will lose the value of his investment;

(l) investors should note that there may be an exchange rate risk where the Cash Settlement Amount may be converted from a foreign currency into Singapore dollars. Exchange rates between currencies are determined by forces of supply and demand in the foreign exchange markets. These forces are, in turn, affected by factors such as international balances of payments and other economic and financial conditions, government intervention in currency markets and currency trading speculation. Fluctuations in foreign exchange rates, foreign political and economic developments, and the imposition of exchange controls or other foreign governmental laws or restrictions applicable to such investments may affect the foreign currency market price and the exchange rate-adjusted equivalent price of the Warrants. Fluctuations in the exchange rate of any one currency may be offset by fluctuations in the exchange rate of other relevant currencies;

(m) investors should note that it is not possible to predict the price at which the Warrants will trade in the secondary market or whether such market will be liquid or illiquid. To the extent Warrants of a particular issue are exercised, the number of Warrants of such issue outstanding will decrease, resulting in a diminished liquidity for the remaining Warrants of such issue. A decrease in the liquidity of an issue of Warrants may cause, in turn, an increase in the volatility associated with the price of such issue of Warrants. The Issuer may, but is not obligated to, at any time, purchase Warrants at any price in the open market or by tender or private agreement. Any Warrants so purchased may be held or resold or surrendered for cancellation. To the extent that an issue of Warrants becomes illiquid, an investor may have to exercise such Warrants to realise value;

(n) two or more risk factors may simultaneously have an effect on the value of a Warrant such that the effect of any individual risk factor may not be predicted. No assurance can be given as to the effect any combination of risk factors may have on the value of a Warrant;

(o) investors should note that they may be required to pay stamp taxes or other documentary charges in accordance with the laws and practices of the country where the Warrants are transferred. Investors who are in any doubt as to their tax position should consult their own independent tax advisers. In addition, investors should be aware that tax regulations and their application by the relevant taxation authorities change from time to time. Accordingly, it is not possible to predict the precise tax treatment which will apply at any given time. Investors should refer to the Taxation Section in pages 234 to 237 of the Base Listing Document;

(p) investors should note that the Issuer may enter into discount, commission or fee arrangements with brokers and/or any of its subsidiaries or affiliates with respect to the primary or secondary market in the Warrants. The arrangements may result in the benefit to investors in Warrants buying and selling Warrants through nominated brokers by reducing or eliminating the commission payable by such Warrantholders. In the event that the commission payable by Warrantholders is eliminated, fee arrangements between the Issuer and brokers and/or any of its subsidiaries or affiliates will continue to apply. Investors in the Warrants should note that any brokers with whom the Issuer has a commission arrangement does not, and cannot be expected to, deal exclusively in the Warrants, therefore any broker and/or any of its subsidiaries or affiliates may from time to time engage in transactions involving the shares comprising the Index and/or structured products of other issuers over the same underlying Index as the Warrants for their proprietary accounts and/or accounts of their clients. The fact that the same broker may deal simultaneously for different clients in competing products in the market place may affect the value of the Warrants and present certain conflicts of interests;

(q) various potential and actual conflicts of interest may arise from the overall activities of the Issuer and any of its subsidiaries and affiliates.

The Issuer and any of its subsidiaries and affiliates are diversified financial institutions with relationships in countries around the world. These entities engage in a wide range of commercial and investment banking, brokerage, funds management, hedging transactions and investment and other activities for their own account or the account of others. In addition, the Issuer and any of its subsidiaries and affiliates, in connection with their other business activities, may possess or acquire material information about the Index and/or the shares comprising the Index. Such activities and information may involve or otherwise affect the Index and/or such shares comprising the Index in a manner that may cause consequences adverse to the Warrantholders or otherwise create conflicts of interests in connection with the issue of Warrants by the Issuer. Such actions and conflicts may include, without limitation, the exercise of voting power, the purchase and sale of securities, financial advisory relationships and exercise of creditor rights. The Issuer and any of its subsidiaries and affiliates have no obligation to disclose such information about the Index and/or such shares or such activities. The Issuer and any of its subsidiaries and affiliates and their officers and directors may engage in any such activities without regard to the issue of Warrants by the Issuer or the effect that such activities may directly or indirectly have on any Warrant;

(r) in the ordinary course of their business, including without limitation in connection with the Issuer or its appointed designated market maker's market making activities, the Issuer and any of its respective subsidiaries and affiliates may effect transactions for their own account or for the account of their customers and hold long or short positions in the shares comprising the Index and/or related derivatives. In addition, in connection with the offering of any Warrants, the Issuer and any of its respective subsidiaries and affiliates may enter into one or more hedging transactions with respect to the shares comprising the Index and/or related derivatives. In connection with such hedging or market-making activities or with respect to proprietary or other trading activities by the Issuer and any of its respective subsidiaries and its affiliates, the Issuer and any of its respective subsidiaries and affiliates may enter into transactions in the shares comprising the Index and/or related derivatives which may affect the market price, liquidity or value of the Warrants and which may affect the interests of Warrantholders;

(s) certain risks relating to the Issuer's operating environment and strategy, including those as set out in the Base Listing Document, may impact the Issuer's ability to execute its strategy and directly affect its business activities, financial condition, results of operations and prospects. As a broad-based international financial services firm, the Issuer is inherently exposed to risks that become apparent only with the benefit of hindsight, risks of which it is not presently aware or which it currently does not consider to be material could also materially affect its business activities, financial condition, results of operations and prospects. The sequence in which the risk factors are set out in the Base Listing Document is not indicative of their likehood of occurrence or the potential magnitude of their financial consequences; and

(t) as the Warrants are represented by a global warrant certificate which will be deposited with The Central Depository (Pte) Limited ("**CDP**"):

(i) investors should note that no definitive certificate will be issued in relation to the Warrants;

(ii) there will be no register of Warrantholders and each person who is for the time being shown in the records maintained by CDP as entitled to a particular number of Warrants by way of interest (to the extent of such number) in the global warrant certificate in respect of those Warrants represented thereby shall be treated as the holder of such number of Warrants;

(iii) investors will need to rely on any statements received from their brokers/custodians as evidence of their interest in the Warrants; and

(iv) notices to such Warrantholders will be published on the website of the SGX-ST. Investors will need to check the website of the SGX-ST regularly and/or rely on their brokers/custodians to obtain such notices.

INFORMATION RELATING TO THE INDEX

All information contained in this document regarding the Index is derived from publicly available information. The Issuer has not independently verified any of such information which appears on the website of Hang Seng Indexes Company Limited at www.hsi.com.hk.

Description of the Index

The Hang Seng Index ("**HSI**") was launched on 24 November 1969 and is one of the earliest stock market indexes in Hong Kong. Also known as the Hong Kong Blue Chip Index, the HSI measures the performance of largest and most liquid companies listed in Hong Kong.

The HSI is managed and compiled by Hang Seng Indexes Company Limited (the "**Index Sponsor**") (formerly HSI Services Limited), which is a wholly-owned subsidiary of Hang Seng Bank.

Constituent Stocks

To better reflect the price movements of the major sectors of the market, four sub-indexes were introduced in 1985. The constituent stocks are grouped under Finance, Utilities, Properties, and Commerce and Industry sub-indexes, and are as follows (effective 15 March 2021):

Finance

Company Name	Stock Code
AIA Group Limited	1299
Bank of China Limited	3988
Bank of Communications Co., Ltd.	3328
BOC Hong Kong (Holdings) Limited	2388
China Construction Bank Corporation	939
China Life Insurance Company Limited	2628
Hang Seng Bank, Limited	11
Hong Kong Exchanges and Clearing Limited	388
HSBC Holdings plc	5
Industrial and Commercial Bank of China Limited	1398
Ping An Insurance (Group) Company of China, Ltd.	2318

Utilities

Company Name	Stock Code
Cheung Kong Infrastructure Holdings Ltd.	1038
CLP Holdings Limited	2
Power Assets Holdings Limited	6
The Hong Kong and China Gas Company Limited	3

Properties

Company Name	Stock Code
Cheung Kong Property Holdings Limited	1113
China Overseas Land & Investment Limited	688

China Resources Land Limited	1109
Country Garden Holdings Co. Ltd.	2007
Hang Lung Properties Limited	101
Henderson Land Development Company Limited	12
Longfor Group Holdings Limited	960
New World Development Company Limited	17
Sun Hung Kai Properties Limited	16
The Link Real Estate Investment Trust	823
Wharf Real Estate Investment Company Limited	1997

Commerce and Industry

Company Name	**Stock Code**
AAC Technologies Holdings Inc.	2018
Alibaba Group Holding Limited	9988
Alibaba Health Information Technology Limited	241
ANTA Sports Products Limited	2020
Budweiser Brewing Company APAC Limited	1876
China Mengniu Dairy Co. Ltd.	2319
China Mobile Limited	941
China Petroleum & Chemical Corporation	386
China Unicom Limited	762
CITIC Limited	267
CK Hutchison Holdings Limited	1
CNOOC Limited	883
CSPC Pharmaceutical Group Ltd.	1093
Galaxy Entertainment Group Ltd.	27
Geely Automobile Holdings Ltd.	175
Haidilao International Holding Ltd.	6862
Hengan International Group Company Limited	1044
Meituan	3690
MTR Corporation Limited	66
PetroChina Company Limited	857
Sands China Ltd.	1928
Shenzhou International Group Holdings Ltd.	2313
Sino Biopharmaceutical Ltd.	1177
Sunny Optical Technology (Group) Co. Ltd.	2382
Techtronic Industries Co. Ltd.	669
Tencent Holdings Limited	700
WH Group Ltd.	288
WuXi Biologics (Cayman) Inc.	2269
Xiaomi Corporation	1810

Eligibility and Selection Criteria

Constituent stocks of the HSI are selected by a rigorous process of detailed analysis. Only companies with a primary listing on the Main Board of the Stock Exchange of Hong Kong Limited ("**SEHK**") are eligible potential constituents. Mainland China enterprises that have H-share listing in Hong Kong will be eligible for inclusion in the HSI if they meet any one of the following conditions:

1. the H-share company has 100% of its ordinary share capital in the form of H shares which are listed on the SEHK;

2. the H-share company has completed the process of Share Reform, with the result that there is no unlisted share capital in the company; or

3. for new H-share IPOs, the company has no unlisted share capital.

To be eligible for selection, a company in the Universe:

1. must be among those companies that constitute the top 90% of the total market capitalisation of all primary listed shares on the SEHK (market capitalisation is expressed as an average of the past 12 months);

2. must be among those companies that constitute the top 90% of the total turnover of all primary listed shares on the SEHK (turnover is aggregated and individually assessed for eight quarterly sub-periods for the past 24 months); and

3. should normally have a listing history of 24 months on the SEHK or meet the requirements of the below Guidelines for Handling Large-cap Stocks Listed for Less Than 24 Months.

From the many eligible candidates, final selections are based on the following:

1. the market capitalisation and turnover ranking of the company;

2. the representation of the relevant sub-sector within the HSI directly reflecting that of the market; and

3. the financial performance of the company.

The HSI is reviewed quarterly.

Guidelines for Handling Large-cap Stocks Listed for Less Than 24 Months:

For a newly listed large-cap stock, the minimum listing history required for inclusion in the universe for the HSI review is as follows:

AVERAGE MARKET CAPITALISATION RANKING AT TIME OF REVIEW	MINIMUM LISTING HISTORY
Top 5	3 Months
6-15	6 Months
16-20	12 Months
21-25	18 Months
Below 25	24 Months

Calculation Methodology

The HSI adopts freefloat-adjusted market capitalisation weighted methodology with a 10% cap on each constituent weighting.

$$\text{Current Index} = \frac{\sum(P_t \times IS \times FAF \times CF)}{\sum(P_{t-1} \times IS \times FAF \times CF)} \times \text{Yesterday's Closing Index}$$

P_t : Current Price at Day $_t$
P_{t-1} : Closing Price at Day $_{t-1}$
IS : Number of Issued Shares
(In case of H-share constituents, only H-share portion is taken into calculation)
FAF : Freefloat-adjusted Factor, which is between 0 and 1
CF : Cap Factor, which is between 0 and 1

Freefloat Adjustment

Shares held by any entities (excluding custodians, trustees, mutual funds and investment companies) which control more than 5% of the shareholdings would be considered as non-freefloat and are excluded from index calculation:

1. **Strategic holdings** – Governments and affiliated entities or any other entities which hold substantial shares in the Company would be considered as non-freefloat unless otherwise proved;

2. **Directors' and management holdings** – Directors, members of the board committee, principal officers or founding members;

3. **Corporate cross holdings** – Publicly traded companies or private firms / institutions; and

4. **Lock-up shares**[4] – Shareholdings with a publicly disclosed lock-up arrangement.

Data used for the freefloat adjustment are taken from publicly available sources, including financial reports, IPO prospectuses, company announcements, the Disclosure of Interests Notification History Reports from the Hong Kong Stock Exchange, FactSet and / or other research databases.

The freefloat-adjusted factor ("**FAF**"), representing the proportion of shares that is freefloated as a percentage of the issued shares, is rounded up to the nearest 1% for FAFs below 10% and otherwise to the nearest 5% for index calculation. FAFs are reviewed quarterly. For companies with more than one class of shares, FAF will be calculated separately for each class of shares.

Cap Adjustment

A cap factor ("**CF**") is calculated quarterly, such that no individual constituent in an Index will have a weighting exceeding a predetermined cap level on the index capping date.

Further information on the HSI and its constituent stocks

If investors in the Warrants would like to obtain any other information on the HSI, they may consider taking the following steps:

[4] Any A shares with trading restriction will be classified as non-freefloat, regardless of the shareholding percentage.

(i) to consult with their financial advisers; or

(ii) to visit the website of the Index Sponsor (if there is one) which at the date of this document is *www.hsi.com.hk*. The Index Sponsor may not always maintain a website and may change or add a new website. Intending investors should conduct their own web searches to ensure that they are viewing the most up to date version of the Index Sponsor's website. The Issuer takes no responsibility for the contents of the Index Sponsor's website and makes no representation as to its accuracy or completeness and expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon the whole or any part of the contents of the Index Sponsor's website.

Index Disclaimer

The Hang Seng Index (the "**Index**") is published and compiled by Hang Seng Indexes Company Limited pursuant to a licence from Hang Seng Data Services Limited. The mark and name "Hang Seng Index" are proprietary to Hang Seng Data Services Limited. Hang Seng Indexes Company Limited and Hang Seng Data Services Limited have agreed to the use of, and reference to, the Index by the Issuer in connection with the Warrants (the "**Product**"), **BUT NEITHER HANG SENG INDEXES COMPANY LIMITED NOR HANG SENG DATA SERVICES LIMITED WARRANTS OR REPRESENTS OR GUARANTEES TO ANY BROKER OR HOLDER OF THE PRODUCT OR ANY OTHER PERSON (i) THE ACCURACY OR COMPLETENESS OF THE INDEX AND ITS COMPUTATION OR ANY INFORMATION RELATED THERETO; OR (ii) THE FITNESS OR SUITABILITY FOR ANY PURPOSE OF THE INDEX OR ANY COMPONENT OR DATA COMPRISED IN IT; OR (iii) THE RESULTS WHICH MAY BE OBTAINED BY ANY PERSON FROM THE USE OF THE INDEX OR ANY COMPONENT OR DATA COMPRISED IN IT FOR ANY PURPOSE, AND NO WARRANTY OR REPRESENTATION OR GUARANTEE OF ANY KIND WHATSOEVER RELATING TO THE INDEX IS GIVEN OR MAY BE IMPLIED.** The process and basis of computation and compilation of the Index and any of the related formula or formulae, constituent stocks and factors may at any time be changed or altered by Hang Seng Indexes Company Limited without notice. **TO THE EXTENT PERMITTED BY APPLICABLE LAW, NO RESPONSIBILITY OR LIABILITY IS ACCEPTED BY HANG SENG INDEXES COMPANY LIMITED OR HANG SENG DATA SERVICES LIMITED (i) IN RESPECT OF THE USE OF AND/OR REFERENCE TO THE INDEX BY THE ISSUER IN CONNECTION WITH THE PRODUCT; OR (ii) FOR ANY INACCURACIES, OMISSIONS, MISTAKES OR ERRORS OF HANG SENG INDEXES COMPANY LIMITED IN THE COMPUTATION OF THE INDEX; OR (iii) FOR ANY INACCURACIES, OMISSIONS, MISTAKES, ERRORS OR INCOMPLETENESS OF ANY INFORMATION USED IN CONNECTION WITH THE COMPUTATION OF THE INDEX WHICH IS SUPPLIED BY ANY OTHER PERSON; OR (iv) FOR ANY ECONOMIC OR OTHER LOSS WHICH MAY BE DIRECTLY OR INDIRECTLY SUSTAINED BY ANY BROKER OR HOLDER OF THE PRODUCT OR ANY OTHER PERSON DEALING WITH THE PRODUCT AS A RESULT OF ANY OF THE AFORESAID, AND NO CLAIMS, ACTIONS OR LEGAL PROCEEDINGS MAY BE BROUGHT AGAINST HANG SENG INDEXES COMPANY LIMITED AND/OR HANG SENG DATA SERVICES LIMITED** in connection with the Product in any manner whatsoever by any broker, holder or other person dealing with the Product. Any broker, holder or other person dealing with the Product does so therefore in full knowledge of this disclaimer and can place no reliance whatsoever on Hang Seng Indexes Company Limited and Hang Seng Data Services Limited. For the avoidance of doubt, this disclaimer does not create any contractual or quasi-contractual relationship between any broker, holder or other person and Hang Seng Indexes Company Limited and/or Hang Seng Data Services Limited and must not be construed to have created such relationship.

INFORMATION RELATING TO THE DESIGNATED MARKET MAKER

UBS AG, London Branch, has been appointed the designated market maker ("**DMM**") for the Warrants. The DMM will provide competitive buy and sell quotes for the Warrants continuously during the trading hours of the SGX-ST on the following basis:

(a)	Maximum bid and offer spread	:	10 times the minimum permitted price movement in the Warrants in accordance with the rules of the SGX-ST or S$ 0.20, whichever is the greater
(b)	Minimum quantity subject to bid and offer spread	:	100 Board Lots Warrants
(c)	Last Trading Day for Market Making	:	The date falling five Exchange Business Days immediately preceding the Expiry Date

In addition, the DMM will/may not provide a quotation in the following circumstances:

(i) during the pre-market opening and five minutes following the opening of the Relevant Stock Exchange on any trading day;

(ii) before the Relevant Stock Exchange has opened and after the Relevant Stock Exchange has closed on any trading day and trading in the securities constituting the Index has ceased for such trading day;

(iii) when the Warrants are suspended from trading for any reason;

(iv) if a Market Disruption Event occurs;

(v) if the Warrant is valueless (where the Issuer's bid price is below the minimum bid size for such securities as prescribed by the SGX-ST);

(vi) when trading in the shares or securities relating to or constituting the Index is suspended or limited in a material way for any reason (including price quote limits activated by the relevant exchange or otherwise), for the avoidance of doubt, the DMM is not obliged to provide quotations for the Warrants at any time when the shares or securities relating to or constituting the Index are not traded for any reason;

(vii) when the Issuer or the DMM faces technical problems affecting the ability of the DMM to provide the bid and offer prices;

(viii) when the ability of the Issuer to source a hedge or unwind an existing hedge, as determined by the Issuer in good faith, is materially affected by the prevailing market conditions. The Issuer will inform the SGX-ST of its inability to do so as soon as practicable;

(ix) in cases where the Issuer has no Warrants to sell, the DMM will only provide the bid price. Warrants held by Issuer or any of Issuer's affiliates in a fiduciary or agency capacity are not Warrants available for market making;

(x) when the stock market experiences exceptional price movements and volatility; and

(xi) when it is a public holiday in Hong Kong and/or Singapore and/or HKEX and/or the SGX-ST are not open for dealings.

The last trading day on which the DMM will provide competitive Quotations for the Warrants would be the fifth Exchange Business Day immediately preceding the Expiry Date.

PLACING AND SALE

General

No action has been or will be taken by the Issuer that would permit a public offering of the Warrants or possession or distribution of any offering material in relation to the Warrants in any jurisdiction where action for that purpose is required. No offers, sales or deliveries of any Warrants, or distribution of any offering material relating to the Warrants may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws or regulations and will not impose any obligation on the Issuer. In the event that the Issuer contemplates a placing, placing fees may be payable in connection with the issue and the Issuer may at its discretion allow discounts to placees.

United Kingdom

In relation to each tranche of Warrants, the Issuer has represented, warranted and agreed that:

(a) No deposit-taking: in relation to any Warrants 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 Warrants other than to persons:

(A) whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses; or

(B) 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 Warrants would otherwise constitute a contravention of section 19 of the Financial Services and Markets Act 2000 (the "**FSMA**") by the Issuer;

(b) Financial Promotion: it has only communicated or caused to be communicated and will only communicate or cause to be communicated any 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 Warrants in circumstances in which section 21(1) of the FSMA does not or would not, if the Issuer was not an authorised person, apply to the Issuer; and

(c) General Compliance: it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Warrants in, from or otherwise involving the United Kingdom.

United States of America

The Warrants have not been, and will not be, registered under the Securities Act. Subject to certain exceptions, Warrants, or interests therein, may not at any time be offered, sold, resold or delivered, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. person or to others for offering, sale or resale in the United States or to any such U.S. person. Offers and sales of Warrants, or interests therein, in the United States or to U.S. persons would constitute a violation of United States securities laws unless made in compliance with registration requirements of the Securities Act or pursuant to an exemption therefrom. The Warrants will not be offered, sold or delivered within the United States or to U.S. persons. As used herein, "**United States**" means the United States of America (including the States and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction; and "**U.S. person**" means (i) any citizen or resident of the United States, including any corporation, partnership or other entity created or organised in or under the laws of the United States or of any political subdivision thereof, (ii) any estate or trust the income of which is subject to United States income taxation regardless of its source, (iii) "U.S. person" as such term is defined in (a) Regulation S under the Securities Act or (b) the Interpretive Guidance and Policy Statement Regarding Compliance with Certain Swap Regulations promulgated by the U.S. Commodity Futures Trading Commission ("**CFTC**") pursuant to the U.S. Commodity Exchange Act of 1936, as amended, or (iv) a person other than a "Non-United States Person" as defined in CFTC Rule 4.7, in each case, as such definition is amended, modified or supplemented from time to time.

Prohibition of Sales to European Economic Area and the United Kingdom Retail Investors

Unless the applicable Supplemental Listing Document in respect of any Warrants specifies the "Prohibition of Sales to European Economic Area Retail Investors" as "Not Applicable", the Issuer has represented and agreed that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Warrants which are the subject of the offering contemplated by the Base Listing Document as completed by the applicable Supplemental Listing Document in relation thereto to any retail investor in the European Economic Area and the United Kingdom. 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 Directive 2014/65/EU (as amended, "**MiFID II**");

(ii) a customer within the meaning of Directive 2016/97 (as amended), 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 an "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Warrants to be offered so as to enable an investor to decide to purchase or subscribe the Warrants.

PUBLIC OFFER SELLING RESTRICTION UNDER THE PROSPECTUS REGULATION

If the Supplemental Listing Document in respect of any Warrants specifies "Prohibition of Sales to European Economic Area Retail Investors" as "Not Applicable", in relation to each Member State of the European Economic Area and the United Kingdom (each, a "**Relevant State**"), the Issuer has represented, warranted and agreed that it has not made and will not make an offer of Warrants which are the subject of the offering contemplated by the Base Listing Document as completed by the Supplemental Listing Document in relation thereto to the public in that Relevant State except that it may make an offer of such Warrants to the public in that Relevant State:

(a) Approved listing document: if the Supplemental Listing Document in relation to the Warrants specifies that an offer of those Warrants 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 listing document in relation to such Warrants 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 listing document has subsequently been completed by the Supplemental Listing Document contemplating such Non-exempt Offer, in accordance with the Prospectus Regulation, in the period beginning and ending on the dates specified in such listing document or Supplemental Listing Document, as applicable and the Issuer has consented in writing to its use for the purpose of that Non-exempt Offer;

(b) Qualified investors: at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(c) Fewer than 150 offered: at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the Issuer for any such offer; or

(d) Other exempt offers: at any time in any other circumstances falling within Article 3(2) of the Prospectus Regulation,

provided that no such offer of Warrants referred to in (b) to (d) above shall require the Issuer to publish a listing document pursuant to Article 3 of the Prospectus Regulation or supplement a listing document pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "**offer of Warrants to the public**" in relation to any Warrants 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 Warrants to be offered so as to enable an investor to decide to purchase or subscribe for the Warrants.

Singapore

This document has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this document and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of Warrants may not be circulated or distributed, nor may Warrants be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than pursuant to, and in accordance with the conditions of, any applicable provision of the Securities and Futures Act, Chapter 289 of Singapore.

Hong Kong

No person, other than a person permitted to do so under the securities laws of Hong Kong, has issued, or had in its possession for the purposes of issue, or will issue, or have in its possession for the purposes of issue any advertisement, invitation or document relating to the Warrants, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong other than with respect to Warrants which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) of the Laws of Hong Kong and any rules made thereunder.

SUPPLEMENTAL INFORMATION RELATING TO THE ISSUER

The information set out in Appendix I of this document relates to the recent developments in the Issuer's business.

The information set out in Appendix II of this document is an extract of the audited consolidated financial statements of UBS AG and its subsidiaries for the full year ended 31 December 2020.

The information set out in Appendix III of this document relates to the risk factors relating to the operating environment and strategy of UBS AG.

The information set out in Appendix IV of this document is an extract of the unaudited consolidated financial statements of UBS AG and its subsidiaries for the first quarter ended 31 March 2021.

For more information on the Issuer, please see http://www.ubs.com/.

Queries regarding the Warrants may be directed to +852 2971 6668 or OL-HKWarrants@ubs.com.

SUPPLEMENTAL GENERAL INFORMATION

The information set out herein is supplemental to, and should be read in conjunction with, the information set out on page 285 of the Base Listing Document.

1. Save as disclosed in the Base Listing Document and herein, there is no litigation, arbitration or administrative proceedings relating to claims or amounts which are material in the context of the issue of the Warrants to which the Issuer is a party nor, to the best of its knowledge and belief, is there any threatened litigation, arbitration or administrative proceedings relating to claims or amounts which are material in the context of the issue of the Warrants which would in either case jeopardise its ability to discharge its obligations in respect of the Warrants.

2. UBS AG, Singapore Branch at 9 Penang Road, Singapore 238459, has been authorised to accept, on behalf of the Issuer, service of process and any other notices required to be served on the Issuer. Any notices required to be served on the Issuer should be sent to UBS AG, Singapore Branch at the above address for the attention of Han-Kiat Tan, Legal & Compliance.

3. Settlement of trades done on a normal "ready basis" on the SGX-ST generally take place on the second Business Day following the transaction. Dealing in the Warrants will take place in board lots of 100 Warrants in Singapore dollars. For further details on the transfer of Warrants and their exercise, please refer to the section headed "Summary of the Issue" above.

4. It is not the current intention of the Issuer to apply for a listing of the Warrants on any stock exchange other than the SGX-ST.

5. There has been no adverse change, material in the context of the issue of the Warrants, in the financial position of the Issuer since 31 March 2021.

6. The following contracts, relating to the issue of the Warrants, have been or will be entered into by the Issuer and may be material to the issue of the Warrants:

   (a) the Instrument; and

   (b) the Warrant Agent Agreement.

   None of the directors of the Issuer has any direct or indirect interest in any of the above contracts.

7. The Issuer has appropriate risk management capabilities to manage the issue of the Warrants.

8. Copies of the following documents may be inspected during usual business hours on any weekday (Saturdays, Sundays and holidays excepted) at the office of Allen & Gledhill LLP at One Marina Boulevard #28-00, Singapore 018989, during the period of 14 days from the date of this document:

   (a) the articles of association of the Issuer;

(b) the latest financial reports (including the notes thereto) of the Issuer;

(c) the Base Listing Document; and

(d) this document.

APPENDIX I

RECENT DEVELOPMENTS IN THE ISSUER'S BUSINESS

This section supersedes in its entirety the section in the Base Listing Document entitled "Information Relating to UBS AG".

1. Overview

UBS AG ("**Issuer**") with its subsidiaries (together, "**UBS AG consolidated**", or "**UBS AG Group**"; together with UBS Group AG, which is the holding company of UBS AG, and its subsidiaries, "**UBS Group**", "**Group**", "**UBS**" or "**UBS Group AG consolidated**") provides financial advice and solutions to private, institutional and corporate clients worldwide, as well as private clients in Switzerland. The operational structure of the Group is comprised of the Group Functions and four business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management and the Investment Bank. UBS articulated its statement of purpose as reimagining the power of investing and connecting people for a better world. UBS will aim to deliver a client experience that is personalized, relevant, on-time (the client sets the speed and can act on opportunities anytime and anywhere), and seamless (simple seamless and intuitive interaction between UBS and its clients). UBS also defined five strategic imperatives: Clients, Connections, Contributors – delivering the power of investing; Focus – play where UBS is positioned to win; Technology – make technology UBS's differentiator; Simplification and efficiency – increase ease of doing businesses and enable UBS's journey; Culture – mobilize employees behind UBS's future vision and to act as one firm.

On 31 March 2021, UBS Group's common equity tier 1 ("CET1") capital ratio was 14.0%, the CET1 leverage ratio was 3.89%, the total loss-absorbing capacity ratio was 35.0%, and the total loss-absorbing capacity leverage ratio was 9.7%. On the same date, invested assets stood at USD 4,306 billion, equity attributable to shareholders was USD 58,026 million and market capitalisation was USD 54,536 million. On the same date, UBS employed 71,779 people.[1]

On 31 March 2021, UBS AG consolidated CET1 capital ratio was 13.6%, the CET1 leverage ratio was 3.73%, the total loss-absorbing capacity ratio was 34.2%, and the total loss-absorbing capacity leverage ratio was 9.4%. On the same date, invested assets stood at USD 4,306 billion and equity attributable to UBS AG shareholders was USD 57,446 million. On the same date, UBS AG Group employed 47,592 people.[1]

The rating agencies S&P Global Ratings Europe Limited ("Standard & Poor's"), Moody's Deutschland GmbH ("Moody's"), and Fitch Ratings Limited ("Fitch Ratings") have published solicited credit ratings reflecting their assessment of the creditworthiness of UBS AG, i.e. its ability to fulfil in a timely manner payment obligations, such as principal or interest payments on long-term loans, also known as debt servicing. The ratings from Fitch Ratings and Standard & Poor's may be attributed a plus or minus sign, and those from Moody's a number. These supplementary attributes indicate the relative position within the respective rating class. UBS AG has a long-term counterparty credit rating of A+ (outlook: stable) from Standard & Poor's, long-term senior debt rating of Aa3 (outlook: stable) from Moody's, and long-term issuer default rating of AA- (outlook: stable) from Fitch Ratings.

An explanation of the significance of ratings may be obtained from the rating agencies. Generally, rating agencies base their ratings on such material and information, and such of their own investigations, studies and assumptions, as they deem appropriate. The ratings of UBS AG should be evaluated independently from similar ratings of other entities, and from the rating, if any, of its

[1] Full-time equivalents.

securities. A credit rating is not a recommendation to buy, sell or hold securities issued or guaranteed by the rated entity and may be subject to review, revision, suspension, reduction or withdrawal at any time by the assigning rating agency. All the above-mentioned rating agencies are registered as credit rating agencies under Regulation (EC) No 1060/2009 as amended by Regulation (EU) No 513/2011.

No profit forecasts or estimates are included in this document.

No recent events particular to the Issuer have occurred, which are to a material extent relevant to the evaluation of the Issuer's solvency.

2. Information about the Issuer

2.1 Corporate Information

The legal and commercial name of the Issuer is UBS AG.

The company was incorporated under the name SBC AG on 28 February 1978 for an unlimited duration and entered in the Commercial Register of Canton Basel-City on that day. On 8 December 1997, the company changed its name to UBS AG. The company in its present form was created on 29 June 1998 by the merger of Union Bank of Switzerland (founded 1862) and Swiss Bank Corporation (founded 1872). UBS AG is entered in the Commercial Registers of Canton Zurich and Canton Basel-City. The registration number is CHE-101.329.561.

UBS AG is incorporated and domiciled in Switzerland and operates under the Swiss Code of Obligations as an Aktiengesellschaft, a corporation limited by shares. UBS AG's Legal Entity Identifier (LEI) code is BFM8T61CT2L1QCEMIK50.

According to article 2 of the articles of association of UBS AG dated 26 April 2018 ("**Articles of Association**"), the purpose of UBS AG is the operation of a bank. Its scope of operations extends to all types of banking, financial, advisory, trading and service activities in Switzerland and abroad. UBS AG may establish branches and representative offices as well as banks, finance companies and other enterprises of any kind in Switzerland and abroad, hold equity interests in these companies, and conduct their management. UBS AG is authorized to acquire, mortgage and sell real estate and building rights in Switzerland and abroad. UBS AG may borrow and invest money on the capital markets. UBS AG is part of the group of companies controlled by the group parent company UBS Group AG. It may promote the interests of the group parent company or other group companies. It may provide loans, guarantees and other kinds of financing and security for group companies.

The addresses and telephone numbers of UBS AG's two registered offices and principal places of business are: Bahnhofstrasse 45, CH-8001 Zurich, Switzerland, telephone +41 44 234 1111; and Aeschenvorstadt 1, CH-4051 Basel, Switzerland, telephone +41 61 288 5050.

2.2 UBS's borrowing and funding structure and financing of UBS's activities

For information on UBS's expected financing of its business activities, please refer to "Liquidity and funding management" in the "Capital, liquidity and funding, and balance sheet" section of the Annual Report 2020.

3. Business Overview

3.1 Organisational Structure of the Issuer

UBS AG is a Swiss bank and the parent company of the UBS AG Group. It is 100% owned by UBS Group AG, which is the holding company of the UBS Group. UBS operates as a group with four business divisions and Group Functions.

In 2014, UBS began adapting its legal entity structure in response to too-big-to-fail requirements and other regulatory initiatives. First, UBS Group AG was established as the ultimate parent holding company for the Group. In 2015, UBS AG transferred its personal & corporate banking and Swiss-booked wealth management businesses to the newly established UBS Switzerland AG, a banking subsidiary of UBS AG in Switzerland. That same year, UBS Business Solutions AG, a wholly owned subsidiary of UBS Group AG, was established and acts as the Group service company. In 2016, UBS Americas Holding LLC became the intermediate holding company for UBS's US subsidiaries and UBS's wealth management subsidiaries across Europe were merged into UBS Europe SE, UBS's German-headquartered European subsidiary. In 2019, UBS Limited, UBS's UK headquartered subsidiary, was merged into UBS Europe SE.

UBS Group AG's interests in subsidiaries and other entities as of 31 December 2020, including interests in significant subsidiaries, are discussed in "Note 28 Interests in subsidiaries and other entities" to the UBS Group AG's consolidated financial statements included in the UBS Group AG and UBS AG Annual Report 2020 published on 05 March 2021 ("Annual Report 2020").

UBS AG's interests in subsidiaries and other entities as of 31 December 2020, including interests in significant subsidiaries, are discussed in "Note 28 Interests in subsidiaries and other entities" to the UBS AG's consolidated financial statements included in the Annual Report 2020.

UBS AG is the parent company of, and conducts a significant portion of its operations through, its subsidiaries. UBS AG has contributed a significant portion of its capital and provides substantial liquidity to subsidiaries. In addition, UBS Business Solutions AG provides substantial services to group companies including UBS AG and its subsidiaries. To this extent, UBS AG is dependent on certain of the entities of the UBS AG Group and of the UBS Group.

3.2 Principal activities

UBS businesses are organised globally into four business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management, and the Investment Bank. All four business divisions are supported by Group Functions. Each of the business divisions and Group Functions are described below. A description of the businesses, organisational structures, products and services and targeted markets of the business divisions and Group Functions can be found under "*Our businesses*" in the "*Our strategy, business model and environment*" section of the Annual Report 2020.

- *Global Wealth Management* provides investment advice and solutions, as well as lending solutions, to private clients, in particular in the ultra high net worth and high net worth segments. The business is managed globally across the regions.

- *Personal & Corporate Banking* provides comprehensive financial products and services to private, corporate and institutional clients, operating across all banking markets in Switzerland.

- *Asset Management* is a large-scale and diversified global asset manager. It offers investment capabilities and styles across all major traditional and alternative asset classes, as well as advisory support to institutions, wholesale intermediaries and wealth management clients globally.

- The *Investment Bank* provides a range of services to institutional, corporate and wealth management clients globally, to help them raise capital, grow their businesses, invest and manage risks. Offerings include advisory services, capital markets, cash and derivatives trading across equities and fixed income and financing.

- *Group Functions* – formerly named Corporate Center, is made up of the following major areas: Group Services (which consists of Technology, Corporate Services, Human Resources, Operations, Finance, Legal, Risk Control, Research and Analytics, Compliance, Regulatory & Governance, Communications & Branding and UBS in Society), Group Treasury and Non-core and Legacy Portfolio.

3.3 Competition

The financial services industry is characterized by intense competition, continuous innovation, restrictive, detailed, and sometimes fragmented regulation and ongoing consolidation. UBS faces competition at the level of local markets and individual business lines, and from global financial institutions that are comparable to UBS in their size and breadth. Barriers to entry in individual markets and pricing levels are being eroded by new technology. UBS expects these trends to continue and competition to increase.

Any statements regarding the competitive position of UBS AG, UBS AG Group or the Group contained in this document are made on the basis of the opinion of UBS AG or the Group.

3.4 Recent Developments

3.4.1 UBS AG consolidated key figures

UBS AG derived the selected consolidated financial information included in the table below for the years ended 31 December 2020, 2019 and 2018 from the Annual Report 2020, except where noted. The selected consolidated financial information included in the table below for the quarter ended 31 March 2021 and 31 March 2020 was derived from the UBS AG First Quarter 2021 Report.

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards ("**IFRS**") issued by the International Accounting Standards Board ("**IASB**"). Information for the years ended 31 December 2020, 2019, and 2018 which is indicated as being unaudited in the table below was included in the Annual Report 2020, but has not been audited on the basis that the respective disclosures are not required under IFRS, and therefore are not part of the audited financial statements. Prospective investors should read the whole of this document, the Annual Report 2020 and the UBS AG First Quarter 2021 Report and should not rely solely on the summarized information set out below.

	As of or for the quarter ended		As of or for the year ended		
USD million, except where indicated	31.3.21	31.3.20	31.12.20	31.12.19	31.12.18
	unaudited		*audited, except where indicated*		
Results					
Income statement					
Operating income	8,836	8,009	32,780	29,307	30,642
Net interest income	1,589	1,313	5,788	4,415	4,971
Net fee and commission income	5,719	5,025	19,207	17,460	17,930
Credit loss (expense) / release	28	(268)	(695)	(78)	(117)
Other net income from financial instruments measured at fair value through profit or loss	1,314	1,775	6,930	6,833	6,953
Operating expenses	6,684	6,210	25,081	24,138	25,184
Operating profit / (loss) before tax	2,151	1,799	7,699	5,169	5,458
Net profit / (loss) attributable to shareholders	1,710	1,421	6,196	3,965	4,107
Balance sheet					
Total assets	1,109,234		1,125,327	971,927	958,066
Total financial liabilities measured at amortized cost	719,508		732,364	617,429	612,174
of which: customer deposits	508,903		527,929	450,591	421,986
of which: debt issued measured at amortized cost	87,495		85,351	62,835	91,245
of which: subordinated debt [1]	5,253		7,744	7,431	7,511
Total financial liabilities measured at fair value through profit or loss	324,108		325,080	291,452	283,717
of which: debt issued designated at fair value	64,635		59,868	66,592	57,031
Loans and advances to customers	380,141		380,977	327,992	321,482
Total equity	57,753		58,073	53,896	52,400
Equity attributable to shareholders	57,446		57,754	53,722	52,224
Profitability and growth					
Return on equity (%) [2]	11.9	10.2	10.9*	7.4*	7.9*
Return on tangible equity (%) [3]	13.4	11.5	12.4*	8.5*	9.1*
Return on common equity tier 1 capital (%) [4]	17.8	15.9	16.6*	11.3*	11.9*
Return on risk-weighted assets, gross (%) [5]	12.3	12.2	11.9*	11.2*	12.0*
Return on leverage ratio denominator, gross (%) [6]	3.4	3.5	3.4*	3.2*	3.4*
Cost / income ratio (%) [7]	75.9	75.0	74.9*	82.1*	81.9*
Net profit growth (%) [8]	20.3	33.0	56.3*	(3.4)*	441.9*

Resources					
Common equity tier 1 capital [9]	38,826	36,162	38,181	35,233*	34,562*
Risk-weighted assets [9]	285,119	284,706	286,743*	257,831*	262,840*
Common equity tier 1 capital ratio (%) [9]	13.6	12.7	13.3*	13.7*	13.2*
Going concern capital ratio (%) [9]	18.7	16.5	18.3*	18.3*	16.1*
Total loss-absorbing capacity ratio (%) [9]	34.2	32.1	34.2*	33.9*	31.3*
Leverage ratio denominator [9, 10]	1,039,736	957,210	1,036,771*	911,228*	904,455*
Common equity tier 1 leverage ratio (%) [9, 10]	3.73	3.78	3.68*	3.87*	3.82*
Going concern leverage ratio (%) [9, 10]	5.1	4.9	5.1*	5.2*	4.7*
Total loss-absorbing capacity leverage ratio (%) [9]	9.4	9.5	9.5*	9.6*	9.1*
Other					
Invested assets (USD billion) [11]	4,306	3,236	4,187	3,607	3,101
Personnel (full-time equivalents)	47,592	47,182	47,546*	47,005*	47,643*

* unaudited

[1] Amount as at 31 December 2018 is derived from the Annual Report 2019.
[2] Calculated as net profit attributable to shareholders (annualized as applicable) divided by average equity attributable to shareholders. This measure provides information about the profitability of the business in relation to equity.
[3] Calculated as net profit attributable to shareholders (annualized as applicable) divided by average equity attributable to shareholders less average goodwill and intangible assets. This measure provides information about the profitability of the business in relation to tangible equity.
[4] Calculated as net profit attributable to shareholders (annualized as applicable) divided by average common equity tier 1 capital. This measure provides information about the profitability of the business in relation to common equity tier 1 capital.
[5] Calculated as operating income before credit loss expense or release (annualized as applicable) divided by average risk-weighted assets. This measure provides information about the revenues of the business in relation to risk-weighted assets.
[6] The leverage ratio denominators used for the 2020 return calculation do not reflect the effects of the temporary exemption that has been granted by FINMA in connection with COVID-19. Refer to the "*Regulatory and legal developments*" section of the Annual Report 2020 for more information. Calculated as operating income before credit loss expense or release (annualized as applicable) divided by average leverage ratio denominator. This measure provides information about the revenues of the business in relation to leverage ratio denominator.
[7] Calculated as operating expenses divided by operating income before credit loss expense or release. This measure provides information about the efficiency of the business by comparing operating expenses with gross income.
[8] Calculated as change in net profit attributable to shareholders from continuing operations between current and comparison periods divided by net profit attributable to shareholders from continuing operations of comparison period. This measure provides information about profit growth in comparison with the prior-year period.
[9] Based on the applicable Swiss systemically relevant bank framework as of 1 January 2020.
[10] Leverage ratio denominators and leverage ratios for the respective periods in 2020 do not reflect the effects of the temporary exemption that applied from 25 March 2020 until 1 January 2021 and was granted by FINMA in connection with COVID-19. Refer to the "*Regulatory and legal developments*" section of the Annual Report 2020 for more information.
[11] Includes invested assets for Global Wealth Management, Asset Management and Personal & Corporate Banking. Calculated as the sum of managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts, and wealth management securities or brokerage accounts. This measure provides information about the volume of client assets managed by or deposited with UBS for investment purposes.

3.4.2 Accounting, regulatory, legal and other developments

Refer to the "*Recent developments*" and the "*Credit risk*" sections of the UBS Group First Quarter 2021 Report, as well as the "*Regulatory and legal developments*" in the "*Our strategy, business model and environment*" section of the Annual Report 2020 for information on key accounting, regulatory, legal and other developments.

3.5 Trend Information

As indicated in the UBS Group First Quarter 2021 Report, investor sentiment remained positive in the first quarter of 2021, helped by the strong rebound in economic activity and greater optimism regarding the further recovery, supported by mass COVID-19 vaccination campaigns around the globe. Significant fiscal stimulus, notably in the US, along with the prospect of continued accommodative monetary policy, contributed to generally more positive views on the timing and extent of a sustainable economic recovery. However, economic, social, and geopolitical tensions remain, raising questions around the sustainability and shape of the recovery. Persistently high numbers of COVID-19 infections and hospitalizations, as well as lockdowns and similar measures imposed to control the pandemic, add to these existing concerns, as well as the severity and duration of the effects of the pandemic in certain economic sectors. UBS's clients value strength and expert guidance, particularly in these uncertain times, and UBS remain focused on supporting them with advice and solutions. UBS expects its revenues in the second quarter of 2021 to be influenced by seasonal factors, such as lower client activity compared with the first quarter of 2021. Higher asset prices should have a positive effect on recurring fee income in UBS's asset gathering businesses. However, the continued uncertainty about the environment and economic recovery could affect both asset prices and client activity. With its balance sheet for all seasons and its diversified business model, UBS remains well positioned to drive sustainable long-term value for its clients and shareholders.

Refer to the "*Risk factors*" " and the "*Recent Developments*" sections of this document as well as to the "*Our environmen*t" section of the Annual Report 2020 for more information.

4. Administrative, Management and Supervisory Bodies of the Issuer

UBS AG complies with all relevant Swiss legal and regulatory corporate governance requirements. As a foreign private issuer with debt securities listed on the New York Stock Exchange ("**NYSE**"), UBS AG also complies with the relevant NYSE corporate governance standards applicable to foreign private issuers.

UBS AG operates under a strict dual board structure, as mandated by Swiss banking law. The Board of Directors ("**BoD**") exercises the ultimate supervision over management, whereas the Executive Board ("**EB**"), headed by the President of the Executive Board ("**President of the EB**"), has executive management responsibility. The functions of Chairman of the BoD and President of the EB are assigned to two different people, ensuring a separation of power. This structure establishes checks and balances and preserves the institutional independence of the BoD from the day-to-day management of UBS AG, for which responsibility is delegated to the EB under the leadership of the President of the EB. No member of one board may simultaneously be a member of the other.

Supervision and control of the EB remain with the BoD. The authorities and responsibilities of the two bodies are governed by the Articles of Association and the Organization Regulations of UBS AG with their annexes.

4.1 Board of Directors

The BoD consists of at least five and no more than twelve members. All the members of the BoD are elected individually by the Annual General Meeting of Shareholders ("**AGM**") for a term of office of one year, which expires after the completion of the next AGM. Shareholders also elect the Chairman upon proposal of the BoD.

The BoD meets as often as business requires, and at least six times a year.

4.1.1 Members of the Board of Directors

The current members of the BoD are listed below.

Member	Title	Term of office	Current principal activities outside UBS AG
Axel A. Weber	Chairman	2022	Chairman of the Board of Directors of UBS Group AG; board member of the Swiss Bankers Association; Trustees Board member of Avenir Suisse; board member of the Swiss Finance Council; Chairman of the board of the Institute of International Finance; member of the European Financial Services Round Table; member of the European Banking Group; member of the International Advisory Councils of the China Banking and Insurance Regulatory Commission and the China Securities Regulatory Commission; member of the International Advisory Panel, Monetary Authority of Singapore; member of the Group of Thirty, Washington, D.C.; Advisory Board member of the Department of Economics, University of Zurich; member of the Trilateral Commission.
Jeremy Anderson	Vice Chairma n	2022	Vice-Chairman and Senior Independent Director of the Board of Directors of UBS Group AG; board member of Prudential plc; trustee of the UK's Productivity Leadership Group; trustee of Kingham Hill Trust; trustee of St. Helen Bishopsgate.
Claudia Böckstiegel	Member	2022	Member of the Board of Directors of UBS Group AG.
William C. Dudley	Member	2022	Member of the Board of Directors of UBS Group AG; senior research scholar at the Griswold Center for Economic Policy Studies at Princeton University; member of the Board of Treliant LLC; member of the Group of Thirty; member of the Council on Foreign Relations; chair of the Bretton Woods Committee board of directors; member of the Board of the Council for Economic Education.
Patrick Firmenich	Member	2022	Member of the Board of Directors of UBS Group AG; chairman of the Board of Firmenich International SA; member of the Board of Jacobs Holding AG; member of the Board of INSEAD and INSEAD World Foundation; member of the Advisory Council of the Swiss Board Institute.
Reto Francioni	Member	2022	Member of the Board of Directors of UBS Group AG; professor at the University of Basel; board member of Coca-Cola HBC AG (Senior Independent Non-Executive Director, chair of the nomination committee); chairman of the board of Swiss International Air Lines AG; board member of MTIP AG; executive director and member of myTAMAR GmBH.
Fred Hu	Member	2022	Member of the Board of Directors of UBS Group AG; non-executive chairman of the board of Yum China Holdings (chair of the nomination and governance committee); board member of Industrial and Commercial Bank of China; board member of Hong Kong Exchanges and Clearing Ltd.; chairman of Primavera Capital Ltd; member of the Board of Ant Group; board member of Minsheng Financial Leasing Co.; trustee of the China Medical Board; Governor of the Chinese International School in Hong Kong; co-chairman of

			the Nature Conservancy Asia Pacific Council.
Mark Hughes	Member	2022	Member of the Board of Directors of UBS Group AG; chair of the Board of Directors of the Global Risk Institute; visiting lecturer at the University of Leeds; senior advisor to McKinsey & Company.
Nathalie Rachou	Member	2022	Member of the Board of Directors of UBS Group AG; member of the Board of Euronext N.V.; member of the Board of Veolia Environnement SA.
Julie G. Richardson	Member	2022	Member of the Board of Directors of UBS Group AG; member of the board of Yext (chair of the audit committee); member of the board of Vereit, Inc. (chair of the compensation committee); member of the board of Datalog (chair of the audit committee).
Dieter Wemmer	Member	2022	Member of the Board of Directors of UBS Group AG; board member of Ørsted A/S (chair of the audit and risk committee); chairman of Marco Capital Holding, Malta; member of the Berlin Center of Corporate Governance.
Jeanette Wong	Member	2022	Member of the Board of Directors of UBS Group AG; board member of EssilorLuxottica (chair of the corporate social responsibility committee); board member of Jurong Town Corporation; board member of PSA International; board member of FFMC Holdings Pte. Ltd. and of Fullerton Fund Management Company Ltd.; member of the Global Advisory Board, Asia, University of Chicago Booth School of Business; member of the Securities Industry Council; member of the Board of Trustees of the National University of Singapore.

4.1.2 Organisational principles and structure

Following each AGM, the BoD meets to appoint one or more Vice Chairmen, BoD committee members (other than the Compensation Committee members, who are elected by the shareholders), and their respective Chairpersons. At the same meeting, the BoD appoints a Company Secretary, who acts as secretary to the BoD and its committees.

The BoD permanent committees comprise the Audit Committee, the Compensation Committee and the Risk Committee. The BoD may set up other committees, including so-called ad hoc committees, if it deems such other committees appropriate or necessary, such as the Special Committee and the Strategy Committee.

4.2 Executive Board ("EB")

Under the leadership of the President of the EB, the EB has executive management responsibility for UBS AG and its business. All EB members (with the exception of the President of the EB) are proposed by the President of the EB. The appointments are made by the BoD.

4.2.1 Members of the Executive Board

The current members of the EB are listed below. In addition, UBS has announced that Markus Diethelm is stepping down from the EB and Barbara Levi will succeed him as General Counsel effective 1 November 2021.

Member and business address	**Function**	**Current principal activities outside UBS AG**

Ralph Hamers UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	President of the Executive Board	Member of the Group Executive Board and Group Chief Executive Officer of UBS Group AG; member of the Board of the Swiss-American Chamber of Commerce; member of the Institut International D'Etudes Bancaires; member of the McKinsey Advisory Council; member of the World Economic Forum International Business Council; Governor of the World Economic Forum (Financial Services).
Christian Bluhm UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Chief Risk Officer	Member of the Group Executive Board and Group Chief Risk Officer of UBS Group AG; board member of UBS Switzerland AG; member of the Foundation Board of the UBS Pension Fund; member of the Foundation Board – International Financial Risk Institute.
Mike Dargan UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Chief Digital and Information Officer	Member of the Group Executive Board and Chief Digital and Information Officer of UBS Group AG; President of the Executive Board and board member of UBS Business Solutions AG.
Markus U. Diethelm UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	General Counsel	Member of the Group Executive Board and Group General Counsel of UBS Group AG; chairman of the Swiss-American Chamber of Commerce's legal committee; co-chairman of the American Swiss Foundation & Chairman of the Swiss Advisory Council of the American Swiss Foundation; member of the Supervisory Board of the Fonds de Dotation LUMA / Arles; member of the New York State Council of Business Leaders in Support of Access to Justice.
Kirt Gardner UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Chief Financial Officer	Member of the Group Executive Board and Group Chief Financial Officer of UBS Group AG; board member of UBS Business Solutions AG.
Suni Harford UBS AG, 1285 Avenue of the Americas, New York, NY 10019 USA	President Asset Management	Member of the Executive Board and President Asset Management of UBS Group AG; chairman of the Board of Directors of UBS Asset Management AG; chair of the Board of UBS Optimus Foundation; member of the Leadership Council of the Bob Woodruff Foundation.
Robert Karofsky UBS AG, 1285 Avenue of the Americas, New York, NY 10019, USA	President Investment Bank	Member of the Group Executive Board and President Investment Bank of UBS Group AG; president and board member of UBS Securities LLC; member of the Board of UBS Optimus Foundation; trustee of the UBS Americas Inc. Political Action Committee.
Iqbal Khan UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Co-President Global Wealth Management and President UBS Europe, Middle East and Africa	Member of the Executive Board, co-President Global Wealth Management and President UBS Europe, Middle East and Africa of UBS Group AG; member of the Supervisory Board of UBS

		Europe SE; member of the Board of UBS Optimus Foundation; board member of Room To Read Switzerland.
Edmund Koh UBS AG, One Raffles Quay North Tower, Singapore 048583	President UBS Asia Pacific	Member of the Group Executive Board and President UBS Asia Pacific of UBS Group AG; member of two subcommittees of the Singapore Ministry of Finance's Committee on the Future Economy; member of the Financial Centre Advisory Panel of the Monetary Authority of Singapore; council member of the Asian Bureau of Finance and Economic Research; member of the Board of Trustees of the Wealth Management Institute, Singapore; board member of Next50 Limited, Singapore; board member of Medico Suites (S) Pte Ltd; board member of Medico Republic (S) Pte Ltd; Council member of the KidSTART program of Early Childhood Development Agency Singapore; trustee of the Cultural Matching Fund, Singapore; member of University of Toronto's International Leadership Council for Asia.
Tom Naratil UBS AG, 1285 Avenue of the Americas, New York, NY 10019 USA	Co-President Global Wealth Management and President UBS Americas	Member of the Group Executive Board and co-President Global Wealth Management and President UBS Americas of UBS Group AG; CEO and board member of UBS Americas Holding LLC; board member of the American Swiss Foundation; member of the Board of Consultors for the College of Nursing at Villanova University.
Markus Ronner UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Chief Compliance and Governance Officer	Member of the Group Executive Board and Group Chief Compliance and Governance Officer of UBS Group AG.

4.3 Potential Conflicts of Interest

Members of the BoD and the EB may act as directors or executive officers of other companies (for current principal positions outside UBS AG, if any, of BoD and EB members, please see sections 4.1.1 and 4.2.1 above, respectively) and may have economic or other private interests that differ from those of UBS AG. Conflicts of interest may potentially arise from these positions or interests. For example, it cannot be excluded that a member of the BoD or EB has or will have a function within a company, the shares of which are or will be traded by UBS AG or which has or will have a business relationship with UBS AG. UBS AG is confident that its internal corporate governance practices and its compliance with relevant legal and regulatory provisions reasonably ensure that any conflicts of interest of the type described above are appropriately managed, including through disclosure when appropriate.

Other than as indicated above, UBS is not aware of potential conflicts of interests between any duties to the Issuer of the members of the BoD and the EB and their private interests or other duties.

5. Auditors

Based on article 31 of the Articles of Association, UBS AG shareholders elect the auditors for a term of office of one year. At the AGMs of 18 April 2019, 27 April 2020 and 7 April 2021, Ernst & Young Ltd., Aeschengraben 9, CH-4002 Basel, Switzerland ("**Ernst & Young**") was elected as auditor for the consolidated and standalone financial statements of UBS AG for a one-year term.

Ernst & Young is a member of EXPERTsuisse, the Swiss Expert Association for Audit, Tax and Fiduciary. Ernst & Young is also registered with the Swiss Federal Audit Oversight Authority, which is responsible for the licensing and supervision of audit firms and individuals that provide audit services in Switzerland.

6. Major Shareholders of the Issuer

UBS Group AG owns 100% of the outstanding shares of UBS AG. UBS AG is a wholly owned subsidiary of UBS Group AG. While UBS has no specific corporate measures intended to prevent abuse of control to the detriment of minority shareholders, UBS has adopted a comprehensive and integrated governance framework which takes into account the specific requirements of each relevant jurisdiction. This governance framework includes separate articles of association and organizational regulations for UBS Group AG and UBS AG. In addition, as UBS AG is regulated as a bank in Switzerland, it is subject to capital regulation and close supervisory oversight. This includes the general requirement under Swiss law that contracts of UBS AG with affiliates are subject to an arm's length principle of negotiation.

7. Financial Information concerning the Issuer’s Assets and Liabilities, Financial Position and Profits and Losses

7.1 Historical Annual Financial Information

Detailed information about UBS AG consolidated and UBS AG assets and liabilities, financial position and profits and losses for financial year 2020 is available in the section "*UBS AG consolidated financial statements*" of the Annual Report 2020 and in the UBS AG's standalone financial statements for the year ended 31 December 2020 (the "**Standalone Financial Statements 2020**"), respectively; and for financial year 2019 it is available in the "*UBS AG consolidated financial statements*" section of the UBS Group AG and UBS AG annual report 2019, published on 28 February 2020 ("**Annual Report 2019**") and in the UBS AG's standalone financial statements for the year ended 31 December 2019 published on 28 February 2020 (the "**Standalone Financial Statements 2019**"). The consolidated and standalone financial accounts are closed on 31 December of each year.

The annual financial reports form an essential part of UBS AG’s reporting. They include the audited consolidated financial statements of UBS AG, prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board. The annual reports also include discussions and analysis of the consolidated financial and business results of UBS, its business divisions and Group Functions. In addition, UBS AG prepares and publishes standalone financial statements in accordance with Swiss GAAP, as well as certain additional disclosures required under US Securities and Exchange Commission regulations.

7.2 Auditing of Historical Annual Financial Information

The consolidated financial statements and the standalone financial statements of UBS AG for financial years 2020 and 2019 were audited by Ernst & Young. The reports of the auditors on the consolidated financial statements can be found on pages 417-428 (inclusive) of the Annual Report

2020 and on pages 487-497 (inclusive) of the Annual Report 2019. The reports of the auditors on the standalone financial statements of UBS AG can be found on pages 34-39 (inclusive) of the Standalone Financial Statements 2020 and on pages 30-33 (inclusive) of the Standalone Financial Statements 2019.

There are no qualifications in the auditors' reports on the consolidated financial statements of UBS AG and the standalone financial statements of UBS AG for the years ended on 31 December 2020 and 31 December 2019.

7.3 Interim Financial Information

Reference is also made to the UBS Group AG first quarter 2021 report published on 27 April 2021 ("**UBS Group First Quarter 2021 Report**"), and the UBS AG first quarter 2021 report published on 30 April 2021 ("**UBS AG First Quarter 2021 Report**"), which contain information on the financial condition and results of operations, including the interim financial statements, of UBS Group AG consolidated and UBS AG consolidated, respectively, as of and for the period ended 31 March 2021. The interim consolidated financial statements are not audited.

7.4 Litigation, Regulatory and Similar Matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this section may refer to UBS AG and / or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant. Developments relating to a matter that occur after the relevant reporting period, but prior to the issuance of financial statements, which affect management's assessment of the provision for such matter (because, for example, the developments provide evidence of conditions that existed at the end of the reporting period), are adjusting events after the reporting period under IAS 10 and must be recognized in the financial statements for the reporting period.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, UBS states that it has established a provision, and for the other matters, it makes no such statement. When UBS makes this statement and it expects disclosure of the amount of a provision to prejudice seriously its position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, UBS does not disclose that amount. In some cases UBS is subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which UBS does not state whether it has established a provision, either (a) it has not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard; or (b) it has established a provision but expects disclosure of that fact to prejudice seriously its position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which UBS has established provisions, UBS is able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which it is able to estimate expected timing is immaterial relative to its current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in "*Note 15a Provisions*" to the UBS AG unaudited interim consolidated financial statements included in the UBS AG First Quarter 2021 Report. It is not practicable to provide an aggregate estimate of liability for UBS's litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require UBS to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although UBS therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, UBS believes that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions. Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the non-prosecution agreement ("**NPA**") UBS entered into with the US Department of Justice ("**DOJ**"), Criminal Division, Fraud Section in connection with submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate ("**LIBOR**"), was terminated by the DOJ based on its determination that UBS had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a fine and was subject to probation, which ended in January 2020.

A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require UBS to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations and may permit financial market utilities to limit, suspend or terminate UBS's participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining capital requirements. Information concerning UBS's capital requirements and the calculation of operational risk for this purpose is included in the "*Capital management*" section of the UBS Group First Quarter 2021 Report.

Provisions for litigation, regulatory and similar matters by business division and in Group Functions[1]

USD million	**Global Wealth Manage- ment**	**Personal & Corporate Banking**	**Asset Manage- ment**	**Invest ment Bank**	**Group Functions**	**Total**
Balance as of 31 December 2020	861	115	0	227	932	2,135
Increase in provisions recognized in the income statement	11	0	1	1	5	**18**
Release of provisions recognized in the income statement	(8)	0	0	(1)	0	**(9)**
Provisions used in conformity with designated purpose	(27)	0	0	(5)	(2)	**(34)**
Foreign currency translation / unwind of discount	(27)	(6)	0	(5)	0	**(38)**
Balance as of 31 March 2021	**810**	**109**	**1**	**217**	**935**	**2,072**

[1] Provisions, if any, for matters described in this section are recorded in Global Wealth Management (item 3 and item 4) and Group Functions (item 2). Provisions, if any, for the matters described in items 1 and 6 of this section are allocated between Global Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this section in item 5 are allocated between the Investment Bank and Group Functions.

1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that the implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration ("**FTA**") to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests.

The Swiss Federal Administrative Court ruled in 2016 that, in the administrative assistance proceedings related to a French bulk request, UBS has the right to appeal all final FTA client data disclosure orders. On 30 July 2018, the Swiss Federal Administrative Court granted UBS's appeal by holding the French administrative assistance request inadmissible. The FTA filed a final appeal with the Swiss Federal Supreme Court. On 26 July 2019, the Supreme Court reversed the decision of the Federal Administrative Court. In December 2019, the court released its written decision. The decision requires the FTA to obtain confirmation from the French authorities that transmitted data will be used only for the purposes stated in their request before transmitting any data. The stated purpose of the original request was to obtain information relating to taxes owed by account holders. Accordingly, any information transferred to the French authorities must not be passed to criminal authorities or used in connection with the ongoing case against UBS discussed in this item. In February 2020, the FTA ordered that UBS would not be granted party status in the French administrative assistance proceedings. UBS appealed this decision to the Federal Administrative Court. On 15 July, the Federal Administrative Court upheld the FTA's decision, holding that UBS will no longer have party status in these proceedings. The Swiss Federal Supreme Court has determined that it will not hear UBS's appeal of this decision.

Since 2013, UBS (France) S.A., UBS AG and certain former employees have been under investigation in France for alleged complicity in unlawful solicitation of clients on French territory, regarding the laundering of proceeds of tax fraud, and banking and financial solicitation by unauthorized persons. In connection with this investigation, the investigating judges ordered UBS AG to provide bail (*caution*) of EUR 1.1 billion and UBS (France) S.A. to post bail of EUR 40 million, which was reduced on appeal to EUR 10 million.

A trial in the court of first instance took place from 8 October 2018 until 15 November 2018. On 20 February 2019, the court announced a verdict finding UBS AG guilty of unlawful solicitation of clients on French territory and aggravated laundering of the proceeds of tax fraud, and UBS (France) S.A. guilty of aiding and abetting unlawful solicitation and laundering the proceeds of tax fraud. The court imposed fines aggregating EUR 3.7 billion on UBS AG and UBS (France) S.A. and awarded EUR 800 million of civil damages to the French state. UBS has appealed the decision. Under French law, the judgment is suspended while the appeal is pending. The trial in the Court of Appeal took place between 8-24 March 2021. At the conclusion of the trial, the prosecutor asserted that the maximum penalty was EUR 2.2 billion and requested the court to award a penalty of at least EUR 2 billion. The French state asked for civil damages of EUR 1 billion. The judgment on the merits of the case is currently set for 27 September 2021. A subsequent appeal to the Cour de Cassation, France's highest court, is possible with respect to questions of law.

UBS believes that based on both the law and the facts the judgment of the court of first instance should be reversed. UBS believes it followed its obligations under Swiss and French law as well as the European Savings Tax Directive. Even assuming liability, which it contests, UBS believes the penalties and damage amounts awarded greatly exceed the amounts that could be supported by the law and the facts. In particular, UBS believes the court incorrectly based the penalty on the total regularized assets rather than on any unpaid taxes on those assets for which a fraud has been characterized and further incorrectly awarded damages based on costs that were not proven by the civil party. Notwithstanding that UBS believes it should be acquitted, its balance sheet at 31 March 2021 reflected provisions with respect to this matter in an amount of EUR 450 million (USD 528 million at 31 March 2021). The wide range of possible outcomes in this case contributes to a high degree of estimation uncertainty. The provision reflected on UBS's balance sheet at 31 March 2021 reflects its best estimate of possible financial implications, although it is reasonably possible that actual penalties and civil damages could exceed the provision amount.

In 2016, UBS was notified by the Belgian investigating judge that it is under formal investigation ("inculpé") regarding the laundering of proceeds of tax fraud, of banking and financial solicitation by unauthorized persons, and of serious tax fraud.

UBS's balance sheet at 31 March 2021 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which UBS has established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that UBS has recognized.

2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities ("**RMBS**") and was a purchaser and seller of US residential mortgages.

In November 2018, the DOJ filed a civil complaint in the District Court for the Eastern District of New York. The complaint seeks unspecified civil monetary penalties under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 related to UBS's issuance, underwriting and sale of 40 RMBS transactions in 2006 and 2007. UBS moved to dismiss the civil complaint on 6 February 2019. On 10 December 2019, the district court denied UBS's motion to dismiss.

UBS's balance sheet at 31 March 2021 reflected a provision with respect to matters described in this item 2 in an amount that it believes to be appropriate under the applicable accounting standard. As in the case of other matters for which UBS has established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that UBS has recognized.

3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC ("**BMIS**") investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority ("**FINMA**") and the Luxembourg Commission de Surveillance du Secteur Financier. Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts totalling approximately EUR 2.1 billion, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS ("**BMIS Trustee**").

A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of approximately USD 125 million of payments alleged to be fraudulent conveyances and preference payments. In 2016, the bankruptcy court dismissed these claims against the UBS entities. In February 2019, the Court of Appeals reversed the dismissal of the BMIS Trustee's remaining claims, and the US Supreme Court subsequently denied a petition seeking review of the Court of Appeals' decision. The case has been remanded to the Bankruptcy Court for further proceedings.

4. Puerto Rico

Declines since 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (“**funds**”) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (“**UBS PR**”) led to multiple regulatory inquiries, which in 2014 and 2015, led to settlements with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico, the US Securities and Exchange Commission (“**SEC**”) and the Financial Industry Regulatory Authority.

Since then UBS clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and/or who used their UBS account assets as collateral for UBS non-purpose loans filed customer complaints and arbitration demands. Allegations include fraud, misrepresentation and unsuitability of the funds and of the loans seeking aggregate damages of USD 3.4 billion, of which USD 2.8 billion have been resolved through settlements, arbitration or withdrawal of claims.

A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants’ motion to dismiss was denied.

In 2011, a purported derivative action was filed on behalf of the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. In 2016, the court granted the System’s request to join the action as a plaintiff. In 2017, the court denied defendants’ motion to dismiss the complaint. In 2020, the court denied plaintiffs’ motion for summary judgment.

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico ("Commonwealth") defaulted on certain interest payments on Puerto Rico bonds. In 2016, US federal legislation created an oversight board with power to oversee Puerto Rico’s finances and to restructure its debt. The oversight board has imposed a stay on the exercise of certain creditors’ rights. In 2017, the oversight board placed certain of the bonds into a bankruptcy-like proceeding under the supervision of a Federal District Judge.

In May 2019, the oversight board filed complaints in Puerto Rico federal district court bringing claims against financial, legal and accounting firms that had participated in Puerto Rico municipal bond offerings, including UBS, seeking a return of underwriting and swap fees paid in connection with those offerings. UBS estimates that it received approximately USD 125 million in fees in the relevant offerings.

In August 2019, and February and November 2020, four US insurance companies that insured issues of Puerto Rico municipal bonds sued UBS and several other underwriters of Puerto Rico municipal bonds. The actions collectively seek recovery of an aggregate of USD 955 million in damages from the defendants. The plaintiffs in these cases claim that defendants failed to reasonably investigate financial statements in the offering materials for the insured Puerto Rico bonds issued between 2002 and 2007, which plaintiffs argue they relied upon in agreeing to insure the bonds notwithstanding that they had no contractual relationship with the underwriters.

UBS’s balance sheet at 31 March 2021 reflected provisions with respect to matters described in this item 4 in amounts that it believes to be appropriate under the applicable accounting standard. As in the case of other matters for which UBS has established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that UBS has recognized.

5. Foreign exchange, LIBOR and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Beginning in 2013, numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. As a result of these investigations, UBS entered into resolutions with the UK Financial Conduct Authority ("**FCA**"), the US Commodity Futures Trading Commission ("**CFTC**"), FINMA, the Board of Governors of the Federal Reserve System ("Federal Reserve Board") and the Connecticut Department of Banking, the DOJ's Criminal Division and the European Commission. UBS has ongoing obligations under the Cease and Desist Order of the Federal Reserve Board and the Office of the Comptroller of the Currency (as successor to the Connecticut Department of Banking), and to cooperate with relevant authorities and to undertake certain remediation measures. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Investigations relating to foreign exchange matters by certain authorities remain ongoing notwithstanding these resolutions.

Foreign exchange-related civil litigation: Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. UBS has resolved US federal court class actions relating to foreign currency transactions with the defendant banks and persons who transacted in foreign exchange futures contracts and options on such futures under a settlement agreement that provides for UBS to pay an aggregate of USD 141 million and provide cooperation to the settlement classes. Certain class members have excluded themselves from that settlement and have filed individual actions in US and English courts against UBS and other banks, alleging violations of US and European competition laws and unjust enrichment.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of persons and businesses in the US who directly purchased foreign currency from the defendants and alleged co-conspirators for their own end use. In March 2017, the court granted UBS's (and the other banks') motions to dismiss the complaint. The plaintiffs filed an amended complaint in August 2017. In March 2018, the court denied the defendants' motions to dismiss the amended complaint.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office, the Monetary Authority of Singapore, the Hong Kong Monetary Authority, FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. UBS reached settlements or otherwise concluded investigations relating to benchmark interest rates with the investigating authorities. UBS has ongoing obligations to cooperate with the authorities with whom UBS has reached resolutions and to undertake certain remediation measures with respect to benchmark interest rate submissions. UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and the Swiss Competition Commission ("**WEKO**"), in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO, as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are a number of other actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. The complaints allege manipulation, through various means, of certain benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, SGD SIBOR and SOR and Australian BBSW, and seek unspecified compensatory and other damages under varying legal theories.

USD LIBOR class and individual actions in the US: In 2013 and 2015, the district court in the USD LIBOR actions dismissed, in whole or in part, certain plaintiffs' antitrust claims, federal racketeering claims, CEA claims, and state common law claims. Although the Second Circuit vacated the district court's judgment dismissing antitrust claims, the district court again dismissed antitrust claims against UBS in 2016. Certain plaintiffs have appealed that decision to the Second Circuit. Separately, in 2018, the Second Circuit reversed in part the district court's 2015 decision dismissing certain individual plaintiffs' claims and certain of these actions are now proceeding. UBS entered into an agreement in 2016 with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received final court approval. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs sought permission to appeal that ruling to the Second Circuit. In July 2018, the Second Circuit denied the petition to appeal of the class of USD lenders and in November 2018 denied the petition of the USD exchange class. In December 2019, UBS entered into an agreement with representatives of the class of USD lenders to settle their USD LIBOR class action. The agreement has received final court approval. In January 2019, a putative class action was filed in the District Court for the Southern District of New York against UBS and numerous other banks on behalf of US residents who, since 1 February 2014, directly transacted with a defendant bank in USD LIBOR instruments. The complaint asserts antitrust claims. The defendants moved to dismiss the complaint in August 2019. On 26 March 2020 the court granted defendants' motion to dismiss the complaint in its entirety. Plaintiffs have appealed the dismissal. In August 2020, an individual action was filed in the Northern District of California against UBS and numerous other banks alleging that the defendants conspired to fix the interest rate used as the basis for loans to consumers by jointly setting the USD LIBOR rate and monopolized the market for LIBOR-based consumer loans and credit cards.

Other benchmark class actions in the US: In 2014, 2015 and 2017, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiffs' claims, including plaintiffs' federal antitrust and racketeering claims. In August 2020, the court granted defendants' motion for judgment on the pleadings and dismissed the lone remaining claim in the action as impermissibly extraterritorial. Plaintiffs have appealed. In 2017, the court dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds. In April 2020, the appeals court reversed the dismissal and in August 2020 plaintiffs in that action filed an amended complaint. Defendants moved to dismiss the amended complaint in October 2020. In 2017, the court dismissed the CHF LIBOR action on standing grounds and failure to state a claim. Plaintiffs filed an amended complaint following the dismissal, and the court granted a renewed motion to dismiss in September 2019. Plaintiffs have appealed. Also in 2017, the court in the EURIBOR lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs have appealed. In October 2018, the court in the SIBOR / SOR action dismissed all but one of plaintiffs' claims against UBS. Plaintiffs filed an amended complaint following the dismissal, and the court granted a renewed motion to dismiss in July 2019. Plaintiffs appealed. In March 2021, the Second Circuit reversed the dismissal. In November 2018, the court in the BBSW lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Following that dismissal, plaintiffs filed an amended complaint in April 2019, which UBS and other defendants named in the amended complaint moved to dismiss. In February 2020, the court in the BBSW action granted in part and denied in part defendants' motions to dismiss the amended complaint. In August 2020, UBS and other BBSW defendants joined a motion for judgment on the pleadings. The court dismissed the GBP LIBOR action in August 2019. Plaintiffs have appealed.

Government bonds: Putative class actions have been filed since 2015 in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. A consolidated complaint was filed in 2017 in the US District Court for the Southern District of New York alleging that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction and in the secondary market and asserting claims under the antitrust laws and for unjust enrichment. Defendants' motions to dismiss the consolidated complaint was granted on 31 March 2021. Plaintiffs may seek permission to file an amended complaint. Similar class actions have been filed concerning European government bonds and other government bonds.

UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above, UBS's balance sheet at 31 March 2021 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which UBS has established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that UBS has recognized.

6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver.

FINMA issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

UBS's balance sheet at 31 December 2020 reflected a provision with respect to matters described in this item 6 in an amount that it believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which UBS has established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that UBS has recognized.

The specific litigation, regulatory and other matters described above under items (1) to (6) include all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects as described in the "*Note 15 Provisions and contingent liabilities*" to UBS AG unaudited interim consolidated financial statements included in the UBS AG First Quarter 2021 Report. The proceedings indicated below are matters that have recently been considered material, but are not currently considered material, by UBS. Except as disclosed in this document, there is no litigation of which the Issuer is aware that may have, or has had during the 12 months prior to the date of this document, a major impact on the financial position of UBS AG and its subsidiaries taken as a whole.

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: Certain RMBS trusts filed an action in the US District Court for the Southern District of New York seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations issued and underwritten by UBS In the first quarter of 2020 the court approved the settlement UBS agreed with the trustee in July 2018 and UBS paid the USD 850 million settlement amount. A significant portion of this amount was borne by other parties that indemnified UBS. Proceedings to determine how the settlement funds will be distributed to RMBS holders are ongoing.

UBS considers claims relating to substantially all loan repurchase demands to be resolved and believes that new demands to repurchase US residential mortgage loans are time-barred under a decision rendered by the New York Court of Appeals.

*Government sponsored entities ("**GSE**") bonds*: Starting in February 2019, class action complaints were filed in the US District Court for the Southern District of New York against UBS and other banks on behalf of plaintiffs who traded GSE bonds. A consolidated complaint was filed alleging collusion in GSE bond trading between 1 January 2009 and 1 January 2016. In December 2019, UBS and eleven other defendants agreed to settle the class action for a total of USD 250 million. The settlement has been approved by the court and this matter is now resolved.

Foreign exchange-related civil litigation regarding indirect purchasers: In 2017, two putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of persons and entities who had indirectly purchased foreign exchange instruments from a defendant or co-conspirator in the US, and a consolidated complaint was filed in June 2017. In March 2018, the court dismissed the consolidated complaint. In October 2018, the court granted plaintiffs' motion seeking leave to file an amended complaint. UBS and 11 other banks have reached an agreement with the plaintiffs to settle the class action for a total of USD 10 million. The court approved the settlement in November 2020.

7.5 Material Contracts

Except as otherwise disclosed in this document (including the documents incorporated herein by reference), no material contracts have been entered into outside of the ordinary course of UBS AG's or UBS AG Group's business, which could result in any member of the UBS AG Group being under an obligation or entitlement that is material to UBS AG's ability to meet its obligations to the investors in relation to the issued securities.

7.6 Significant Changes in the Financial Position and Performance; Material Adverse Change in Prospects

Except as otherwise indicated in this document (including the documents incorporated herein by reference), no material changes have occurred in UBS AG's assets and liabilities, financial position or profits and losses since 31 March 2021.

8. Share Capital

As reflected in the Articles of Association most recently registered with the Commercial Register of the Canton of Zurich and the Commercial Register of Basel-City, UBS AG has (i) fully paid and issued share capital of CHF 385,840,846.60, divided into 3,858,408,466 registered shares with a par value of CHF 0.10 each (article 4), and (ii) conditional capital in the amount of CHF 38,000,000, comprising 380,000,000 registered shares with a par value of CHF 0.10 each that can be issued upon the voluntary or mandatory exercise of conversion rights and/or warrants (article 4a).

9. Documents Available

The most recent Articles of Association of UBS AG are available on UBS's Corporate Governance website, at www.ubs.com/governance. Save as otherwise indicated herein, information on or accessible through the Group's corporate website, www.ubs.com, does not form part of and is not incorporated into this document.

APPENDIX II

EXTRACT OF
THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF
UBS AG AND ITS SUBSIDIARIES
FOR THE FULL YEAR ENDED 31 DECEMBER 2020

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To the General Meeting of

UBS AG, Zurich & Basel

Basel, 4 March 2021

Statutory auditor's report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of UBS AG and its subsidiaries ("the Group"), which comprise the consolidated balance sheets as of 31 December 2020 and 31 December 2019, and the consolidated income statements, statements of comprehensive income, statements of changes in equity and statements of cash flows for each of the three years in the period ended 31 December 2020, and the related notes to the consolidated financial statements, including the information identified as "audited" as described in Note 1 (collectively referred to as the "consolidated financial statements").

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2020 and 31 December 2019, and the consolidated financial performance and its consolidated cash flows for each of the three years in the period ended 31 December 2020 in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and 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 provisions of Swiss law and the requirements of the Swiss audit profession, as well as the International Code of Ethics for Professional Accountants (including International Independence Standards) of the International Ethics Standards Board for Accountants (IESBA Code), 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.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the *Auditor's responsibilities for the audit of the consolidated financial statements* section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Valuation of complex or illiquid instruments at fair value in accordance with IFRS 9 and IFRS 13

Area of focus

At 31 December 2020, as explained in Notes 1 and 21 to the consolidated financial statements, the Group held financial assets and liabilities measured at fair value of USD 404,576 million and USD 325,080 million, including financial instruments that did not trade in active markets. These instruments are reported within the following accounts: financial assets and liabilities at fair value held for trading, derivative financial instruments, financial assets and liabilities at fair value not held for trading, other financial liabilities designated at fair value and debt issued designated at fair value. In determining the fair value of these financial instruments, the Group used valuation techniques, modelling assumptions, and estimates of unobservable market inputs which required significant management judgment.

Auditing management's judgments and assumptions used in the estimation of the fair value of these instruments was complex due to the highly judgmental nature of valuation techniques, modelling assumptions and significant unobservable inputs. This included consideration of any incremental risk arising from the impact of COVID-19 on valuation techniques and supporting external marks. The valuation techniques that required judgement were comprised of discounted cash flow and earnings-based valuation techniques. Judgmental modelling assumptions result from a range of different models or model calibrations used by market participants. Valuation inputs which were particularly complex and subjective included those with a limited degree of observability and the extrapolation, interpolation or calibration of curves using limited and proxy data points. Examples of such inputs included unobservable credit spreads and bond prices, volatility, and correlation.

Our audit response

We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over management's financial instruments valuation processes, including controls over market data inputs, model and methodology governance, and valuation adjustments.

We tested the valuation techniques, models and methodologies, and the inputs used in those models, as outlined above, by performing an independent revaluation of certain complex or illiquid financial assets and liabilities with the support of specialists, using independent models and inputs, and comparing inputs to available market data among other procedures.

In addition, we evaluated the methodology and inputs used by management in determining valuation adjustments, including funding and credit fair value adjustments, on uncollateralized derivatives and fair value option liabilities.

We also assessed management's disclosures regarding fair value measurement (within Notes 1 and 21 to the consolidated financial statements).

Recognition of deferred tax assets

Area of focus

At 31 December 2020, the Group's deferred tax assets ("DTA") were USD 9,174 million (see Note 8 to the consolidated financial statements). DTAs are recognized to the extent it is probable that taxable profits will be available, against which, the deductible temporary differences or the carryforward of unused tax losses within the loss carryforward period can be utilized. There is significant judgment exercised when estimating the future taxable income that is not based on the reversal of taxable temporary differences. Management's estimate of future taxable profits is based on the strategic plans and is sensitive to the assumptions made in estimating future taxable income. Additionally, management supports a portion of the DTA with tax planning strategies.

Auditing management's assessment of the realizability of the Group's DTAs was complex due to the highly judgmental nature of estimating future taxable profits over the life of the underlying tax loss carryforwards. Estimating future profitability is inherently subjective as it is sensitive to future economic, market and other conditions, which are difficult to predict. Specifically, some of the more subjective key macro-economic assumptions used included gross domestic product growth rates, equity market performance, and interest rates. The subjectivity of these assumptions has increased due to the uncertain projected impact of COVID-19. Additionally, auditing tax planning strategies requires specific tax knowledge and understanding of the applicable tax laws, which are complex and require judgment in the interpretation of such laws and the related application.

Our audit response

We obtained an understanding, evaluated the design, and tested the operating effectiveness of management's controls over DTA valuation, which included the assumptions used in developing the strategic plans, tax planning strategies and estimating future taxable income.

We assessed the completeness and accuracy of the data used for the estimations of future taxable income. This included recalculating the outputs of the models applied to the recognition process for DTAs.

We involved specialists to assist in assessing the key economic assumptions embedded in the strategic plans. We compared key assumptions used to forecast future taxable income to externally available historical and prospective data and assumptions, and assessed the sensitivity of the outcomes using reasonably possible changes in assumptions.

In addition, we assessed the appropriateness and impact of management's tax planning strategies by evaluating whether these strategies were available, feasible, and prudent. This evaluation was based on applicable tax laws and an assessment of management's interpretations of such tax laws, our understanding of the Group's business and industry, and the Group's ability to implement the strategies.

We also assessed management's disclosure regarding recognized and unrecognized deferred tax assets (within Note 8 to the consolidated financial statements).

Legal provisions & contingent liabilities

Area of focus

At 31 December 2020, the Group's provisions for litigation, regulatory and similar matters (legal provisions) were USD 2,135 million. As explained in Note 18 to the consolidated financial statements, the Group operates in a legal and regulatory environment that is exposed to significant litigation and similar risks arising from disputes and regulatory proceedings. Such matters are subject to many uncertainties and the outcomes may be difficult to predict. These uncertainties inherently affect the amount and timing of potential outflows with respect to the legal provisions which have been established and contingent liabilities.

Auditing management's assessment of legal provisions and contingent liabilities was complex and judgmental due to the significant estimation required to evaluate management's estimate of the amount and the probability that an outflow of resources will be required for existing legal matters. In particular, these legal provisions are based on management's estimation of the likelihood of the occurrence of certain scenarios and related impact on the Group's financial position.

Our audit response

We obtained an understanding, evaluated the design and tested the operational effectiveness of management's controls over the legal provision and contingencies process. Our procedures included testing management's review of the accuracy of the inputs to the estimation of the likelihood of the occurrence of certain scenarios and related impact on the Group's financial position.

We assessed the methodologies on which the provision amounts were based with the involvement of specialists, recalculated the provisions, and tested the underlying information. We inspected legal analyses of the matters supporting the judgmental aspects impacted by legal interpretations. We obtained correspondence directly from external legal counsel to assess the information provided by management and performed inquiries with external counsel as necessary.

We also assessed management's disclosure regarding legal provisions and contingent liabilities (within Note 18 to the consolidated financial statements).

Expected credit losses

Area of focus

At 31 December 2020, the Group's allowances and provisions for expected credit losses ("ECL") was USD 1,468 million. As explained in Note 1, Note 9 and Note 20 to the consolidated financial statements, ECL is recognized for financial assets measured at amortized cost, financial assets measured at fair value through other comprehensive income, fee and lease receivables, financial guarantees and irrevocable loan commitments. ECL is also recognized on the undrawn portion of revolving revocable credit lines, which include the Group's credit card limits and master credit facilities. The allowances and provisions for ECL consists of exposures that are in default which are individually evaluated for impairment (stage 3), as well as losses inherent in the loan portfolio that are not specifically identified (stage 1 and stage 2). Management's ECL estimates represent the difference between contractual cash flows and those the Group expects to receive, discounted at the effective interest rate. The method used to calculate ECL is based on a combination of the following principal factors: probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD").

Auditing management's estimate of the allowances and provisions for ECL was complex due to the highly judgmental nature of forward-looking economic scenarios, their probability weightings, and the credit risk models used to estimate stage 1 and stage 2 ECL. In the current unprecedented economic environment resulting from the COVID-19 pandemic, ECL estimation requires higher management judgement, specifically within the following two areas: (i) scenario selection, including assumptions about the scenario severity, the form and shape of the recovery pattern, and the number of scenarios necessary to sufficiently cover the bandwidth of potential outcomes, as well as related scenario weights; and, (ii) the impact on the ECL models, including related model overlays implemented by management, since the output from historic data based ECL models may be less appropriate.

Additionally, auditing the measurement of individual ECL for stage 3 was complex due to the high degree of judgment involved in management's process for estimating ECL based on LGD assumptions. These LGD assumptions take into account expected future cash flows from collateral and other credit enhancements or expected payouts from bankruptcy proceedings for unsecured claims and, where applicable, time to realization of collateral and the seniority of claims.

Our audit response

We obtained an understanding, evaluated the design and tested the operating effectiveness of management's controls over the ECL estimate, including management's choice of, and the probability weighting assigned to, the forward-looking economic scenarios used in measuring ECL. We evaluated management's methodologies and governance controls for developing and monitoring the economic scenarios used and the probability weightings assigned to them, and any related overlays. Supported by specialists, we assessed the key macroeconomic variables used in the forward-looking scenarios, such as real gross domestic product growth, unemployment rate, interest rates and house price indices.

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over credit risk models used in the ECL estimate, including controls over the completeness and accuracy of model input data, calculation logic, output data used in the overall ECL calculation, and any related overlays. With the support of specialists, we performed an evaluation of management's models and tested the model outcomes by inspecting model documentation, reperforming model calculations, and comparing data used as inputs to management's forecast to external sources, among other procedures.

For the measurement of stage 3, we obtained an understanding, evaluated the design and tested the operating effectiveness of controls over management's process, including an evaluation of the assumptions used by management regarding the future cash flows from the debtors' continuing operations and/or the liquidation of collateral. Supported by specialists in certain areas, we additionally tested collateral valuation, cash flow assumptions and exit strategies by performing inquiries of management, inspecting underlying documents, such as loan contracts, financial statements, covenants, budgets and business plans, and by re-performing discounted cash flow calculations among other procedures.

We also assessed management's disclosures regarding financial assets at amortized cost and other positions in scope of expected credit loss measurement (Note 1, Note 9 and Note 20 to the consolidated financial statements).

IT logical access and change management controls relevant to financial reporting

Area of focus

The Group's business and financial accounting and reporting processes are highly dependent on its information technology ("IT") systems. This dependency increased during the 2020 COVID-19 pandemic when the Group shifted to a remote working environment, with the bulk of its workforce working outside the office. The Group continues to invest in its IT systems to meet client needs and business requirements including the effectiveness of its IT general controls ("ITGCs") relevant to IT logical access and change management.

Auditing management's ITGCs relevant to IT logical access and change management was complex as the Group is a multi-location organization and in addition has a significant number of IT systems and applications relevant to financial reporting.

Our audit response

In assessing the effectiveness of management's ITGCs related to IT logical access and change management, we utilized IT auditors as part of our audit team. Our audit procedures focused on the IT infrastructure and applications relevant to financial reporting. We obtained an understanding and evaluated the design, and tested the operating effectiveness of key IT logical access and change management controls.

Our audit procedures related to IT logical access included tests of user access management, privileged user access, periodic access right recertifications, and user authentication controls.

Our audit procedures related to IT change management included tests of management's program change test approach, approval of change requests, as well as segregation of duties.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of UBS AG, the compensation report (pages 260-261), and our auditor's reports thereon.

Our opinions on the consolidated financial statements, the standalone financial statements of UBS AG and the compensation report do not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibility of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors 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 the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

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 Swiss law, ISAs and Swiss Auditing Standards 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.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: http://www.expertsuisse.ch/en/audit-report-for-public-companies. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Maurice McCormick Licensed audit expert (Auditor in charge)	Robert E. Jacob, Jr. Certified Public Accountant (U.S.)

UBS AG consolidated financial statements

Primary financial statements and share information

Audited |

Income statement

		For the year ended		
USD million	Note	31.12.20	31.12.19	31.12.18
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	3	8,816	10,703	10,121
Interest expense from financial instruments measured at amortized cost	3	(4,333)	(7,303)	(6,494)
Net interest income from financial instruments measured at fair value through profit or loss	3	1,305	1,015	1,344
Net interest income	3	5,788	4,415	4,971
Other net income from financial instruments measured at fair value through profit or loss	3	6,930	6,833	6,953
Credit loss (expense) / release	20	(695)	(78)	(117)
Fee and commission income	4	20,982	19,156	19,632
Fee and commission expense	4	(1,775)	(1,696)	(1,703)
Net fee and commission income	4	19,207	17,460	17,930
Other income	5	1,549	677	905
Total operating income		32,780	29,307	30,642
Personnel expenses	6	14,686	13,801	13,992
General and administrative expenses	7	8,486	8,586	10,075
Depreciation and impairment of property, equipment and software	12	1,851	1,576	1,052
Amortization and impairment of goodwill and intangible assets	13	57	175	65
Total operating expenses		25,081	24,138	25,184
Operating profit / (loss) before tax		7,699	5,169	5,458
Tax expense / (benefit)	8	1,488	1,198	1,345
Net profit / (loss)		6,211	3,971	4,113
Net profit / (loss) attributable to non-controlling interests		15	6	7
Net profit / (loss) attributable to shareholders		6,196	3,965	4,107

Statement of comprehensive income

		For the year ended		
USD million	Note	31.12.20	31.12.19	31.12.18
Comprehensive income attributable to shareholders				
Net profit / (loss)		6,196	3,965	4,107
Other comprehensive income that may be reclassified to the income statement				
Foreign currency translation				
Foreign currency translation movements related to net assets of foreign operations, before tax		2,040	199	(701)
Effective portion of changes in fair value of hedging instruments designated as net investment hedges, before tax		(938)	(144)	181
Foreign currency translation differences on foreign operations reclassified to the income statement		(7)	52	4
Effective portion of changes in fair value of hedging instruments designated as net investment hedges reclassified to the income statement		2	(14)	2
Income tax relating to foreign currency translations, including the effect of net investment hedges		(67)	(1)	(2)
Subtotal foreign currency translation, net of tax		1,030[1]	92	(515)
Financial assets measured at fair value through other comprehensive income	11			
Net unrealized gains / (losses), before tax		223	189	(56)
Realized gains reclassified to the income statement from equity		(40)	(33)	0
Realized losses reclassified to the income statement from equity		0	2	0
Income tax relating to net unrealized gains / (losses)		(48)	(41)	12
Subtotal financial assets measured at fair value through other comprehensive income, net of tax		136	117	(45)
Cash flow hedges of interest rate risk	25			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax		2,012	1,571	(42)
Net (gains) / losses reclassified to the income statement from equity		(770)	(175)	(294)
Income tax relating to cash flow hedges		(231)	(253)	67
Subtotal cash flow hedges, net of tax		1,011[2]	1,143	(269)
Cost of hedging	25			
Change in fair value of cost of hedging, before tax		(46)		
Amortization of initial cost of hedging to the income statement		33		
Income tax relating to cost of hedging		0		
Subtotal cost of hedging, net of tax		(13)		
Total other comprehensive income that may be reclassified to the income statement, net of tax		2,165	1,351	(829)
Other comprehensive income that will not be reclassified to the income statement				
Defined benefit plans	26			
Gains / (losses) on defined benefit plans, before tax		(222)[3]	(129)	(70)
Income tax relating to defined benefit plans		88	(41)	245
Subtotal defined benefit plans, net of tax		(134)	(170)	175
Own credit on financial liabilities designated at fair value	21			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax		(293)	(400)	517
Income tax relating to own credit on financial liabilities designated at fair value		0	8	(8)
Subtotal own credit on financial liabilities designated at fair value, net of tax		(293)	(392)	509
Total other comprehensive income that will not be reclassified to the income statement, net of tax		(427)	(562)	684
Total other comprehensive income		1,738	789	(145)
Total comprehensive income attributable to shareholders		7,934	4,754	3,961

Table continues on the next page.

Statement of comprehensive income (continued)

Table continued from previous page.

		For the year ended		
USD million	Note	31.12.20	31.12.19	31.12.18
Comprehensive income attributable to non-controlling interests				
Net profit / (loss)		15	6	7
Other comprehensive income that will not be reclassified to the income statement				
Foreign currency translation movements, before tax		21	(4)	(1)
Income tax relating to foreign currency translation movements		0	0	0
Subtotal foreign currency translation, net of tax		21	(4)	(1)
Total other comprehensive income that will not be reclassified to the income statement, net of tax		21	(4)	(1)
Total comprehensive income attributable to non-controlling interests		36	2	5
Total comprehensive income				
Net profit / (loss)		6,211	3,971	4,113
Other comprehensive income		1,759	785	(147)
of which: other comprehensive income that may be reclassified to the income statement		*2,165*	*1,351*	*(829)*
of which: other comprehensive income that will not be reclassified to the income statement		*(406)*	*(566)*	*682*
Total comprehensive income		7,970	4,756	3,967

1 Mainly driven by the strengthening of the Swiss franc (9%) and the euro (9%) against the US dollar. 2 Mainly reflects an increase in net unrealized gains on US dollar hedging derivatives resulting from decreases in the relevant long-term US dollar interest rates, partly offset by the reclassification of net gains on hedging instruments from OCI to the income statement as the hedged forecast cash flows affected profit or loss. 3 Mainly includes a net pre-tax OCI loss of USD 172 million related to the Swiss pension plan (primarily driven by an extraordinary employer contribution of USD 143 million that increased the gross plan assets, but led to an OCI loss as no net pension asset could be recognized on the balance sheet as of 31 December 2020 due to the asset ceiling) and a net pre-tax OCI loss of USD 61 million related to the UK pension plan (driven by an increase in the defined benefit obligation, mainly resulting from a lower discount rate). Refer to Note 26 for more information.

Balance sheet

USD million	Note	31.12.20	31.12.19
Assets			
Cash and balances at central banks		158,231	107,068
Loans and advances to banks	9	15,344	12,379
Receivables from securities financing transactions	9, 22	74,210	84,245
Cash collateral receivables on derivative instruments	9, 22	32,737	23,289
Loans and advances to customers	9	380,977	327,992
Other financial assets measured at amortized cost	9, 14a	27,219	23,012
Total financial assets measured at amortized cost		688,717	577,985
Financial assets at fair value held for trading	21	125,492	127,695
of which: assets pledged as collateral that may be sold or repledged by counterparties		*47,098*	*41,285*
Derivative financial instruments	10, 21, 22	159,618	121,843
Brokerage receivables	21	24,659	18,007
Financial assets at fair value not held for trading	21	80,038	83,636
Total financial assets measured at fair value through profit or loss		389,808	351,181
Financial assets measured at fair value through other comprehensive income	11, 21	8,258	6,345
Investments in associates	28b	1,557	1,051
Property, equipment and software	12	11,958	11,826
Goodwill and intangible assets	13	6,480	6,469
Deferred tax assets	8	9,174	9,524
Other non-financial assets	14b	9,374	7,547
Total assets		1,125,327	971,927
Liabilities			
Amounts due to banks	15	11,050	6,570
Payables from securities financing transactions	22	6,321	7,778
Cash collateral payables on derivative instruments	22	37,313	31,416
Customer deposits	15a	527,929	450,591
Funding from UBS Group AG and its subsidiaries	15b	53,979	47,866
Debt issued measured at amortized cost	17	85,351	62,835
Other financial liabilities measured at amortized cost	19a	10,421	10,373
Total financial liabilities measured at amortized cost		732,364	617,429
Financial liabilities at fair value held for trading	21	33,595	30,591
Derivative financial instruments	10, 21, 22	161,102	120,880
Brokerage payables designated at fair value	21	38,742	37,233
Debt issued designated at fair value	16, 21	59,868	66,592
Other financial liabilities designated at fair value	19b, 21	31,773	36,157
Total financial liabilities measured at fair value through profit or loss		325,080	291,452
Provisions	18a	2,791	2,938
Other non-financial liabilities	19c	7,018	6,211
Total liabilities		1,067,254	918,031
Equity			
Share capital		338	338
Share premium		24,580	24,659
Retained earnings		25,251	23,419
Other comprehensive income recognized directly in equity, net of tax		7,585	5,306
Equity attributable to shareholders		57,754	53,722
Equity attributable to non-controlling interests		319	174
Total equity		58,073	53,896
Total liabilities and equity		1,125,327	971,927

Statement of changes in equity

USD million	Share capital	Share premium	Retained earnings
Balance as of 31 December 2017	**338**	**24,633**	**22,189**
Effect of adoption of IFRS 9			(518)
Effect of adoption of IFRS 15			(25)
Effect of retained earnings restatement[2]			(32)
Balance as of 1 January 2018 after the adoption of IFRS 9 and IFRS 15 and restatement of retained earnings	**338**	**24,633**	**21,614**
Issuance of share capital			
Premium on shares issued and warrants exercised		34	
Tax (expense) / benefit		(5)	
Dividends			(3,098)
Translation effects recognized directly in retained earnings			(21)
New consolidations / (deconsolidations) and other increases / (decreases)		(7)	
Total comprehensive income for the year			4,790
of which: net profit / (loss)			*4,107*
of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax			
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*175*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*509*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation			
Balance as of 31 December 2018	**338**	**24,655**	**23,285**
Effect of adoption of IFRIC 23			(11)
Balance as of 1 January 2019 after the adoption of IFRIC 23	**338**	**24,655**	**23,274**
Issuance of share capital			
Premium on shares issued and warrants exercised		0	
Tax (expense) / benefit		11	
Dividends			(3,250)
Translation effects recognized directly in retained earnings			(9)
New consolidations / (deconsolidations) and other increases / (decreases)		(7)	
Total comprehensive income for the year			3,403
of which: net profit / (loss)			*3,965*
of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax			
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*(170)*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*(392)*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation			
Balance as of 31 December 2019	**338**	**24,659**	**23,419**

Other comprehensive income recognized directly in equity, net of tax[1]	*of which: foreign currency translation*	*of which: financial assets at fair value through other comprehensive income*	*of which: cash flow hedges*	*of which: cost of hedging*	Total equity attributable to shareholders	Non-controlling interests	Total equity
4,828	***4,455***	***13***	***360***		**51,987**	**59**	**52,046**
(74)		*(74)*			(591)		(591)
					(25)		(25)
					(32)		(32)
4,754	***4,455***	***(61)***	***360***		**51,338**	**59**	**51,397**
					0		0
					34		34
					(5)		(5)
					(3,098)	(10)	(3,108)
21		*3*	*18*		0		0
					(7)	122	115
(829)	*(515)*	*(45)*	*(269)*		3,961	5	3,967
					4,107	*7*	*4,113*
(829)	*(515)*	*(45)*	*(269)*		*(829)*		*(829)*
					175		*175*
					509		*509*
					0	*(1)*	*(1)*
3,946	***3,940***	***(103)***	***109***		**52,224**	**176**	**52,400**
					(11)		(11)
3,946	***3,940***	***(103)***	***109***		**52,213**	**176**	**52,389**
					0		0
					0		0
					11		11
					(3,250)	(8)	(3,258)
9		*0*	*9*		0		0
					(7)	5	(3)
1,351	*92*	*117*	*1,143*		4,754	2	4,756
					3,965	*6*	*3,971*
1,351	*92*	*117*	*1,143*		*1,351*		*1,351*
					(170)		*(170)*
					(392)		*(392)*
					0	*(4)*	*(4)*
5,306	**4,032**	***14***	***1,260***		**53,722**	**174**	**53,896**

Statement of changes in equity (continued)

USD million	Share capital	Share premium	Retained earnings
Balance as of 31 December 2019	**338**	**24,659**	**23,419**
Issuance of share capital			
Premium on shares issued and warrants exercised		(4)[3]	
Tax (expense) / benefit		1	
Dividends			(3,848)
Translation effects recognized directly in retained earnings			(49)
Share of changes in retained earnings of associates and joint ventures			(40)
New consolidations / (deconsolidations) and other increases / (decreases)[4]		(76)	
Total comprehensive income for the year			5,769
of which: net profit / (loss)			*6,196*
of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax			
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*(134)*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*(293)*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation			
Balance as of 31 December 2020	338	24,580	25,251

1 Excludes other comprehensive income related to defined benefit plans and own credit, which is recorded directly in Retained earnings. 2 Opening retained earnings as of 1 January 2018 have been restated to reflect a reduction of USD 32 million in connection with the retrospective recognition of a USD 43 million increase in compensation-related liabilities and an USD 11 million increase in deferred tax assets. Refer to Note 1b for more information. 3 Includes decreases related to recharges by UBS Group AG for share-based compensation awards granted to employees of UBS AG or its subsidiaries. 4 Mainly relates to the establishment of a banking partnership with Banco do Brasil. Refer to Note 29 for more information.

Other comprehensive income recognized directly in equity, net of tax[1]	*of which: foreign currency translation*	*of which: financial assets at fair value through other comprehensive income*	*of which: cash flow hedges*	*of which: cost of hedging*	Total equity attributable to shareholders	Non-controlling interests	Total equity
5,306	*4,032*	*14*	*1,260*		53,722	174	53,896
					0		0
					(4)		(4)
					1		1
					(3,848)	(6)	(3,854)
49		*0*	*49*		0		0
					(40)		(40)
65	*65*				(12)	115	103
2,165	*1,030*	*136*	*1,011*	*(13)*	7,934	36	7,970
					6,196	*15*	*6,211*
2,165	*1,030*	*136*	*1,011*	*(13)*	*2,165*		*2,165*
					(134)		*(134)*
					(293)		*(293)*
					0	*21*	*21*
7,585	*5,126*	*151*	*2,321*	*(13)*	57,754	319	58,073

Share information and earnings per share

Ordinary share capital

As of 31 December 2020, UBS AG had 3,858,408,466 issued shares (31 December 2019: 3,858,408,466 shares) with a nominal value of CHF 0.10 each, leading to a share capital of CHF 385,840,846.60. The shares were entirely held by UBS Group AG.

Conditional share capital

As of 31 December 2020, the following conditional share capital was available to UBS AG's Board of Directors (BoD):

– A maximum of CHF 38,000,000 represented by up to 380,000,000 fully paid registered shares with a nominal value of CHF 0.10 each, to be issued through the voluntary or mandatory exercise of conversion rights and / or warrants granted in connection with the issuance of bonds or similar financial instruments on national or international capital markets. This conditional capital allowance was approved at the Annual General Meeting of UBS AG on 14 April 2010. The BoD has not made use of such allowance.

Authorized share capital

UBS AG had no authorized capital available to issue on 31 December 2020.

Earnings per share

In 2015, UBS AG shares were delisted from the SIX Swiss Exchange and the New York Stock Exchange. As of 31 December 2020, 100% of UBS AG's issued shares were held by UBS Group AG and therefore were not publicly traded. Accordingly, earnings per share information is not provided for UBS AG.

Statement of cash flows

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Cash flow from / (used in) operating activities			
Net profit / (loss)	6,211	3,971	4,113
Non-cash items included in net profit and other adjustments:			
Depreciation and impairment of property, equipment and software	1,851	1,576	1,052
Amortization and impairment of goodwill and intangible assets	57	175	65
Credit loss expense / (release)	695	78	117
Share of net profits of associates / joint ventures and impairment of associates	(84)	(45)	(528)
Deferred tax expense / (benefit)	355	460	374
Net loss / (gain) from investing activities	(698)	220	(49)
Net loss / (gain) from financing activities	3,246	6,506	(4,829)
Other net adjustments	(8,061)	862	(1,092)
Net change in operating assets and liabilities:			
Loans and advances to banks / amounts due to banks	3,586	(4,336)	3,504
Securities financing transactions	9,588	8,678	(11,230)
Cash collateral on derivative instruments	(3,486)	2,842	(1,449)
Loans and advances to customers	(33,897)	(3,205)	(4,152)
Customer deposits	52,831	23,399	7,931
Financial assets and liabilities at fair value held for trading and derivative financial instruments	11,326	(18,873)	11,093
Brokerage receivables and payables	(5,199)	(2,347)	11,432
Financial assets at fair value not held for trading, other financial assets and liabilities	392	126	10,902
Provisions, other non-financial assets and liabilities	(1,213)	(537)	1,377
Income taxes paid, net of refunds	(919)	(741)	(888)
Net cash flow from / (used in) operating activities	36,581	18,805	27,744
Cash flow from / (used in) investing activities			
Purchase of subsidiaries, associates and intangible assets	(46)	(26)	(287)
Disposal of subsidiaries, associates and intangible assets[1]	674	114	137
Purchase of property, equipment and software	(1,573)	(1,401)	(1,473)
Disposal of property, equipment and software	364	11	114
Purchase of financial assets measured at fair value through other comprehensive income	(6,290)	(3,424)	(1,999)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	4,530	3,913	1,361
Net (purchase) / redemption of debt securities measured at amortized cost	(4,166)	(562)	(3,770)
Net cash flow from / (used in) investing activities	(6,506)	(1,374)	(5,918)

Table continues on the next page.

Statement of cash flows (continued)

Table continued from previous page.

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Cash flow from / (used in) financing activities			
Net short-term debt issued / (repaid)	23,845	(17,149)	(12,245)
Distributions paid on UBS AG shares	(3,848)	(3,250)	(3,098)
Repayment of lease liabilities	(547)	(496)	
Issuance of long-term debt, including debt issued designated at fair value	72,273	59,199	54,726
Repayment of long-term debt, including debt issued designated at fair value	(83,825)	(68,883)	(44,344)
Funding from UBS Group AG and its subsidiaries	4,606	5,848	5,956
Net changes in non-controlling interests	(6)	(8)	(31)
Net cash flow from / (used in) financing activities	12,498	(24,738)	963
Total cash flow			
Cash and cash equivalents at the beginning of the year	119,804	125,853	104,787
Net cash flow from / (used in) operating, investing and financing activities	42,573	(7,307)	22,789
Effects of exchange rate differences on cash and cash equivalents	11,053	1,258	(1,722)
Cash and cash equivalents at the end of the year[2]	173,430	119,804	125,853
of which: cash and balances at central banks[3]	*158,088*	*106,957*	*108,268*
of which: loans and advances to banks	*13,928*	*11,317*	*15,452*
of which: money market paper[4]	*1,415*	*1,530*	*2,133*
Additional information			
Net cash flow from / (used in) operating activities includes:			
Interest received in cash	11,929	15,344	14,666
Interest paid in cash	6,414	10,800	9,372
Dividends on equity investments, investment funds and associates received in cash[5]	1,901	3,145	2,322

1 Includes cash proceeds from the sale of the majority stake in Fondcenter AG of USD 426 million for the year ended 31 December 2020. Refer to Note 29 for more information. Also includes dividends received from associates. 2 USD 3,828 million, USD 3,192 million and USD 5,245 million of cash and cash equivalents (mainly reflected in Loans and advances to banks) were restricted as of 31 December 2020, 31 December 2019 and 31 December 2018, respectively. Refer to Note 23 for more information. 3 Includes only balances with an original maturity of three months or less. 4 Money market paper is included in the balance sheet under Financial assets at fair value held for trading (31 December 2020: USD 117 million; 31 December 2019: USD 235 million; 31 December 2018: USD 366 million), Financial assets measured at fair value through other comprehensive income (31 December 2020: USD 178 million; 31 December 2019: USD 24 million; 31 December 2018: USD 8 million), Financial assets at fair value not held for trading (31 December 2020: USD 536 million; 31 December 2019: USD 920 million; 31 December 2018: USD 1,556 million) and Other financial assets measured at amortized cost (31 December 2020: USD 584 million; 31 December 2019: USD 351 million; 31 December 2018: USD 204 million). 5 Includes dividends received from associates reported within Net cash flow from / (used in) investing activities.

Changes in liabilities arising from financing activities

USD million	Debt issued measured at amortized cost	*of which: short-term*	*of which: long-term*	Debt issued designated at fair value	Over-the-counter (OTC) debt instruments[2]	Funding from UBS Group AG and its subsidiaries[3]	Total
Balance as of 1 January 2019	91,245	39,025	52,220	57,031	2,450	41,202	191,928
Cash flows	(28,355)	*(17,149)*	*(11,206)*	1,947	(425)	5,848	(20,985)
Non-cash changes	(55)	*(39)*	*(16)*	7,614	(3)	1,033	8,588
of which: foreign currency translation	*(346)*	*(39)*	*(307)*	*210*	*(6)*	*(128)*	*(270)*
of which: fair value changes				*7,404*	*3*	*17*	*7,424*
of which: other[1]	*291*		*291*			*1,144*	*1,434*
Balance as of 31 December 2019	62,835	*21,837*	*40,998*	66,592	2,022	48,083	179,531
Cash flows	18,722	*23,845*	*(5,123)*	(6,423)	(6)	4,606	16,899
Non-cash changes	3,794	*984*	*2,810*	(301)	44	2,666	6,203
of which: foreign currency translation	*3,589*	*984*	*2,605*	*1,760*	*82*	*1,395*	*6,825*
of which: fair value changes				*(2,061)*	*(38)*	*152*	*(1,946)*
of which: other[1]	*205*		*205*			*1,119*	*1,324*
Balance as of 31 December 2020	85,351	46,666	38,685	59,868	2,060	55,354	202,633

1 Includes the effect of fair value hedges on long-term debt. Refer to Note 1a item 2j and Note 17 for more information. 2 Included in balance sheet line Other financial liabilities designated at fair value. 3 Includes funding from UBS Group AG and its subsidiaries measured at amortized cost (refer to Note 15b) and measured at fair value (refer to Note 19b).

Notes to the UBS AG consolidated financial statements

Note 1 Summary of significant accounting policies

The following table provides an overview of information included in this Note.

Note 1 Summary of significant accounting policies (continued)

a) Significant accounting policies

This Note describes the significant accounting policies applied in the preparation of the consolidated financial statements (the Financial Statements) of UBS AG and its subsidiaries (UBS AG). On 25 February 2021, the Financial Statements were authorized for issue by the Board of Directors.

Basis of accounting

The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (the IASB), and are presented in US dollars (USD).

Disclosures marked as audited in the "Risk, capital, liquidity and funding, and balance sheet" section of this report form an integral part of the Financial Statements. These disclosures relate to requirements under IFRS 7, *Financial Instruments: Disclosures*, and IAS 1, *Presentation of Financial Statements*, and are not repeated in this section.

The accounting policies described in this Note have been applied consistently in all years presented unless otherwise stated in Note 1b. In addition, effective from 1 January 2019, UBS AG applies IFRS 16, *Leases,* which sets out the principles for the recognition, measurement, presentation and disclosure of leases. Within this Note, policies applied for periods that differ from those applied to the financial year ended 31 December 2020 are identified as "Comparative policy."

Critical accounting estimates and judgments

Preparation of these Financial Statements under IFRS requires management to apply judgment and make estimates and assumptions that affect reported amounts of assets, liabilities, income and expenses and disclosure of contingent assets and liabilities, and may involve significant uncertainty at the time they are made. Such estimates and assumptions are based on the best available information. UBS AG regularly reassesses such estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions, updating them as necessary. Changes in those estimates and assumptions may have a significant effect on the Financial Statements. Furthermore, actual results may differ significantly from UBS AG's estimates, which could result in significant losses to UBS AG, beyond what was anticipated or provided for.
The following areas contain estimation uncertainty or require critical judgment and have a significant effect on amounts recognized in the Financial Statements:

- expected credit loss measurement (refer to item 2g in this Note and to Note 20);
- fair value measurement (refer to item 2f in this Note and to Note 21);
- income taxes (refer to item 7 in this Note and to Note 8);
- provisions and contingent liabilities (refer to item 11 in this Note and to Note 18);
- post-employment benefit plans (refer to item 6 in this Note and to Note 26);
- goodwill (refer to item 10 in this Note and to Note 13); and
- consolidation of structured entities (refer to item 1 in this Note and to Note 28).

1) Consolidation

The Financial Statements comprise the financial statements of UBS AG and its subsidiaries, presented as a single economic entity; intercompany transactions and balances have been eliminated. UBS AG consolidates all entities that it controls, including structured entities (SEs), which is the case when it has: (i) power over the relevant activities of the entity; (ii) exposure to an entity's variable returns; and (iii) the ability to use its power to affect its own returns.

Consideration is given to all facts and circumstances to determine whether UBS AG has power over another entity, i.e., the current ability to direct the relevant activities of an entity when decisions about those activities need to be made.

Subsidiaries, including SEs, are consolidated from the date when control is gained and deconsolidated from the date when control ceases. Control, or the lack thereof, is reassessed if facts and circumstances indicate that there is a change to one or more elements required to establish that control is present.

Business combinations are accounted for using the acquisition method. The amount of non-controlling interest is measured at the non-controlling interest's proportionate share of the acquiree's identifiable net assets.

› **Refer to Note 28 for more information**

Critical accounting estimates and judgments

Each individual entity is assessed for consolidation in line with the aforementioned consolidation principles. The assessment of control can be complex and requires the use of significant judgment, in particular in determining whether UBS AG has power over the entity. As the nature and extent of UBS AG's involvement is unique for each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not. When carrying out the consolidation assessment, judgment is exercised considering all the relevant facts and circumstances, including the nature and activities of the investee, as well as the substance of voting and similar rights.

› **Refer to Note 28 for more information**

2) Financial instruments

a. Recognition

UBS AG recognizes financial instruments when it becomes a party to contractual provisions of an instrument. UBS AG applies settlement date accounting to all standard purchases and sales of non-derivative financial instruments.

In transactions where UBS AG acts as a transferee, to the extent such financial asset transfer does not qualify for derecognition by the transferor, UBS AG does not recognize the transferred instrument as its asset.

UBS AG also acts in a fiduciary capacity, which results in it holding or placing assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless these items meet the definition of an asset and the recognition criteria are satisfied, such assets are not recognized on UBS AG's balance sheet and the related income is excluded from the Financial Statements.

Client cash balances associated with derivatives clearing and execution services are not recognized on the balance sheet if, through contractual agreement, regulation or practice, UBS AG neither obtains benefits from nor controls such cash balances.

b. Classification, measurement and presentation

Financial assets

All financial instruments are on initial recognition measured at fair value and classified as measured at amortized cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL). For financial instruments subsequently measured at amortized cost or FVOCI, the initial fair value is adjusted for directly attributable transaction costs.

Where the contractual terms of a debt instrument result in cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding, the debt instrument is classified as measured at amortized cost if it is held within a business model that has an objective to hold financial assets to collect contractual cash flows, or at FVOCI if it is held within a business model with the objective being achieved by both collecting contractual cash flows and selling financial assets.

All other financial assets are measured at FVTPL, including those held for trading or those managed on a fair value basis, except for derivatives designated in a hedge relationship, in which case hedge accounting requirements apply (refer to item 2j in this Note for more information).

Business model assessment and contractual cash flow characteristics

UBS AG determines the nature of a business model by considering the way financial assets are managed to achieve a particular business objective.

In assessing whether the contractual cash flows are SPPI, UBS AG considers whether the contractual terms of the financial asset contain a term that could change the timing or amount of contractual cash flows arising over the life of the instrument.

Financial liabilities

Financial liabilities measured at amortized cost

Financial liabilities measured at amortized cost include *Debt issued measured at amortized cost* and *Funding from UBS Group AG and its subsidiaries*, which constitute obligations of UBS AG arising from funding it has received from UBS Group AG or its subsidiaries, which are not within the UBS AG's scope of consolidation. The latter includes contingent capital instruments issued to UBS Group AG and its subsidiaries containing contractual provisions under which the principal amounts would be written down or converted into equity upon either a specified common equity tier 1 (CET1) ratio breach or a determination by the Swiss Financial Market Supervisory Authority (FINMA) that a viability event has occurred. Such contractual provisions are not derivatives, as the underlying is deemed to be a non-financial variable specific to a party to the contract.

Where there is a legal bail-in mechanism for write-down or conversion into equity (as is the case, for instance, with senior unsecured debt issued by UBS AG that is subject to write-down or conversion under resolution authority granted to FINMA under Swiss law), the amortized cost accounting treatment applied to these instruments is not affected.

If the debt were to be written down or converted into equity in a future period, it would be partially or fully derecognized, with the difference between its carrying amount and the fair value of any equity issued recognized in the income statement.

A gain or loss is recognized in *Other income* when debt issued is subsequently repurchased for market-making or other activities. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

Financial liabilities measured at fair value through profit or loss

UBS AG designates certain issued debt instruments as financial liabilities at fair value through profit or loss, on the basis that such financial instruments include embedded derivatives and / or are managed on a fair value basis (refer to the table below for more information), in which case bifurcation of the embedded derivative component is not required. Financial instruments including embedded derivatives arise predominantly from the issuance of certain structured debt instruments.

Measurement and presentation

After initial recognition, UBS AG classifies, measures and presents its financial assets and liabilities in accordance with IFRS 9, as described in the table on the following pages.

Note 1 Summary of significant accounting policies (continued)

Classification, measurement and presentation of financial assets

Financial assets classification		Significant items included	Measurement and presentation
Measured at amortized cost		This classification includes: – cash and balances at central banks; – loans and advances to banks; – cash collateral receivables on securities borrowed; – receivables on reverse repurchase agreements; – cash collateral receivables on derivative instruments; – residential and commercial mortgages; – corporate loans; – secured loans, including Lombard loans, and unsecured loans; – loans to financial advisors; and – debt securities held as high-quality liquid assets (HQLA).	Measured at amortized cost using the effective interest method less allowances for expected credit losses (ECL) (refer to items 2d and 2g in this Note for more information). The following items are recognized in the income statement: – interest income, which is accounted for in accordance with item 2d in this Note; – ECL and reversals; and – foreign exchange translation gains and losses. When the financial asset at amortized cost is derecognized, the gain or loss is recognized in the income statement. For amounts arising from settlement of certain derivatives, refer to the next page.
Measured at FVOCI	Debt instruments measured at FVOCI	This classification primarily includes debt securities and certain asset-backed securities held as HQLA.	Measured at fair value, with unrealized gains and losses reported in *Other comprehensive income,* net of applicable income taxes, until such investments are derecognized. Upon derecognition, any accumulated balances in *Other comprehensive income* are reclassified to the income statement and reported within *Other income.* The following items, which are determined on the same basis as for financial assets measured at amortized cost, are recognized in the income statement: – interest income, which is accounted for in accordance with item 2d in this Note; – ECL and reversals; and – foreign exchange translation gains and losses.

Note 1 Summary of significant accounting policies (continued)

Classification, measurement and presentation of financial assets

<table>
<tr><th colspan="2">Financial assets classification</th><th>Significant items included</th><th>Measurement and presentation</th></tr>
<tr><td rowspan="2">Measured at FVTPL</td><td>Held for trading</td><td>Financial assets held for trading include:
– all derivatives with a positive replacement value, except those that are designated and effective hedging instruments; and
– other financial assets acquired principally for the purpose of selling or repurchasing in the near term, or that are part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking. Included in this category are debt instruments (including those in the form of securities, money market paper, and traded corporate and bank loans) and equity instruments.</td><td rowspan="2">Measured at fair value, with changes recognized in the income statement.

Derivative assets (including derivatives that are designated and effective hedging instruments) are generally presented as Derivative financial instruments, except those exchange-traded and OTC-cleared derivatives that are considered to be settled on a daily basis or in substance net settled on a daily basis, which are presented within Cash collateral receivables on derivative instruments.

Changes in fair value, initial transaction costs, dividends and gains and losses arising on disposal or redemption are recognized in Other net income from financial instruments measured at fair value through profit or loss,[1] except interest income on instruments other than derivatives (refer to item 2d in this Note), interest on derivatives designated as hedging instruments in hedges of interest rate risk and forward points on certain short- and long-duration foreign exchange contracts acting as economic hedges, which are reported in Net interest income.

Changes in the fair value of derivatives that are designated and effective hedging instruments are presented either in the income statement or Other comprehensive income, depending on the type of hedge relationship (refer to item 2j in this Note for more information).</td></tr>
<tr><td>Mandatorily measured at FVTPL – Other</td><td>This classification includes financial assets mandatorily measured at FVTPL that are not held for trading, as follows:
– certain structured loans, certain commercial loans, receivables under reverse repurchase and cash collateral on securities borrowing agreements that are managed on a fair value basis;
– loans managed on a fair value basis, including those hedged with credit derivatives;
– certain debt securities held as HQLA and managed on a fair value basis;
– certain investment fund holdings and assets held to hedge delivery obligations related to cash-settled employee compensation plans;
– brokerage receivables, for which contractual cash flows do not meet the SPPI criterion because the aggregate balance is accounted for as a single unit of account, with interest being calculated on the individual components;
– auction rate securities, for which contractual cash flows do not meet the SPPI criterion because interest may be reset at rates that contain leverage;
– equity instruments; and
– assets held under unit-linked investment contracts.</td></tr>
</table>

1 Effective from 1 January 2019, this line item includes dividends (prior to 1 January 2019, dividends were included within *Net interest income*), intermediation income arising from certain client-driven Global Wealth Management and Personal & Corporate Banking financial transactions, foreign currency translation effects and income and expenses from exposures to precious metals.

Note 1 Summary of significant accounting policies (continued)

Classification, measurement and presentation of financial liabilities

Financial liabilities classification		Significant items included	Measurement and presentation
Measured at amortized cost		This classification includes: – demand and time deposits; – retail savings / deposits; – amounts payable under repurchase agreements; – cash collateral on securities lent; – non-structured fixed-rate bonds; – subordinated debt; – certificates of deposit and covered bonds; – obligations against funding from UBS Group AG and its subsidiaries; and – cash collateral payables on derivative instruments.	Measured at amortized cost using the effective interest method. When the financial liability at amortized cost is derecognized, the gain or loss is recognized in the income statement.
Measured at fair value through profit or loss	Held for trading	Financial liabilities held for trading include: – all derivatives with a negative replacement value (including certain loan commitments), except those that are designated and effective hedging instruments; and – obligations to deliver financial instruments, such as debt and equity instruments, that UBS AG has sold to third parties but does not own (short positions).	Measurement and presentation of financial liabilities classified at FVTPL follow the same principles as for financial assets classified at FVTPL, except that the amount of change in the fair value of the financial liability designated at FVTPL that is attributable to changes in UBS AG's own credit risk is presented in *Other comprehensive income* directly within *Retained earnings* and is never reclassified to the income statement. Derivative liabilities (including derivatives that are designated and effective hedging instruments) are generally presented as *Derivative financial instruments*, except those exchange-traded and OTC-cleared derivatives that are considered to be settled on a daily basis or in substance net settled on a daily basis, which are presented within *Cash collateral payables on derivative instruments*.
	Designated at FVTPL	UBS AG designates at FVTPL the following financial liabilities: – issued hybrid debt instruments that primarily include equity-linked, credit-linked and rates-linked bonds or notes; – issued debt instruments managed on a fair value basis; – certain payables under repurchase agreements and cash collateral on securities lending agreements that are managed in conjunction with associated reverse repurchase agreements and cash collateral on securities borrowed; – amounts due under unit-linked investment contracts whose cash flows are linked to financial assets measured at FVTPL and eliminate an accounting mismatch; and – brokerage payables, which arise in conjunction with brokerage receivables and are measured at FVTPL to achieve measurement consistency.	

c. Loan commitments and financial guarantees

Loan commitments are arrangements to provide credit under defined terms and conditions. Irrevocable loan commitments are classified as: (i) derivative loan commitments measured at fair value through profit or loss; (ii) loan commitments designated at fair value through profit or loss; or (iii) loan commitments not measured at fair value. Financial guarantee contracts are contracts that require UBS AG to make specified payments to reimburse the holder for an incurred loss because a specified debtor fails to make payments when due in accordance with the terms of a specified debt instrument.

d. Interest income and expense

Interest income and expense are recognized in the income statement based on the effective interest method. When calculating the effective interest rate (EIR) for financial instruments (other than credit-impaired financial instruments), UBS AG estimates future cash flows considering all contractual terms of the instrument, but not expected credit losses, with the EIR applied to the gross carrying amount of the financial asset or the amortized cost of a financial liability. However, when a financial asset becomes credit-impaired after initial recognition, interest income is determined by applying the EIR to the amortized cost of the instrument, which represents the gross carrying amount adjusted for any credit loss allowance.

Upfront fees, including fees on loan commitments not measured at fair value where a loan is expected to be issued, and direct costs are included within the initial measurement of a financial instrument measured at amortized cost or FVOCI and recognized over the expected life of the instrument as part of its EIR.

Fees related to loan commitments where no loan is expected to be issued, as well as loan syndication fees where UBS AG does not retain a portion of the syndicated loan or where UBS AG does retain a portion of the syndicated loan at the same effective yield for comparable risk as other participants, are included in *Net fee and commission income* and either recognized over the life of the commitment or when syndication occurs.

› **Refer to item 3 in this Note for more information**

Interest income on financial assets, excluding derivatives, is included in interest income when positive and in interest expense when negative. Similarly, interest expense on financial liabilities, excluding derivatives, is included in interest expense, except when interest rates are negative, in which case it is included in interest income.

› **Refer to item 2b in this Note and Note 3 for more information**

e. Derecognition

Financial assets

UBS AG derecognizes a financial asset, or a portion of a financial asset, when the contractual rights to the cash flows from the financial asset expire, or UBS AG has either (i) transferred the contractual rights to receive the cash flows from the asset, or (ii) retained the contractual rights to receive the cash flows of that asset, but assumed a contractual obligation to pay the cash flows to one or more entities, subject to certain criteria. Transferred financial assets are derecognized if the purchaser has received substantially all the risks and rewards of the asset or a significant part of the risks and rewards combined with a practical ability to sell or pledge the asset.

Where financial assets have been pledged as collateral or in similar arrangements, they are considered to have been transferred if the counterparty has received the contractual rights to the cash flows of the pledged assets, as may be evidenced by, for example, the counterparty's right to sell or repledge the assets. In transfers where control over the financial asset is retained, UBS AG continues to recognize the asset to the extent of its continuing involvement, determined by the extent to which it is exposed to changes in the value of the transferred asset following the transfer.

Certain over-the-counter (OTC) derivative contracts and most exchange-traded futures and option contracts cleared through central clearing counterparties and exchanges are considered to be settled on a daily basis, as the payment or receipt of variation margin on a daily basis represents legal or economic settlement, which results in derecognition of the associated derivatives.

› **Refer to item 2i in this Note, Note 22 and Note 23 for more information**

Financial liabilities

UBS AG derecognizes a financial liability from its balance sheet when it is extinguished; i.e., when the obligation specified in the contract is discharged, canceled or expires. When an existing financial liability is exchanged for a new one from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, the original liability is derecognized and a new liability recognized with any difference in the respective carrying amounts recognized in the income statement.

f. Fair value of financial instruments

UBS AG accounts for a significant portion of its assets and liabilities at fair value. Fair value is the price on the measurement date that would be received for the sale of an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market, or in the most advantageous market in the absence of a principal market.

› **Refer to Note 21 for more information**

Note 1 Summary of significant accounting policies (continued)

Critical accounting estimates and judgments

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs in the fair valuation of financial instruments requires significant judgment and could affect the amount of gain or loss recorded for a particular position. Valuation techniques that rely more heavily on unobservable inputs and sophisticated models inherently require a higher level of judgment and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, which are presented in Note 21d.

UBS AG's governance framework over fair value measurement is described in Note 21b, and UBS AG provides a sensitivity analysis of the estimated effects arising from changing significant unobservable inputs in Level 3 financial instruments to reasonably possible alternative assumptions within Note 21g.

› **Refer to Note 21 for more information**

g. Allowances and provisions for expected credit losses

Expected credit losses (ECL) are recognized for financial assets measured at amortized cost, financial assets measured at FVOCI, fee and lease receivables, financial guarantees and loan commitments not measured at fair value. ECL are also recognized on the undrawn portion of revolving revocable credit lines, which include UBS AG's credit card limits and master credit facilities, and are referred to by UBS AG as "other credit lines." Though these other credit lines are revocable at any time, UBS AG is exposed to credit risk because the borrower has the ability to draw down funds before UBS AG can take credit risk mitigation actions.

Recognition of expected credit losses

ECL are recognized on the following basis:

- Stage 1 instruments: Maximum 12-month ECL are recognized from initial recognition, reflecting the portion of lifetime cash shortfalls that would result if a default occurs in the 12 months after the reporting date, weighted by the risk of a default occurring.
- Stage 2 instruments: Lifetime ECL are recognized if a significant increase in credit risk (SICR) is observed subsequent to the instrument's initial recognition, reflecting lifetime cash shortfalls that would result from all possible default events over the expected life of a financial instrument, weighted by the risk of a default occurring. When an SICR is no longer observed, the instrument will move back to stage 1.
- Stage 3 instruments: Lifetime ECL are always recognized for credit-impaired financial instruments, as determined by the occurrence of one or more loss events, by estimating expected cash flows based on a chosen recovery strategy. Credit-impaired exposures may include positions for which no allowance has been recognized, for example because they are expected to be fully recoverable through collateral held.
- Changes in lifetime ECL since initial recognition are also recognized for assets that are purchased or originated credit-impaired (POCI). POCI financial instruments include those that are purchased at a deep discount or newly originated with a defaulted counterparty; they remain a separate category until derecognition.

All or part of a financial asset is written off if it is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against related allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are generally credited to *Credit loss (expense) / release*.

ECL are recognized in the income statement in *Credit loss (expense) / release*. A corresponding ECL allowance is reported as a decrease in the carrying amount of financial assets measured at amortized cost on the balance sheet. For financial assets that are FVOCI, the carrying amount is not reduced, but an accumulated amount is recognized in *Other comprehensive income*. For off-balance sheet financial instruments and other credit lines, provisions for ECL are presented in *Provisions.*

Default and credit impairment

UBS AG applies a single definition of default for credit risk management purposes, regulatory reporting and ECL, with a counterparty classified as defaulted based on quantitative and qualitative criteria.

› **Refer to "Credit policies for distressed assets" in the "Risk management and control" section of this report for more information**

Measurement of expected credit losses

IFRS 9 ECL reflect an unbiased, probability-weighted estimate based on loss expectations resulting from default events. The method used to calculate ECL applies the following principal factors: probability of default (PD), loss given default (LGD) and exposure at default (EAD). Parameters are generally determined on an individual financial asset level. Based on the materiality of the portfolio, for credit card exposures and personal account overdrafts in Switzerland, a portfolio approach is applied that derives an average PD and LGD for the entire portfolio. PDs and LGDs used in the ECL calculation are point-in-time (PIT)-based for key portfolios and consider both current conditions and expected cyclical changes. For material portfolios, PDs and LGDs are determined for different scenarios, whereas EAD projections are treated as scenario independent.

For the purpose of determining the ECL-relevant parameters, UBS AG leverages its Pillar 1 internal ratings-based (IRB) models that are also used in determining expected loss (EL) and risk-weighted assets under the Basel III framework and Pillar 2 stress loss models. Adjustments have been made to these models and IFRS 9-related models have been developed that consider the complexity, structure and risk profile of relevant portfolios and take account of the fact that PDs and LGDs used in the ECL calculation are PIT-based, as opposed to the corresponding Basel III through-the-cycle (TTC) parameters. All models that are relevant for measuring expected credit losses are subject to UBS's model validation and oversight processes.

Probability of default: PD represents the likelihood of a default over a specified time period. A 12-month PD represents the likelihood of default determined for the next 12 months and a lifetime PD represents the probability of default over the remaining lifetime of the instrument. PIT PDs are derived from TTC PDs and scenario forecasts. The modeling is region-, industry- and client segment-specific and considers both macroeconomic scenario dependencies and client-idiosyncratic information.

Exposure at default: EAD represents an estimate of the exposure to credit risk at the time of a potential default occurring, considering expected repayments, interest payments and accruals, discounted at the EIR. Future drawdowns on facilities are considered through a credit conversion factor (CCF) that is reflective of historical drawdown and default patterns and the characteristics of the respective portfolios.

Loss given default: LGD represents an estimate of the loss at the time of a potential default occurring, taking into account expected future cash flows from collateral and other credit enhancements, or expected payouts from bankruptcy proceedings for unsecured claims and, where applicable, time to realization of collateral and the seniority of claims. The LGD is commonly expressed as a percentage of the EAD.

Estimation of expected credit losses

Number of scenarios and estimation of scenario weights

The determination of the probability-weighted ECL requires evaluating a range of diverse and relevant future economic conditions, especially with a view to modeling the non-linear effect of assumptions about macroeconomic factors on the estimate.

To accommodate this requirement, UBS AG uses different economic scenarios in the ECL calculation. Each scenario is represented by a specific scenario narrative, which is relevant considering the exposure of key portfolios to economic risks, and for which a set of consistent macroeconomic variables is determined. An econometric model is used to provide an input into the scenario weight assessment process giving a first indication of the probability that the GDP forecast used for each scenario would materialize, if historically observed deviations of GDP growth from trend growth were representative. As such historical analyses of GDP development do not include an assessment of the underlying economic or political causes, management positions the model output into the context of current conditions and future expectations and applies material judgment in determining the final scenario weights.

The determined weights constitute the probabilities that the respective set of macroeconomic conditions will occur and not that the chosen particular narratives with the related macroeconomic variables will materialize.

Macroeconomic and other factors

The range of macroeconomic, market and other factors that is modeled as part of the scenario determination is wide, and historical information is used to support the identification of the key factors. As the forecast horizon increases, the availability of information decreases, requiring an increase in judgment. For cycle-sensitive PD and LGD determination purposes, UBS AG projects the relevant economic factors for a period of three years before reverting, over a specified period, to a cycle-neutral PD and LGD for longer-term projections.

Factors relevant for ECL calculation vary by type of exposure. Regional and client-segment characteristics are generally taken into account, with specific focus on Switzerland and the US, considering UBS AG's key ECL-relevant portfolios.

For UBS AG, the following forward-looking macroeconomic variables represent the most relevant factors for ECL calculation:
- GDP growth rates, given their significant effect on borrowers' performance;
- unemployment rates, given their significant effect on private clients' ability to meet contractual obligations;
- house price indices, given their significant effect on mortgage collateral valuations;
- interest rates, given their significant effect on counterparties' abilities to service debt;
- consumer price indices, given their overall relevance for companies' performance, private clients' purchasing power and economic stability; and
- equity indices, given that they are an important factor in our corporate rating tools.

Scenario generation, review process and governance

A team of economists, who are part of Group Risk Control, develop the forward-looking macroeconomic assumptions with involvement from a broad range of experts.

The scenarios, their weight and the key macroeconomic and other factors are subject to a critical assessment by the Scenario and Operating Committees, which include senior management from Group Risk and Group Finance. Important aspects for the review include whether there may be particular credit risk concerns that may not be capable of being addressed systematically and require post-model adjustments for stage allocation and ECL allowance.

The Group Model Governance Board, as the highest authority under UBS AG's model governance framework, ratifies the decisions taken by the Operating Committee.

› **Refer to Note 20 for more information**

ECL measurement period

The period for which lifetime ECL are determined is based on the maximum contractual period that UBS AG is exposed to credit risk, taking into account contractual extension, termination and prepayment options. For irrevocable loan commitments and financial guarantee contracts, the measurement period represents the maximum contractual period for which UBS AG has an obligation to extend credit.

Note 1 Summary of significant accounting policies (continued)

Additionally, some financial instruments include both an on-demand loan and a revocable undrawn commitment, where the contractual cancelation right does not limit UBS AG's exposure to credit risk to the contractual notice period, as the client has the ability to draw down funds before UBS AG can take risk-mitigating actions. In such cases, UBS AG is required to estimate the period over which it is exposed to credit risk. This applies to UBS AG's credit card limits, which do not have a defined contractual maturity date, are callable on demand and where the drawn and undrawn components are managed as one exposure. The exposure arising from UBS AG's credit card limits is not significant and is managed at a portfolio level, with credit actions triggered when balances are past due. An ECL measurement period of seven years is applied for credit card limits, capped at 12 months for stage 1 balances, as a proxy for the period that UBS AG is exposed to credit risk.

Customary master credit agreements in the Swiss corporate market also include on-demand loans and revocable undrawn commitments. For smaller commercial facilities, a risk-based monitoring (RbM) approach is in place that highlights negative trends as risk events, at an individual facility level, based on a combination of continuously updated risk indicators. The risk events trigger additional credit reviews by a risk officer, enabling informed credit decisions to be taken. Larger corporate facilities are not subject to RbM, but are reviewed at least annually through a formal credit review. UBS AG has assessed these credit risk management practices and considers both the RbM approach and formal credit reviews as substantive credit reviews resulting in a re-origination of the given facility. Following this, a 12-month measurement period from the reporting date is used for both types of facilities as an appropriate proxy of the period over which UBS AG is exposed to credit risk, with 12 months also used as a look-back period for assessing SICR, always from the respective reporting date.

Significant increase in credit risk

Financial instruments subject to ECL are monitored on an ongoing basis. To determine whether the recognition of a maximum 12-month ECL continues to be appropriate, an assessment is made as to whether an SICR has occurred since initial recognition of the financial instrument, applying both quantitative and qualitative factors.

Primarily, UBS AG assesses changes in an instrument's risk of default on a quantitative basis by comparing the annualized forward-looking and scenario-weighted lifetime PD of an instrument determined at two different dates:

– at the reporting date; and
– at inception of the instrument.

If, based on UBS AG's quantitative modeling, an increase exceeds a set threshold, an SICR is deemed to have occurred and the instrument is transferred to stage 2 with lifetime ECL recognized.

The threshold applied varies depending on the original credit quality of the borrower, with a higher SICR threshold set for those instruments with a low PD at inception. The SICR assessment based on PD changes is made at an individual financial asset level. A high-level overview of the SICR trigger, which is a multiple of the annualized remaining lifetime PIT PD expressed in rating downgrades, is provided in the "SICR thresholds" table below. The actual SICR thresholds applied are defined on a more granular level by interpolating between the values shown in the table below.

SICR thresholds

Internal rating at origination of the instrument	Rating downgrades / SICR trigger
0–3	3
4–8	2
9–13	1

› **Refer to the "Risk management and control" section of this report for more details about UBS AG's internal grading system**

Irrespective of the SICR assessment based on default probabilities, credit risk is generally deemed to have significantly increased for an instrument if the contractual payments are more than 30 days past due. For certain less material portfolios, specifically the Swiss credit card portfolio, the 30-day past due criterion is used as the primary indicator of an SICR. Where instruments are transferred to stage 2 due to the 30-day past due criterion, a minimum period of six months is applied before a transfer back to stage 1 can be triggered. For instruments in Personal & Corporate Banking and Global Wealth Management Region Switzerland that are between 90 and 180 days past due but have not been reclassified to stage 3, a one-year period is applied before a transfer back to stage 1 can be triggered.

Additionally, based on individual counterparty-specific indicators, external market indicators of credit risk or general economic conditions, counterparties may be moved to a watch list, which is used as a secondary qualitative indicator for an SICR. Exception management is further applied, allowing for individual and collective adjustments on exposures sharing the same credit risk characteristics to take account of specific situations that are not otherwise fully reflected.

In general, the overall SICR determination process does not apply to Lombard loans, securities financing transactions and certain other asset-based lending transactions, because of the risk management practices adopted, including daily monitoring processes with strict margining. If margin calls are not satisfied, a position is closed out and classified as a stage 3 position. In exceptional cases, an individual adjustment and a transfer into stage 2 may be made to take account of specific facts.

Credit risk officers are responsible for the identification of an SICR, which for accounting purposes is in some respects different from internal credit risk management processes. This difference mainly arises because ECL accounting requirements are instrument-specific, such that a borrower can have multiple exposures allocated to different stages, and maturing loans in stage 2 will migrate to stage 1 upon renewal irrespective of the actual credit risk at that time. Under a risk-based approach, a holistic counterparty credit assessment and the absolute level of risk at any given date will determine what risk-mitigating actions may be warranted.

› **Refer to the "Risk management and control" section of this report for more information**

Critical accounting estimates and judgments

The calculation of ECL requires management to apply significant judgment and make estimates and assumptions that can result in significant changes to the timing and amount of ECL recognized.

Determination of a significant increase in credit risk
IFRS 9 does not include a definition of what constitutes an SICR, with UBS AG's assessment considering qualitative and quantitative criteria. An IFRS 9 Operating Committee has been established to review and challenge the SICR results.

Scenarios, scenario weights and macroeconomic variables
ECL reflect an unbiased and probability-weighted amount, which UBS AG determines by evaluating a range of possible outcomes. Management selects forward-looking scenarios which include relevant macroeconomic variables and management's assumptions around future economic conditions. An IFRS 9 Scenario Committee, in addition to the Operating Committee, is in place to derive, review and challenge the scenario selection and weights as well as to determine whether any additional post-model adjustments are required that may significantly affect ECL.

ECL measurement period
Lifetime ECL are generally determined based upon the contractual maturity of the transaction, which significantly affects ECL. For credit card limits and Swiss callable master credit facilities, judgment is required, as UBS AG must determine the period over which it is exposed to credit risk. A seven-year period is applied for credit card limits, capped at 12 months for stage 1 positions, and a 12-month period applied for master credit facilities.

Modeling and post-model adjustments
A number of complex models have been developed or modified to calculate ECL, with additional post-model adjustments required which may significantly affect ECL. The models are governed by UBS AG's model validation controls and approved by the Group Model Governance Board (the GMGB). The post-model adjustments are approved by the IFRS 9 Operating Committee and endorsed by the GMGB.

UBS AG provides a sensitivity analysis covering key macroeconomic variables, scenario weights and SICR trigger points on ECL measurement within Note 20f.

› **Refer to Note 20 for more information**

h. Restructured and modified financial assets

When payment default is expected or where default has already occurred, UBS AG may grant concessions to borrowers in financial difficulties that it would not consider in the normal course of its business, such as preferential interest rates, extension of maturity, modifying the schedule of repayments, debt / equity swap, subordination, etc. When a concession or forbearance measure is granted, each case is considered individually and the exposure is generally classified as being in default. Forbearance classification will remain until the loan is collected or written off, non-preferential conditions superseding preferential conditions are granted or until the counterparty has recovered and the preferential conditions no longer exceed UBS AG's risk tolerance.

Modifications result in an alteration of future contractual cash flows and can occur within UBS AG's normal risk tolerance or as part of a credit restructuring where a counterparty is in financial difficulties.

A restructuring or modification of a financial asset could lead to a substantial change in the terms and conditions, resulting in the original financial asset being derecognized and a new financial asset being recognized. Where the modification does not result in a derecognition, any difference between the modified contractual cash flows discounted at the original EIR and the existing gross carrying amount of the given financial asset is recognized in the income statement as a modification gain or loss.

i. Offsetting

UBS AG nets financial assets and liabilities on its balance sheet if (i) it has the unconditional and legally enforceable right to set off the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and its counterparties, and (ii) it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Netted positions include, for example, certain derivatives and repurchase and reverse repurchase transactions with various counterparties, exchanges and clearing houses.

In assessing whether UBS AG intends to either settle on a net basis, or to realize the asset and settle the liability simultaneously, emphasis is placed on the effectiveness of operational settlement mechanics in eliminating substantially all credit and liquidity exposure between the counterparties. This condition precludes offsetting on the balance sheet for substantial amounts of UBS AG's financial assets and liabilities, even though they may be subject to enforceable netting arrangements. For OTC derivative contracts, balance sheet offsetting is generally only permitted in circumstances in which a market settlement mechanism exists via an exchange or central clearing counterparty that effectively accomplishes net settlement through a daily exchange of collateral via a cash margining process. For repurchase arrangements and securities financing transactions, balance sheet offsetting may be permitted only to the extent that the settlement mechanism eliminates, or results in insignificant, credit and liquidity risk, and processes the receivables and payables in a single settlement process or cycle.

› **Refer to Note 22 for more information**

Note 1 Summary of significant accounting policies (continued)

j. Hedge accounting
UBS AG applies hedge accounting requirements of IFRS 9, unless stated otherwise below, where the criteria for documentation and hedge effectiveness are met. If a hedge relationship no longer meets the criteria for hedge accounting, hedge accounting is discontinued. Voluntary discontinuation of hedge accounting is permitted under IAS 39 but not under IFRS 9.

Fair value hedges of interest rate risk related to debt instruments
The fair value change of the hedged item attributable to a hedged risk is reflected as an adjustment to the carrying amount of the hedged item, and recognized in the income statement along with the change in the fair value of the hedging instrument.

Fair value hedges of portfolio interest rate risk related to loans designated under IAS 39
The fair value change of the hedged item attributable to a hedged risk is reflected within *Other financial assets measured at amortized cost* or *Other financial liabilities measured at amortized cost* and recognized in the income statement along with the change in the fair value of the hedging instrument.

Fair value hedges of foreign exchange risk related to debt instruments
The fair value change of the hedged item attributable to a hedged risk is reflected in the measurement of the hedged item and recognized in the income statement along with the change in the fair value of the hedging instrument. The foreign currency basis spread of cross-currency swaps designated as hedging derivatives is excluded from the designation and accounted for as a cost of hedging with amounts deferred in *Other comprehensive income* within *Equity*. These amounts are released to the income statement over the term of the hedged item.

Discontinuation of fair value hedges
Discontinuations for reasons other than derecognition of the hedged item result in an adjustment to the carrying amount, which is amortized to the income statement over the remaining life of the hedged item using the effective interest method. If the hedged item is derecognized, the unamortized fair value adjustment or deferred cost of hedging amount is recognized immediately in the income statement as part of any derecognition gain or loss.

Cash flow hedges of forecast transactions
Fair value gains or losses associated with the effective portion of derivatives designated as cash flow hedges for cash flow repricing risk are recognized initially in *Other comprehensive income* within *Equity* and reclassified to the income statement in the periods when the hedged forecast cash flows affect profit or loss, including discontinued hedges for which forecast cash flows are expected to occur. If the forecast transactions are no longer expected to occur, the deferred gains or losses are immediately reclassified to the income statement.

Hedges of net investments in foreign operations
Gains or losses on the hedging instrument relating to the effective portion of a hedge are recognized directly in *Other comprehensive income* within *Equity,* while any gains or losses relating to the ineffective and / or undesignated portion (for example, the interest element of a forward contract) are recognized in the income statement. Upon disposal or partial disposal of the foreign operation, the cumulative value of any such gains or losses recognized in *Equity* associated with the entity is reclassified to *Other income*.

Interest Rate Benchmark Reform
UBS AG can continue hedge accounting during the period of uncertainty before existing interest rate benchmarks are replaced with alternative risk-free interest rates. During this period, UBS AG can assume that the current benchmark rates will continue to exist, such that forecast transactions are considered highly probable and hedge relationships remain, with little or no consequential impact on the financial statements. Upon replacement of existing interest rate benchmarks by alternative risk-free interest rates expected in 2021 and beyond, UBS AG will apply the requirements of *Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (Interest Rate Benchmark Reform – Phase 2).*

› **Refer to Note 1b and Note 1c for more information**

3) Fee and commission income and expenses

UBS AG earns fee income from the diverse range of services it provides to its clients. Fee income can be divided into two broad categories: fees earned from services that are provided over a certain period of time, such as management of clients' assets, custody services and certain advisory services; and fees earned from point-in-time services, such as underwriting fees, deal-contingent merger and acquisitions (M&A) fees and brokerage fees (e.g., securities and derivatives execution and clearing). UBS AG recognizes fees earned on transaction-based arrangements when it has fully provided the service to the customer. Where the contract requires services to be provided over time, income is recognized on a systematic basis over the life of the agreement.

Consideration received is allocated to the separately identifiable performance obligations in a contract. Owing to the nature of UBS AG's business, contracts that include multiple performance obligations are typically those that are considered to include a series of similar performance obligations fulfilled over time with the same pattern of transfer to the client, e.g., management of client assets and custodial services. As a consequence, UBS AG is not required to apply significant judgment in allocating the consideration received across the various performance obligations.

Point-in-time services are generally for a fixed price or dependent on deal size, e.g., a fixed number of basis points of trade size, where the amount of revenue is known when the performance obligation is met.

Fixed period-in-time fees are recognized on a straight-line basis over the performance period. Custodial and asset management fees can be variable through reference to the size of the customer portfolio and are generally billed on a monthly or quarterly basis once the customer's portfolio size is known or known with near certainty. This is generally prior to UBS AG's reporting dates and such fees are also recognized ratably over the performance period.

UBS AG does not recognize performance fees related to management of clients' assets or fees related to contingencies beyond UBS AG's control until such uncertainties are resolved.

UBS AG's fees are generally earned from short-term contracts, with the majority either collected immediately or via regular monthly or quarterly amounts deducted directly from clients' accounts. As a result, UBS AG's contracts do not include a financing component or result in the recognition of significant receivables or prepayment assets. Furthermore, due to the short-term nature of such contracts, UBS AG has not capitalized any material costs to obtain or fulfill a contract or generated any significant contract assets or liabilities.

UBS AG acts as principal in the majority of contracts with customers, with the exception of derivatives execution and clearing services, resulting in fee and commission income and expense being presented gross on the face of the income statement. For derivatives execution and clearing services, UBS AG only records its specific fees in the income statement, with fees payable to other parties not recognized as an expense but instead directly offset against the associated income collected from the given client.

UBS AG presents expenses primarily in line with their nature in the income statement, differentiating between expenses that are directly attributable to the satisfaction of specific performance obligations associated with the generation of revenues, which are presented within *Total operating income* as *Fee and commission expense*, and those that are related to personnel, general and administrative expenses, which are presented within *Total operating expenses*.

› **Refer to Note 4 for more information, including the disaggregation of revenues**

4) Cash and cash equivalents

For the purpose of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of three months or less, including cash, money market paper and balances at central and other banks.

5) Share-based and other deferred compensation plans

UBS AG recognizes expenses for deferred compensation awards over the period that the employee is required to provide service to become entitled to the award. Where the service period is shortened, for example in the case of employees affected by restructuring programs or mutually agreed termination provisions, recognition of expense is accelerated to the termination date. Where no future service is required, such as for employees who are eligible for retirement or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized over the performance year or, in the case of off-cycle awards, immediately on the grant date.

Share-based compensation plans

UBS Group AG is the grantor of and maintains the obligation to settle share-based compensation plans that are awarded to employees of UBS AG. As a consequence, UBS AG classifies the awards of UBS Group AG shares as equity-settled share-based payment transactions. UBS AG recognizes the fair value of awards granted to its employees by reference to the fair value of UBS Group AG's equity instruments on the date of grant, taking into account the terms and conditions inherent in the award, including, where relevant, dividend rights, transfer restrictions in effect beyond the vesting date, market conditions, and non-vesting condition. For equity-settled awards, the fair value is not remeasured unless the terms of the award are modified such that there is an incremental increase in value. No adjustments are made for modifications that result in a decrease in value. Any increase in fair value resulting from a modification is recognized as compensation expense, either over the remaining service period or, for vested awards, immediately. Expenses are recognized, on a per-tranche basis, over the service period based on an estimate of the number of instruments expected to vest and are adjusted to reflect the actual outcomes of service or performance conditions.

For equity-settled awards, forfeiture events resulting from a breach of a non-vesting condition (i.e., one that does not relate to a service or performance condition) do not result in any adjustment to the share-based compensation expense.

For cash-settled share-based awards, fair value is remeasured at each reporting date, so that the cumulative expense recognized equals the cash distributed.

Other deferred compensation plans

Compensation expense for other deferred compensation plans is recognized on a per-tranche or straight-line basis, depending on the nature of the plan. The amount recognized is measured based on the present value of the amount expected to be paid under the plan and is remeasured at each reporting date, so that the cumulative expense recognized equals the cash or the fair value of respective financial instruments distributed.

› **Refer to Note 27 for more information**

6) Post-employment benefit plans

UBS AG sponsors various post-employment benefit plans for its employees worldwide, which include defined benefit and defined contribution pension plans, and other post-employment benefits, such as medical and life insurance benefits that are payable after the completion of employment.

› **Refer to Note 26 for more information**

Note 1 Summary of significant accounting policies (continued)

Defined benefit plans

Defined benefit plans specify an amount of benefit that an employee will receive, which usually depends on one or more factors, such as age, years of service and compensation. The defined benefit liability recognized in the balance sheet is the present value of the defined benefit obligation less the fair value of the plan's assets at the balance sheet date, with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan's assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net asset is limited to the present value of economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan. UBS AG applies the projected unit credit method to determine the present value of its defined benefit obligations, the related current service cost and, where applicable, the past service cost. These amounts, which take into account the specific features of each plan, including risk sharing between employee and employer, are calculated periodically by independent qualified actuaries.

Critical accounting estimates and judgments

The net defined benefit liability or asset at the balance sheet date and the related personnel expense depend on the expected future benefits to be provided, determined using a number of economic and demographic assumptions. A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit liability or asset and pension expense recognized. The most significant assumptions include life expectancy, the discount rate, expected salary increases, pension increases, and interest credits on retirement savings account balances. Sensitivity analysis for reasonable possible movements in each significant assumption for UBS AG's post-employment obligations is provided within Note 26.

› **Refer to Note 26 for more information**

Defined contribution plans

A defined contribution plan pays fixed contributions into a separate entity from which post-employment and other benefits are paid. UBS AG has no legal or constructive obligation to pay further amounts if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. Compensation expense is recognized when the employees have rendered services in exchange for contributions. This is generally in the year of contribution. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in future payments is available.

7) Income taxes

UBS AG is subject to the income tax laws of Switzerland and those of the non-Swiss jurisdictions in which UBS AG has business operations.

UBS AG's provision for income taxes is composed of current and deferred taxes. Current income taxes represent taxes to be paid or refunded for the current period or previous periods.

Deferred taxes are recognized for temporary differences between the carrying amounts and tax bases of assets and liabilities that will result in taxable or deductible amounts in future periods and are measured using the applicable tax rates and laws that have been enacted or substantively enacted by the end of the reporting period and that will be in effect when such differences are expected to reverse.

Deferred tax assets arise from a variety of sources, the most significant being: (i) tax losses that can be carried forward to be used against profits in future years; and (ii) temporary differences that will result in deductions against profits in future years. Deferred tax assets are recognized only to the extent it is probable that sufficient taxable profits will be available against which these differences can be used. When an entity or tax group has a history of recent losses, deferred tax assets are only recognized to the extent there are sufficient taxable temporary differences or there is convincing other evidence that sufficient taxable profit will be available against which the unused tax losses can be utilized.

Deferred tax liabilities are recognized for temporary differences between the carrying amounts of assets and liabilities in the balance sheet that reflect the expectation that certain items will give rise to taxable income in future periods.

Deferred and current tax assets and liabilities are offset when: (i) they arise in the same tax reporting group; (ii) they relate to the same tax authority; (iii) the legal right to offset exists; and (iv) they are intended to be settled net or realized simultaneously.

Current and deferred taxes are recognized as income tax benefit or expense in the income statement, except for current and deferred taxes recognized in relation to: (i) the acquisition of a subsidiary (for which such amounts would affect the amount of goodwill arising from the acquisition); (ii) gains and losses on the sale of treasury shares (for which the tax effects are recognized directly in *Equity*); (iii) unrealized gains or losses on financial instruments that are classified at FVOCI; (iv) changes in fair value of derivative instruments designated as cash flow hedges; (v) remeasurements of defined benefit plans; or (vi) certain foreign currency translations of foreign operations. Amounts relating to points (iii) through (vi) are recognized in *Other comprehensive income* within *Equity*.

UBS AG reflects the potential effect of uncertain tax positions for which acceptance by the relevant tax authority is not considered probable by adjusting current or deferred taxes, as applicable, using either the most likely amount or expected value methods, depending on which method is deemed a better predictor of the basis on which and extent to which the uncertainty will be resolved.

Critical accounting estimates and judgments

Tax laws are complex, and judgment and interpretations about the application of such laws are required when accounting for income taxes. UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its deferred tax assets, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing deferred tax assets. Estimating future profitability and business plan forecasts is inherently subjective and is particularly sensitive to future economic, market and other conditions.

Forecasts are reviewed annually, but adjustments may be made at other times, if required. If recent losses have been incurred, convincing evidence is required to prove there is sufficient future profitability given the value of UBS AG's deferred tax assets may be affected, with effects primarily recognized through the income statement.

In addition, judgment is required to assess the expected value of uncertain tax positions and the related probabilities, including interpretation of tax laws, the resolution of any income tax-related appeals and litigation.

› **Refer to Note 8 for more information**

8) Investments in associates

Interests in entities where UBS AG has significant influence over the financial and operating policies of the entity but does not have control are classified as investments in associates and accounted for under the equity method of accounting. Typically, UBS AG has significant influence when it holds or has the ability to hold between 20% and 50% of a company's voting rights. Investments in associates are initially recognized at cost, and the carrying amount is increased or decreased after the date of acquisition to recognize UBS AG's share of the investee's comprehensive income and any impairment losses.

The net investment in an associate is impaired if there is objective evidence of a loss event and the carrying amount of the investment in the associate exceeds its recoverable amount.

› **Refer to Note 28 for more information**

9) Property, equipment and software

Property, equipment and software includes own-used properties, leasehold improvements, information technology hardware, externally purchased and internally generated software, as well as communications and other similar equipment. Property, equipment and software is measured at cost less accumulated depreciation and impairment losses and is reviewed at each reporting date for indication for impairment. Software development costs are capitalized only when the costs can be measured reliably and it is probable that future economic benefits will arise. Depreciation of property, equipment and software begins when they are available for use (i.e., when they are in the location and condition necessary for them to be capable of operating in the manner intended by management). Depreciation is calculated on a straight-line basis over an asset's estimated useful life. The estimated useful economic lives of UBS AG's property, equipment and software are:

- properties, excluding land: ≤ 67 years
- IT hardware and communications equipment: ≤ 7 years
- other machines and equipment: ≤ 10 years
- software: ≤ 10 years
- leased properties and leasehold improvements: the shorter of the lease term or the economic life of asset (typically ≤ 20 years).

Property, equipment and software are generally tested for impairment at the appropriate cash-generating unit (CGU) level, alongside goodwill and intangible assets as described in item 10 in this Note. An impairment charge is, however, only recognized for such assets if both the asset's fair value less costs of disposal and value in use (if determinable) are below its carrying amount. The fair values of such assets, other than property that has a market price, are generally determined using a replacement cost approach that reflects the amount that would be currently required by a market participant to replace the service capacity of the asset. If such assets are no longer used, they are tested individually for impairment.

› **Refer to Note 12 for more information**

10) Goodwill and intangible assets

Goodwill represents the future economic benefits arising from other assets acquired in a business combination that are not individually identified and recognized. Goodwill is not amortized, but is assessed for impairment at the end of each reporting period, or when indicators of impairment exist. UBS AG tests goodwill for impairment annually, irrespective of whether there is any indication of impairment.

The impairment test is performed for each CGU to which goodwill is allocated by comparing the recoverable amount, based on its value in use, to the carrying amount of the respective CGU. An impairment charge is recognized in the income statement if the carrying amount exceeds the recoverable amount.

Intangible assets include separately identifiable intangible items arising from business combinations and certain purchased trademarks and similar items. Intangible assets are recognized at cost. The cost of an intangible asset acquired in a business combination is its fair value at the date of acquisition. Intangible assets with a finite useful life are amortized using the straight-line method over their estimated useful life, generally not exceeding 20 years. In rare cases, intangible assets can have an indefinite useful life, in which case they are not amortized. At each reporting date, intangible assets are reviewed for indications of impairment. If such indications exist, the intangible assets are analyzed to assess whether their carrying amount is fully recoverable. An impairment loss is recognized if the carrying amount exceeds the recoverable amount.

Note 1 Summary of significant accounting policies (continued)

Critical accounting estimates and judgments

UBS AG's methodology for goodwill impairment testing is based on a model that is most sensitive to the following key assumptions: (i) forecasts of earnings available to shareholders in years one to three; (ii) changes in the discount rates; and (iii) changes in the long-term growth rate.

Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the BoD. The discount rates and growth rates are determined using external information, as well as considering inputs from both internal and external analysts and the view of management.

The key assumptions used to determine the recoverable amounts of each cash-generating unit are tested for sensitivity by applying reasonably possible changes to those assumptions.

› **Refer to Notes 2 and 13 for more information**

11) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are generally recognized in accordance with IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, when: (i) UBS AG has a present obligation as a result of a past event; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) a reliable estimate of the amount of the obligation can be made.

The majority of UBS AG's provisions relate to litigation, regulatory and similar matters, restructuring, and employee benefits. Restructuring provisions are generally recognized as a consequence of management agreeing to materially change the scope of the business or the manner in which it is conducted, including changes in management structure. Provisions for employee benefits relate mainly to service anniversaries and sabbatical leave, and are recognized in accordance with measurement principles set out in item 6 in this Note. In addition, UBS AG presents expected credit loss allowances within *Provisions* if they relate to a loan commitment, financial guarantee contract or a revolving revocable credit line.

IAS 37 provisions are measured considering the best estimate of the consideration required to settle the present obligation at the balance sheet date.

When conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote. Contingent liabilities are also disclosed for possible obligations that arise from past events the existence of which will be confirmed only by uncertain future events not wholly within the control of UBS AG.

Critical accounting estimates and judgments

Recognition of provisions often involves significant judgment in assessing the existence of an obligation that results from past events and in estimating the probability, timing and amount of any outflows of resources. This is particularly the case for litigation, regulatory and similar matters, which, due to their nature, are subject to many uncertainties, making their outcome difficult to predict.

The amount of any provision recognized is sensitive to the assumptions used and there could be a wide range of possible outcomes for any particular matter.

Management regularly reviews all the available information regarding such matters, including legal advice, to assess whether the recognition criteria for provisions have been satisfied and to determine the timing and amount of any potential outflows.

› **Refer to Note 18 for more information**

12) Foreign currency translation

Transactions denominated in a foreign currency are translated into the functional currency of the reporting entity at the spot exchange rate on the date of the transaction. At the balance sheet date, all monetary assets, including those at FVOCI, and monetary liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Translation differences are reported in *Other net income from financial instruments measured at fair value through profit or loss*.

Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction.

Upon consolidation, assets and liabilities of foreign operations are translated into US dollars, UBS AG's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items and other comprehensive income are translated at the average rate for the period. The resulting foreign currency translation differences are recognized in *Equity* and reclassified to the income statement when UBS AG disposes of, partially or in its entirety, the foreign operation and UBS AG no longer controls the foreign operation.

Share capital issued, share premium and treasury shares held are translated at the historic average rate, with the difference between the historic average rate and the spot rate realized upon repayment of share capital or disposal of treasury shares reported as *Share premium*. Cumulative amounts recognized in OCI in respect of cash flow hedges and financial assets measured at FVOCI are translated at the closing exchange rate as of the balance sheet dates, with any translation effects adjusted through *Retained earnings*.

› **Refer to Note 33 for more information**

13) Non-controlling interests

Non-controlling interests

If UBS AG has an obligation to purchase a non-controlling interest subject to option or forward arrangements, the amounts allocated to non-controlling interests are reduced and a liability equivalent to the exercise price of the option or forward is recognized, with any difference between these two amounts recorded in *Share premium*.

Net cash settlement contracts

Contracts involving UBS Group AG shares that require net cash settlement, or provide the counterparty or UBS AG with a settlement option that includes a choice of settling net in cash, are classified as derivatives held for trading.

14) Leasing

UBS AG predominantly enters into lease contracts, or contracts that include lease components, as a lessee of real estate, including offices, retail branches and sales offices, with a small number of IT hardware leases. UBS AG identifies non-lease components of a contract and accounts for them separately from lease components.

When UBS AG is a lessee in a lease arrangement, UBS AG recognizes a lease liability and corresponding right-of-use (RoU) asset at the commencement of the lease term when UBS AG acquires control of the physical use of the asset. Lease liabilities are presented within *Other financial liabilities measured at amortized cost* and RoU assets within *Property, equipment and software*. The lease liability is measured based on the present value of the lease payments over the lease term, discounted using UBS AG's unsecured borrowing rate, given that the rate implicit in a lease is generally not observable. Interest expense on the lease liability is presented within *Interest expense from financial instruments measured at amortized cost*. The RoU asset is recorded at an amount equal to the lease liability but is adjusted for rent prepayments, initial direct costs, any costs to refurbish the leased asset and / or lease incentives received. The RoU asset is depreciated over the shorter of the lease term or the useful life of the underlying asset, with the depreciation presented within *Depreciation and impairment of property, equipment and software*.

Lease payments generally include fixed and variable payments that depend on an index (such as an inflation index). When a lease contains an extension or termination option that UBS AG considers reasonably certain to be exercised, the expected rental payments or costs of termination are included within the lease payments used to generate the lease liability. UBS AG does not typically enter into leases with purchase options or residual value guarantees.

Where UBS AG acts as a lessor or sub-lessor under a finance lease, a receivable is recognized in *Other financial assets measured at amortized cost* at an amount equal to the present value of the aggregate of the lease payments plus any unguaranteed residual value that UBS AG expects to recover at the end of the lease term. Initial direct costs are also included in the initial measurement of the lease receivable. Lease payments received during the lease term are allocated as repayments of the outstanding receivable. Interest income reflects a constant periodic rate of return on UBS AG's net investment using the interest rate implicit in the lease (or, for sub-leases, the rate for the head lease). UBS AG reviews the estimated unguaranteed residual value annually, and if the estimated residual value to be realized is less than the amount assumed at lease inception, a loss is recognized for the expected shortfall. Where UBS AG acts as a lessor or sub-lessor in an operating lease, UBS AG recognizes the operating lease income on a straight-line basis over the lease term.

Lease receivables are subject to impairment requirements as set out in item 2g in this Note. ECL on lease receivables are determined following the general impairment model within IFRS 9, *Financial Instruments*, without utilizing the simplified approach of always measuring impairment at the amount of lifetime ECL.

Comparative policy | *Policy applicable prior to 1 January 2019*

Operating lease rentals payable were recognized as an expense on a straight-line basis over the lease term, which commenced with control of the physical use of the property. Lease incentives were treated as a reduction of rental expense and were recognized on a consistent basis over the lease term. Operating lease expenses of USD 533 million were presented within *General and administrative expenses* in 2018. As at the date of adoption of IFRS 16, UBS AG had USD 24 million of finance leases and accounted for them consistently with the policy applied from 1 January 2019 above. The adoption of IFRS 16 had no impact on retained earnings.

› **Refer to Note 12 and 30 for more information**

Note 1 Summary of significant accounting policies (continued)

b) Changes in accounting policies, comparability and other adjustments

New or amended accounting standards

Adoption of hedge accounting requirements of IFRS 9, Financial Instruments

Effective from 1 January 2020, UBS AG has prospectively adopted the hedge accounting requirements of IFRS 9, *Financial Instruments*, for all of its existing hedge accounting programs, except for fair value hedges of portfolio interest rate risk, which, as permitted under IFRS 9, continue to be accounted for under IAS 39, *Financial Instruments: Recognition and Measurement*.

The adoption of these requirements has not changed any of the hedge designations disclosed in the Annual Report 2019 with only minor amendments to hedge documentation and hedge effectiveness testing methodologies required to make them compliant with IFRS 9. The adoption had no financial effect on UBS AG's financial statements. However, starting on 1 January 2020, UBS AG began to designate cross-currency swaps as *Fair value hedges of foreign exchange risk related to debt instruments* and utilized the cost of hedging approach introduced by IFRS 9.

› **Refer to Note 1a item 2j for more information about UBS AG's hedge accounting policies under IFRS 9 and Note 25 for more information about Fair value hedges of foreign exchange risk related to debt instruments**

Other changes to financial reporting

Modification of deferred compensation awards

During 2020, UBS AG modified the terms of certain outstanding deferred compensation awards granted for performance years 2015 through 2019 by removing the requirement to provide future service for qualifying employees. These awards remain subject to forfeiture if certain non-vesting conditions are not satisfied. As a result, UBS AG recognized an expense of USD 342 million in the third quarter of 2020, of which USD 303 million was recorded within *Variable compensation – performance awards*, USD 23 million within *Social security* and USD 16 million within *Other personnel expenses*, with a corresponding increase of USD 342 million in liabilities. The full year effect was an expense of approximately USD 270 million, of which USD 240 million is disclosed within *Variable compensation – performance awards*, USD 20 million within *Social security* and USD 10 million within *Other personnel expenses,* with an increase of approximately USD 270 million in liabilities.

Outstanding deferred compensation awards granted to Group Executive Board members, those granted under the Long-Term Incentive Plan, as well as those granted to financial advisors in the US, were not affected by these changes.

Restatement of compensation-related liabilities

During 2020, UBS AG restated its balance sheet and statement of changes in equity as of 1 January 2018 to correct a USD 43 million liability understatement in connection with a legacy Global Wealth Management deferred compensation plan, with the effects presented in the table below. The restatement resulted from a correction of an actuarial calculation associated with compensation-related liabilities. The effects of the understatement were not material to prior-year financial statements; however, such effects would have been material to the quarterly reporting period in which the understatement was identified and therefore prior years were restated. The restatement had no effect on *Net profit / (loss)* for the current period or for any comparative periods.

	31.12.19			31.12.18			1.1.18		
USD million	As reported	Effect	Restated	As reported	Effect	Restated	As reported	Effect	Restated
Balance sheet assets									
Deferred tax assets	9,513	11	9,524	10,066	11	10,077	10,121	11	10,132
Total assets	**971,916**	**11**	**971,927**	**958,055**	**11**	**958,066**	**939,528**	**11**	**939,539**
Balance sheet liabilities									
Other non-financial liabilities	6,168	43	6,211	6,275	43	6,318	6,499	43	6,542
of which: Compensation-related liabilities	*4,296*	*43*	*4,339*	*4,645*	*43*	*4,688*	*5,036*	*43*	*5,079*
of which: financial advisor compensation plans	*1,459*	*43*	*1,502*	*1,454*	*43*	*1,497*		*Not disclosed*	
Total liabilities	**917,988**	**43**	**918,031**	**905,624**	**43**	**905,667**	**888,100**	**43**	**888,143**
Equity									
Retained earnings	23,451	(32)	23,419	23,317	(32)	23,285	21,646	(32)	21,614
Equity attributable to shareholders	**53,754**	**(32)**	**53,722**	**52,256**	**(32)**	**52,224**	**51,370**	**(32)**	**51,338**
Total equity	**53,928**	**(32)**	**53,896**	**52,432**	**(32)**	**52,400**	**51,429**	**(32)**	**51,397**
Total liabilities and equity	**971,916**	**11**	**971,927**	**958,055**	**11**	**958,066**	**939,528**	**11**	**939,539**

Segment reporting
Effective from 1 January 2020, UBS AG no longer discloses a detailed cost breakdown by financial statement line item within its segment reporting disclosures provided in Note 2. The modified approach of presenting operating expenses for each division aligns the reporting with the way that UBS AG manages its cost base. This change has no effect on the income statement, or on the net profit of any business division.

Presentation of interest income and expense from financial instruments measured at fair value through profit or loss
Effective from 1 January 2020, UBS AG presents interest income and interest expense from financial instruments measured at fair value through profit or loss on a net basis, in line with how UBS AG assesses and reports interest and in accordance with IFRS. This presentation change has no effect on *Net interest income* or on *Net profit / (loss) attributable to shareholders*. Prior periods have been aligned with this change in presentation. Further information about net interest income from financial instruments measured at fair value through profit or loss is provided in Note 3.

c) International Financial Reporting Standards and Interpretations to be adopted in 2021 and later and other changes

Amendments to IAS 39, IFRS 9 and IFRS 7 (*Interest Rate Benchmark Reform – Phase 2*)
In August 2020, the IASB issued *Interest Rate Benchmark Reform – Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16* addressing a number of issues in financial reporting areas that arise when IBOR rates are reformed or replaced.

The amendments provide a practical expedient which permits certain changes in the contractual cash flows of debt instruments attributable to the replacement of IBOR rates with alternative risk-free interest rates (RFRs) to be accounted for prospectively by updating the instrument's EIR.

In terms of hedge accounting, the amendments provide relief from discontinuing hedge relationships because of changes resulting from the replacement of IBOR rates and temporary relief from having to ensure that the designated RFR risk component is separately identifiable. Additionally, the amendments do not require remeasurement or immediate release to the income statement of the accumulated amounts resulting from IBOR hedges upon the change to RFRs.

Furthermore, the amendments introduce additional disclosure requirements covering any new risks arising from the reforms and how the transition to alternative benchmark rates is managed.

UBS AG will adopt these amendments on 1 January 2021 and does not expect a material effect on its financial statements.

› **Refer to Note 25 for more information**

IFRS 17, *Insurance Contracts*
In May 2017, the IASB issued IFRS 17, *Insurance Contracts*, which sets out the accounting requirements for contractual rights and obligations that arise from insurance contracts issued and reinsurance contracts held. IFRS 17 is effective from 1 January 2023. UBS AG is assessing the standard, but does not expect it to have a material effect on its financial statements.

Amendments to IAS 1, *Presentation of Financial Statements*, IFRS Practice Statement 2, *Making Materiality Judgements* and IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*
In February 2021, the IASB issued amendments to IAS 1, *Presentation of Financial Statements*, IFRS Practice Statement 2, *Making Materiality Judgements* and amendments to IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors* to help improve accounting policy disclosures and distinguish changes in accounting estimates from changes in accounting policies. These amendments are effective from 1 January 2023, with early application permitted. UBS AG is currently assessing the effect on its financial statements.

Annual Improvements to IFRS Standards 2018–2020 Cycle and narrow-scope amendments to IFRS 3, *Business Combinations*, and IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*
In May 2020, the IASB issued several narrow-scope amendments to a number of standards as well as *Annual Improvements to IFRS Standards 2018–2020 Cycle*. These minor amendments are effective from 1 January 2022. UBS AG is currently assessing the effect on its financial statements.

Note 2a Segment reporting

UBS AG's businesses are organized globally into four business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management and the Investment Bank. All four business divisions are supported by Group Functions and qualify as reportable segments for the purpose of segment reporting. Together with Group Functions, the four business divisions reflect the management structure of UBS AG:

- **Global Wealth Management** provides investment advice and solutions, as well as lending solutions, to private clients, in particular in the ultra high net worth and high net worth segments. The business is managed globally across the regions.
- **Personal & Corporate Banking** provides comprehensive financial products and services to private, corporate and institutional clients, operating across all banking markets in Switzerland.
- **Asset Management** is a large-scale and diversified global asset manager. It offers investment capabilities and styles across all major traditional and alternative asset classes, as well as advisory support to institutions, wholesale intermediaries and wealth management clients globally.
- The **Investment Bank** provides a range of services to institutional, corporate and wealth management clients globally, to help them raise capital, grow their businesses, invest and manage risks. Offerings include advisory services, capital markets, cash and derivatives trading across equities and fixed income and financing.
- **Group Functions** – formerly named Corporate Center, is made up of the following major areas: Group Services (which consists of Technology, Corporate Services, Human Resources, Operations, Finance, Legal, Risk Control, Research and Analytics, Compliance, Regulatory & Governance, Communications & Branding and UBS in Society), Group Treasury and Non-core and Legacy Portfolio.

Financial information about the four business divisions and Group Functions is presented separately in internal management reports.

UBS AG's internal accounting policies, which include management accounting policies and service level agreements, determine the revenues and expenses directly attributable to each reportable segment. Transactions between the reportable segments are carried out at internally agreed rates and are reflected in the operating results of the reportable segments. Revenue-sharing agreements are used to allocate external client revenues to reportable segments where several reportable segments are involved in the value creation chain. Total intersegment revenues for UBS AG are immaterial, as the majority of the revenues are allocated across the segments by means of revenue-sharing agreements. Interest income earned from managing UBS AG's consolidated equity is allocated to the reportable segments based on average attributed equity and currency composition. Assets and liabilities of the reportable segments are funded through and invested with Group Functions, and the net interest margin is reflected in the results of each reportable segment.

Segment assets are based on a third-party view and do not include intercompany balances. This view is in line with internal reporting to the GEB. If one operating segment is involved in an external transaction together with another operating segment or Group Functions, additional criteria are considered to determine the segment that will report the associated assets. This will include a consideration of which segment's business needs are being addressed by the transaction and which segment is providing the funding and / or resources. Allocation of liabilities follows the same principles.

Non-current assets disclosed for segment reporting purposes represent assets that are expected to be recovered more than 12 months after the reporting date, excluding financial instruments, deferred tax assets and post-employment benefits.

Effective from 1 January 2020, UBS AG only reports total operating expenses for each business division and no longer discloses a detailed cost breakdown by financial statement line item. This change streamlines reporting, ensures alignment with how UBS AG manages its cost base and has no effect on the income statement, or on the net profit of any business division.

Note 2a Segment reporting (continued)

Segment reporting

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	UBS AG
For the year ended 31 December 2020						
Net interest income	4,027	2,049	(17)	284	(555)	5,788
Non-interest income[1]	13,107	1,859	2,993	9,224	504	27,686
Income	17,134	3,908	2,975	9,508	(52)	33,474
Credit loss (expense) / release	(88)	(257)	(2)	(305)	(42)	(695)
Total operating income	17,046	3,651	2,974	9,203	(94)	32,780
Total operating expenses	13,080	2,390	1,520	6,762	1,329	25,081
Operating profit / (loss) before tax	**3,965**	**1,261**	**1,454**	**2,441**	**(1,423)**	**7,699**
Tax expense / (benefit)						1,488
Net profit / (loss)						**6,211**
Additional information						
Total assets	367,714	231,710	28,266	369,778	127,858	1,125,327
Additions to non-current assets	5	12	385	150	1,971	2,524

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	UBS AG
For the year ended 31 December 2019						
Net interest income	3,947	1,993	(25)	(669)	(831)	4,415
Non-interest income	12,426	1,745	1,962	7,967	869	24,970
Income	16,373	3,737	1,938	7,298	38	29,385
Credit loss (expense) / release	(20)	(21)	0	(30)	(7)	(78)
Total operating income	16,353	3,717	1,938	7,268	31	29,307
Total operating expenses	13,018	2,274	1,407	6,515	925	24,138
Operating profit / (loss) before tax	**3,335**	**1,443**	**531**	**753**	**(893)**	**5,169**
Tax expense / (benefit)						1,198
Net profit / (loss)						**3,971**
Additional information						
Total assets[2]	309,766	209,512	34,565	316,058	102,028	971,927
Additions to non-current assets	68	10	0	1	4,935	5,014

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	UBS AG
For the year ended 31 December 2018						
Net interest income	4,101	2,049	(29)	(459)	(690)	4,971
Non-interest income	12,700	2,169	1,881	8,539	499	25,788
Income	16,801	4,218	1,852	8,080	(191)	30,759
Credit loss (expense) / release	(15)	(56)	0	(38)	(8)	(117)
Total operating income	16,786	4,162	1,852	8,042	(199)	30,642
Total operating expenses	13,574	2,363	1,427	6,600	1,220	25,184
Operating profit / (loss) before tax	**3,212**	**1,799**	**425**	**1,442**	**(1,419)**	**5,458**
Tax expense / (benefit)						1,345
Net profit / (loss)						**4,113**
Additional information						
Total assets[2]	313,737	200,767	28,140	302,434	112,988	958,066
Additions to non-current assets	196	23	1	89	1,449	1,757

1 Includes a USD 631 million net gain on the sale of a majority stake in Fondcenter AG, of which USD 571 million was recognized in Asset Management and USD 60 million was recognized in Global Wealth Management. Refer to Note 29 for more information. 2 Information has been restated where applicable. Refer to Note 1b for more information.

Note 2b Segment reporting by geographic location

The operating regions shown in the table below correspond to the regional management structure of UBS AG. The allocation of operating income to these regions reflects, and is consistent with, the basis on which the business is managed and its performance is evaluated. These allocations involve assumptions and judgments that management considers to be reasonable, and may be refined to reflect changes in estimates or management structure. The main principles of the allocation methodology are that client revenues are attributed to the domicile of the given client and trading and portfolio management revenues are attributed to the country where the risk is managed. This revenue attribution is consistent with the mandate of the regional Presidents. Certain revenues, such as those related to Non-core and Legacy Portfolio in Group Functions, are managed at a group level. These revenues are included in the *Global* line.

The geographic analysis of non-current assets is based on the location of the entity in which the given assets are recorded.

For the year ended 31 December 2020

	Total operating income		Total non-current assets	
	USD billion	Share %	USD billion	Share %
Americas	13.0	40	9.0	45
of which: USA	*11.7*	*36*	*8.4*	*42*
Asia Pacific	6.0	18	1.4	7
Europe, Middle East and Africa (excluding Switzerland)	6.5	20	2.7	14
Switzerland	6.9	21	6.9	34
Global	0.5	2	0.0	0
Total	32.8	100	20.0	100

For the year ended 31 December 2019

	Total operating income[1]		Total non-current assets	
	USD billion	Share %	USD billion	Share %
Americas	12.0	41	8.9	46
of which: USA	*10.9*	*37*	*8.5*	*44*
Asia Pacific	4.7	16	1.3	7
Europe, Middle East and Africa (excluding Switzerland)	5.8	20	2.6	13
Switzerland	6.7	23	6.5	34
Global	0.1	0	0.0	0
Total	**29.3**	**100**	**19.3**	**100**

For the year ended 31 December 2018

	Total operating income[1]		Total non-current assets	
	USD billion	Share %	USD billion	Share %
Americas	12.6	41	7.4	46
of which: USA	*11.5*	*37*	*7.0*	*43*
Asia Pacific	4.9	16	0.8	5
Europe, Middle East and Africa (excluding Switzerland)	6.2	20	1.8	11
Switzerland	7.1	23	6.2	38
Global	(0.2)	(1)	0.0	0
Total	**30.6**	**100**	**16.2**	**100**

1 Effective as of 1 January 2020, the Investment Bank was realigned into two new business lines, Global Banking and Global Markets, which affects how the business is managed and therefore the allocation of operating income to the regions. The presentation of prior-year information reflects the new regional management structure of the Investment Bank.

Income statement notes

Note 3 Net interest income and other net income from financial instruments measured at fair value through profit or loss

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Net interest income from financial instruments measured at fair value through profit or loss	1,305	1,015	1,344
Other net income from financial instruments measured at fair value through profit or loss	6,930	6,833	6,953
of which: net gains / (losses) from financial liabilities designated at fair value [1]	*1,625*	(8,748)	9,382
Total net income from financial instruments measured at fair value through profit or loss	**8,235**	**7,848**	**8,297**

Net interest income

	31.12.20	31.12.19	31.12.18
Net interest income from financial instruments measured at amortized cost and fair value through other comprehensive income			
Interest income from loans and deposits[2]	6,696	8,026	7,822
Interest income from securities financing transactions[3]	862	2,005	1,567
Interest income from other financial instruments measured at amortized cost	335	364	266
Interest income from debt instruments measured at fair value through other comprehensive income	101	120	142
Interest income from derivative instruments designated as cash flow hedges	822	188	324
Total interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	**8,816**	**10,703**	**10,121**
Interest expense on loans and deposits[4]	2,440	4,541	3,566
Interest expense on securities financing transactions[5]	870	1,152	1,130
Interest expense on debt issued	918	1,491	1,797
Interest expense on lease liabilities	105	118	
Total interest expense from financial instruments measured at amortized cost	**4,333**	**7,303**	**6,494**
Total net interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	**4,483**	**3,400**	**3,628**
Net interest income from financial instruments measured at fair value through profit or loss			
Net interest income from financial instruments at fair value held for trading	847	1,218	1,111
Net interest income from brokerage balances	682	339	575
Net interest income from securities financing transactions at fair value not held for trading[6]	77	116	115
Interest income from other financial instruments at fair value not held for trading	585	914	901
Interest expense on other financial instruments designated at fair value	(886)	(1,571)	(1,357)
Total net interest income from financial instruments measured at fair value through profit or loss	**1,305**	**1,015**	**1,344**
Total net interest income	**5,788**	**4,415**	**4,971**

1 Excludes fair value changes of hedges related to financial liabilities designated at fair value and foreign currency translation effects arising from translating foreign currency transactions into the respective functional currency, both of which are reported within Other net income from financial instruments measured at fair value through profit or loss. 2019 and 2018 included a net loss of USD 1,830 million and a net gain of USD 2,152 million, respectively, driven by financial liabilities related to unit-linked investment contracts, which are designated at fair value through profit or loss. This was offset by a net gain of USD 1,830 million and a net loss of USD 2,134 million in 2019 and 2018, respectively, related to financial assets for unit-linked investment contracts that are mandatorily measured at fair value through profit or loss not held for trading. 2 Consists of interest income from cash and balances at central banks, loans and advances to banks and customers, and cash collateral receivables on derivative instruments, as well as negative interest on amounts due to banks, customer deposits, and cash collateral payables on derivative instruments. 3 Includes interest income on receivables from securities financing transactions and negative interest, including fees, on payables from securities financing transactions. 4 Consists of interest expense on amounts due to banks, cash collateral payables on derivative instruments, customer deposits, and funding from UBS Group AG and its subsidiaries, as well as negative interest on cash and balances at central banks, loans and advances to banks, and cash collateral receivables on derivative instruments. 5 Includes interest expense on payables from securities financing transactions and negative interest, including fees, on receivables from securities financing transactions. 6 Includes interest expense on securities financing transactions designated at fair value.

Note 4 Net fee and commission income

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Fee and commission income			
Underwriting fees	1,104	784	843
of which: equity underwriting fees	*657*	*360*	*431*
of which: debt underwriting fees	*446*	*424*	*412*
M&A and corporate finance fees	736	774	768
Brokerage fees	4,132	3,248	3,521
Investment fund fees	5,289	4,859	4,955
Portfolio management and related services	8,009	7,656	7,756
Other	1,712	1,836	1,789
Total fee and commission income[1]	20,982	19,156	19,632
of which: recurring	*13,010*	*12,545*	*12,911*
of which: transaction-based	*7,512*	*6,449*	*6,629*
of which: performance-based	*461*	*163*	*93*
Fee and commission expense			
Brokerage fees paid	274	310	316
Distribution fees paid	589	590	580
Other	911	796	807
Total fee and commission expense	1,775	1,696	1,703
Net fee and commission income	19,207	17,460	17,930
of which: net brokerage fees	*3,858*	*2,938*	*3,205*

1 For the year ended 31 December 2020, reflects third-party fee and commission income of USD 12,475 million for Global Wealth Management, USD 1,427 million for Personal & Corporate Banking, USD 3,129 million for Asset Management, USD 3,901 million for the Investment Bank and USD 50 million for Group Functions (for the year ended 31 December 2019: USD 11,694 million for Global Wealth Management, USD 1,307 million for Personal & Corporate Banking, USD 2,659 million for Asset Management, USD 3,397 million for the Investment Bank and USD 98 million for Group Functions; for the year ended 31 December 2018: USD 12,059 million for Global Wealth Management, USD 1,338 million for Personal & Corporate Banking, USD 2,579 million for Asset Management, USD 3,557 million for the Investment Bank and USD 100 million for Group Functions).

Note 5 Other income

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Associates, joint ventures and subsidiaries			
Net gains / (losses) from acquisitions and disposals of subsidiaries[1]	635[2]	(36)	(292)
Net gains / (losses) from disposals of investments in associates	0	4	46
Share of net profits of associates and joint ventures	84[3]	46	529[4]
Impairments related to associates	0	(1)	0
Total	719	13	283
Net gains / (losses) from disposals of financial assets measured at fair value through other comprehensive income	40	31	0
Income from properties[5]	25	27	24
Net gains / (losses) from properties held for sale	76[6]	(19)	40
Income from shared services provided to UBS Group AG or its subsidiaries	422	464	478
Other	267[7]	161	80
Total other income	1,549	677	905

1 Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to the disposal or closure of foreign operations. 2 Includes a USD 631 million net gain on the sale of a majority stake in Fondcenter AG. Refer to Note 29 for more information. 3 Includes a valuation gain of USD 26 million on UBS AG's equity ownership of SIX Group. 4 Includes a valuation gain of USD 460 million on UBS AG's equity ownership of SIX Group related to the sale of SIX Payment Services to Worldline. 5 Includes rent received from third parties. 6 Includes net gains of USD 140 million arising from sale-and-leaseback transactions, primarily related to a property in Geneva, partly offset by remeasurement losses relating to properties that were reclassified as held for sale. 7 Includes a USD 215 million gain on the sale of intellectual property rights associated with the Bloomberg Commodity Index family.

Note 6 Personnel expenses

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Salaries[1]	5,535	5,183	5,199
Variable compensation – performance awards[2]	2,953[3]	2,545	2,794
of which: guarantees for new hires	*24*	*29*	*43*
Variable compensation – other[2]	201	225	220
Financial advisor compensation[2,4]	4,091	4,043	4,054
Contractors	138	147	184
Social security	704[3]	627	629
Post-employment benefit plans[5]	597	569	363[6]
Other personnel expenses	466[3]	461	549
Total personnel expenses	**14,686**	**13,801**	**13,992**

1 Includes role-based allowances. 2 Refer to Note 27 for more information. 3 During 2020, UBS AG modified the conditions for continued vesting of certain outstanding deferred compensation awards for qualifying employees, resulting in an expense of approximately USD 270 million, of which USD 240 million is disclosed within Variable compensation – performance awards, USD 20 million within Social security and USD 10 million within Other personnel expenses. Refer to Note 1b for more information. 4 Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. 5 Refer to Note 26 for more information. 6 Changes to the pension fund of UBS AG in Switzerland announced in 2018 resulted in a reduction in the pension obligation recognized by UBS AG. As a consequence, a pre-tax gain of USD 132 million was recognized in the income statement in 2018, with no overall effect on total equity. Refer to Note 26 for more information.

Note 7 General and administrative expenses

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Occupancy	362	342	852
Rent and maintenance of IT and other equipment	346	339	326
Communication and market data services	505	517	520
Administration	5,499	5,176	5,383
of which: shared services costs charged by UBS Group AG or its subsidiaries	*4,939*	*4,621*	*4,803*
of which: UK and German bank levies[1]	*55*	*41*	*58*
Marketing and public relations[2]	225	233	277
Travel and entertainment	132	325	367
Professional fees	592	782	870
Outsourcing of IT and other services	522	610	729
Litigation, regulatory and similar matters[3]	197	165	657
Other	108	97	95
Total general and administrative expenses	**8,486**	**8,586**	**10,075**

1 The UK bank levy expenses of USD 38 million (USD 30 million for 2019 and USD 40 million for 2018) included a credit of USD 27 million (USD 31 million for 2019 and USD 45 million for 2018) related to prior years. 2 Includes charitable donations. 3 Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 18 for more information. Also includes recoveries from third parties of USD 3 million in 2020 (USD 11 million in 2019 and USD 29 million in 2018).

Note 8 Income taxes

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Tax expense / (benefit)			
Swiss			
Current	417	336	434
Deferred	107	246	2,326
Total Swiss	**524**	**582**	**2,760**
Non-Swiss			
Current	715	402	537
Deferred	248	214	(1,952)
Total non-Swiss	**963**	**616**	**(1,415)**
Total income tax expense / (benefit) recognized in the income statement	**1,488**	**1,198**	**1,345**

Income tax recognized in the income statement

Income tax expenses of USD 1,488 million were recognized for UBS AG in 2020, representing an effective tax rate of 19.3%. This included Swiss tax expenses of USD 524 million and non-Swiss tax expenses of USD 963 million.

The Swiss tax expenses included current tax expenses of USD 417 million related to taxable profits of UBS Switzerland AG and other Swiss entities. They also included deferred tax expenses of USD 107 million, which primarily reflect the amortization of deferred tax assets (DTAs) previously recognized in relation to deductible temporary differences.

The non-Swiss tax expenses included current tax expenses of USD 715 million related to taxable profits earned by non-Swiss subsidiaries and branches, and net deferred tax expenses of USD 248 million. Expenses of USD 456 million, primarily relating to the amortization of DTAs previously recognized in relation to tax losses carried forward and deductible temporary differences of UBS Americas Inc., were partly offset by a net benefit of USD 208 million in respect of the remeasurement of DTAs. This net benefit included net upward remeasurements of DTAs of USD 146 million for certain entities, primarily in connection with our business planning process, and USD 62 million in respect of additional DTA recognition that resulted from the contribution of real estate assets by UBS AG to UBS Americas Inc. and UBS Financial Services Inc. in 2020. This allowed the full recognition of DTAs in respect of the associated historic real estate costs that were previously capitalized for US tax purposes under the elections that were made in the fourth quarter of 2018.

The effective tax rate for 2020 of 19.3% is lower than UBS AG's normal tax rate of around 25%, mainly as a result of the aforementioned deferred tax benefit of USD 208 million in respect of the remeasurement of DTAs and also because no net tax expense was recognized in respect of the pre-tax gain of USD 631 million in relation to the sale of a majority stake in Fondcenter AG.

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Operating profit / (loss) before tax	7,699	5,169	5,458
of which: Swiss	*3,042*	*2,297*	*1,427*
of which: non-Swiss	*4,657*	*2,872*	*4,031*
Income taxes at Swiss tax rate of 19.5% for 2020, 20.5% for 2019 and 21% for 2018	1,501	1,060	1,146
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	96	72	68
Tax effects of losses not recognized	144	131	222
Previously unrecognized tax losses now utilized	(212)	(265)	(25)
Non-taxable and lower-taxed income	(381)	(305)	(419)
Non-deductible expenses and additional taxable income	373	713	883
Adjustments related to prior years – current tax	(66)	1	114
Adjustments related to prior years – deferred tax	18	(6)	27
Change in deferred tax recognition	(383)	(293)	(802)
Adjustments to deferred tax balances arising from changes in tax rates	235	(9)	0
Other items	163	99	130
Income tax expense / (benefit)	1,488	1,198	1,345

Note 8 Income taxes (continued)

The components of operating profit before tax, and the differences between income tax expense reflected in the financial statements and the amounts calculated at the Swiss tax rate, are provided in the table on the previous page and explained below.

Component	Description
Non-Swiss tax rates differing from Swiss tax rate	To the extent that UBS AG profits or losses arise outside Switzerland, the applicable local tax rate may differ from the Swiss tax rate. This item reflects, for such profits, an adjustment from the tax expense that would arise at the Swiss tax rate to the tax expense that would arise at the applicable local tax rate. Similarly, it reflects, for such losses, an adjustment from the tax benefit that would arise at the Swiss tax rate to the tax benefit that would arise at the applicable local tax rate.
Tax effects of losses not recognized	This item relates to tax losses of entities arising in the year that are not recognized as DTAs and where no tax benefit arises in relation to those losses. Therefore, the tax benefit calculated by applying the local tax rate to those losses as described above is reversed.
Previously unrecognized tax losses now utilized	This item relates to taxable profits of the year that are offset by tax losses of previous years for which no DTAs were previously recorded. Consequently, no current tax or deferred tax expense arises in relation to those taxable profits and the tax expense calculated by applying the local tax rate on those profits is reversed.
Non-taxable and lower-taxed income	This item relates to tax deductions for the year in respect of permanent differences. These include deductions in respect of profits that are either not taxable or are taxable at a lower rate of tax than the local tax rate. They also include deductions made for tax purposes, which are not reflected in the accounts.
Non-deductible expenses and additional taxable income	This item relates to additional taxable income for the year in respect of permanent differences. These include income that is recognized for tax purposes by an entity but is not included in its profit that is reported in the financial statements, as well as expenses for the year that are non-deductible (e.g., client entertainment costs are not deductible in certain locations).
Adjustments related to prior years – current tax	This item relates to adjustments to current tax expense for prior years (e.g., if the tax payable for a year is agreed with the tax authorities in an amount that differs from the amount previously reflected in the financial statements).
Adjustments related to prior years – deferred tax	This item relates to adjustments to deferred tax positions recognized in prior years (e.g., if a tax loss for a year is fully recognized and the amount of the tax loss agreed with the tax authorities is expected to differ from the amount previously recognized as DTAs in the accounts).
Change in deferred tax recognition	This item relates to changes in DTAs, including changes in DTAs previously recognized resulting from reassessments of expected future taxable profits. It also includes changes in temporary differences in the year, for which deferred tax is not recognized.
Adjustments to deferred tax balances arising from changes in tax rates	This item relates to remeasurements of DTAs and liabilities recognized due to changes in tax rates. These have the effect of changing the future tax saving that is expected from tax losses or deductible tax differences and therefore the amount of DTAs recognized or, alternatively, changing the tax cost of additional taxable income from taxable temporary differences and therefore the deferred tax liability.
Other items	Other items include other differences between profits or losses at the local tax rate and the actual local tax expense or benefit, including movements in provisions for uncertain positions in relation to the current year and other items.

Income tax recognized directly in equity

A net tax expense of USD 258 million was recognized in *Other comprehensive income* (2019: net expense of USD 327 million) and a net tax benefit of USD 1 million recognized in *Share premium* (2019: benefit of USD 11 million).

Note 8 Income taxes (continued)

Deferred tax assets and liabilities

UBS AG has gross DTAs, valuation allowances and recognized DTAs related to tax loss carry-forwards and deductible temporary differences, and also deferred tax liabilities in respect of taxable temporary differences, as shown in the table below. The valuation allowances reflect DTAs that were not recognized because, as of the last remeasurement period, management did not consider it probable that there would be sufficient future taxable profits available to utilize the related tax loss carry-forwards and deductible temporary differences.

Of the recognized DTAs as of 31 December 2020, USD 8.8 billion related to the US and USD 0.4 billion related to other locations (as of 31 December 2019, USD 9.3 billion related to the US and USD 0.2 billion related to other locations).

The recognition of DTAs is supported by forecasts of taxable profits for the entities concerned. In addition, tax planning opportunities are available that would result in additional future taxable income and these would be utilized, if necessary.

As of 31 December 2020, UBS AG has recognized DTAs of USD 138 million (31 December 2019: USD 75 million) in respect of entities that incurred losses in either the current or preceding year.

Deferred tax liabilities are recognized in respect of investments in subsidiaries, branches and associates, and interests in joint arrangements, except to the extent that UBS AG can control the timing of the reversal of the associated taxable temporary difference and it is probable that such will not reverse in the foreseeable future. However, as of 31 December 2020, this exception was not considered to apply to any taxable temporary differences.

USD million	31.12.20			31.12.19[1]		
Deferred tax assets[2]	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
Tax loss carry-forwards	14,108	(8,715)	5,393	14,826	(8,861)	5,965
Temporary differences	4,343	(561)	3,782	4,169	(610)	3,559
of which: related to real estate costs capitalized for US tax purposes	*2,268*	*0*	*2,268*	*2,219*	*0*	*2,219*
of which: related to compensation and benefits	*1,112*	*(173)*	*939*	*1,086*	*(179)*	*907*
of which: related to trading assets	*23*	*(5)*	*16*	*99*	*(5)*	*93*
of which: other	*940*	*(383)*	*558*	*765*	*(426)*	*340*
Total deferred tax assets	18,450	(9,276)	9,174	18,995	(9,471)	9,524
Deferred tax liabilities						
Goodwill and intangible assets			31			29
Cash flow hedges			425			156
Other			102			126
Total deferred tax liabilities			558			311

1 Comparative-period information has been restated. Refer to Note 1b for more information. 2 Less deferred tax liabilities as applicable.

As of 31 December 2020, USD 16.3 billion of the unrecognized tax losses carried forward related to the US (these primarily related to UBS AG's US branch), USD 13.8 billion related to the UK and USD 5.0 billion related to other locations (as of 31 December 2019, USD 17.8 billion related to the US, USD 14.9 billion related to the UK and USD 5.0 billion related to other locations).

In general, US federal tax losses incurred prior to 31 December 2017 can be carried forward for 20 years. However, US federal tax losses incurred after 31 December 2017 and UK tax losses can be carried forward indefinitely, although the utilization of such losses is limited to 80% of the entity's future year taxable profits for the US and generally to 25% thereof for the UK. The amounts of US tax loss carry-forwards that are included in the table below are based on their amount for federal tax purposes rather than for state and local tax purposes.

Unrecognized tax loss carry-forwards

USD million	31.12.20	31.12.19
Within 1 year	146	13
From 2 to 5 years	638	609
From 6 to 10 years	13,257	14,712
From 11 to 20 years	3,858	4,030
No expiry	17,227	18,364
Total	35,127	37,728

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement

The tables on the following pages provide information about financial instruments and certain other credit lines that are subject to expected credit loss (ECL) requirements. UBS AG's ECL disclosure segments or "ECL segments" are aggregated portfolios based on shared risk characteristics and on the same or similar rating methods applied. The key segments are presented in the table below.

› Refer to Note 20 for more information about expected credit loss measurement

Segment	Segment description	Description of credit risk sensitivity	Business division / Group Functions
Private clients with mortgages	Lending to private clients secured by owner-occupied real estate and personal account overdrafts of those clients	Sensitive to the interest rate environment, unemployment levels, real estate collateral values and other regional aspects	– Personal & Corporate Banking – Global Wealth Management
Real estate financing	Rental or income-producing real estate financing to private and corporate clients secured by real estate	Sensitive to GDP developments, the interest rate environment, real estate collateral values and other regional aspects	– Personal & Corporate Banking – Global Wealth Management – Investment Bank
Large corporate clients	Lending to large corporate and multi-national clients	Sensitive to GDP developments, unemployment levels, seasonality, business cycles and collateral values (diverse collateral, including real estate and other collateral types)	– Personal & Corporate Banking – Investment Bank
SME clients	Lending to small and medium-sized corporate clients	Sensitive to GDP developments, unemployment levels, the interest rate environment and, to some extent, seasonality, business cycles and collateral values (diverse collateral, including real estate and other collateral types)	– Personal & Corporate Banking
Lombard	Loans secured by pledges of marketable securities, guarantees and other forms of collateral	Sensitive to the market (e.g., changes in collateral values)	– Global Wealth Management
Credit cards	Credit card solutions in Switzerland and the US	Sensitive to unemployment levels	– Personal & Corporate Banking – Global Wealth Management
Commodity trade finance	Working capital financing of commodity traders, generally extended on a self-liquidating transactional basis	Sensitive primarily to the strength of individual transaction structures and collateral values (price volatility of commodities), as the primary source for debt service is directly linked to the shipments financed	– Personal & Corporate Banking
Financial intermediaries and hedge funds	Lending to financial institutions and pension funds, including exposures to broker-dealers and clearing houses	Sensitive to unemployment levels, the quality and volatility index changes, equity market and GDP developments, regulatory changes and political risk	– Personal & Corporate Banking – Investment Bank

› Refer to Note 20f for more details regarding sensitivity

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

The tables below and on the following pages provide ECL exposure and ECL allowance and provision information about financial instruments and certain non-financial instruments that are subject to ECL.

USD million	31.12.20							
	Carrying amount[1]				ECL allowances			
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	158,231	158,231	0	0	0	0	0	0
Loans and advances to banks	15,344	15,160	184	0	(16)	(9)	(5)	(1)
Receivables from securities financing transactions	74,210	74,210	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	32,737	32,737	0	0	0	0	0	0
Loans and advances to customers	380,977	358,396	20,341	2,240	(1,060)	(142)	(215)	(703)
of which: Private clients with mortgages	*148,175*	*138,769*	*8,448*	*959*	*(166)*	*(35)*	*(93)*	*(39)*
of which: Real estate financing	*43,429*	*37,568*	*5,838*	*23*	*(63)*	*(15)*	*(44)*	*(4)*
of which: Large corporate clients	*15,161*	*12,658*	*2,029*	*474*	*(279)*	*(27)*	*(40)*	*(212)*
of which: SME clients	*14,872*	*11,990*	*2,254*	*628*	*(310)*	*(19)*	*(23)*	*(268)*
of which: Lombard	*133,850*	*133,795*	*0*	*55*	*(36)*	*(5)*	*0*	*(31)*
of which: Credit cards	*1,558*	*1,198*	*330*	*30*	*(38)*	*(11)*	*(11)*	*(16)*
of which: Commodity trade finance	*3,269*	*3,214*	*43*	*12*	*(106)*	*(5)*	*0*	*(101)*
Other financial assets measured at amortized cost	27,219	26,401	348	469	(133)	(34)	(9)	(90)
of which: Loans to financial advisors	*2,569*	*1,982*	*137*	*450*	*(108)*	*(27)*	*(5)*	*(76)*
Total financial assets measured at amortized cost	688,717	665,135	20,873	2,709	(1,211)	(187)	(229)	(795)
Financial assets measured at fair value through other comprehensive income	8,258	8,258	0	0	0	0	0	0
Total on-balance sheet financial assets in scope of ECL requirements	696,976	673,394	20,873	2,709	(1,211)	(187)	(229)	(795)

	Total exposure				ECL provisions			
Off-balance sheet (in scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Guarantees	17,081	14,687	2,225	170	(63)	(14)	(15)	(34)
of which: Large corporate clients	*3,710*	*2,048*	*1,549*	*113*	*(20)*	*(4)*	*(5)*	*(12)*
of which: SME clients	*1,310*	*936*	*326*	*48*	*(13)*	*(1)*	*(1)*	*(11)*
of which: Financial intermediaries and hedge funds	*7,637*	*7,413*	*224*	*0*	*(17)*	*(7)*	*(9)*	*0*
of which: Lombard	*641*	*633*	*0*	*8*	*(2)*	*0*	*0*	*(2)*
of which: Commodity trade finance	*1,441*	*1,416*	*25*	*0*	*(2)*	*(1)*	*0*	*0*
Irrevocable loan commitments	41,372	36,894	4,374	104	(142)	(74)	(68)	0
of which: Large corporate clients	*24,209*	*20,195*	*3,950*	*64*	*(121)*	*(63)*	*(58)*	*0*
Forward starting reverse repurchase and securities borrowing agreements	3,247	3,247	0	0	0	0	0	0
Committed unconditionally revocable credit lines	42,077	37,176	4,792	108	(50)	(29)	(21)	0
of which: Real estate financing	*6,328*	*5,811*	*517*	*0*	*(12)*	*(5)*	*(7)*	*0*
of which: Large corporate clients	*4,909*	*2,783*	*2,099*	*27*	*(9)*	*(2)*	*(7)*	*0*
of which: SME clients	*5,827*	*4,596*	*1,169*	*63*	*(16)*	*(12)*	*(4)*	*0*
of which: Lombard	*9,671*	*9,671*	*0*	*0*	*0*	*(1)*	*0*	*0*
of which: Credit cards	*8,661*	*8,220*	*430*	*11*	*(8)*	*(6)*	*(2)*	*0*
of which: Commodity trade finance	*242*	*242*	*0*	*0*	*0*	*0*	*0*	*0*
Irrevocable committed prolongation of existing loans	3,282	3,277	5	0	(2)	(2)	0	0
Total off-balance sheet financial instruments and other credit lines	107,059	95,281	11,396	382	(257)	(119)	(104)	(34)
Total allowances and provisions					(1,468)	(306)	(333)	(829)

1 The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

USD million	31.12.19							
	Carrying amount[1]				ECL allowances			
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	107,068	107,068	0	0	0	0	0	0
Loans and advances to banks	12,379	12,298	80	0	(6)	(4)	(1)	(1)
Receivables from securities financing transactions	84,245	84,245	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	23,289	23,289	0	0	0	0	0	0
Loans and advances to customers	327,992	310,705	15,538	1,749	(764)	(82)	(123)	(559)
of which: Private clients with mortgages	*132,646*	*124,063*	*7,624*	*959*	*(110)*	*(15)*	*(55)*	*(41)*
of which: Real estate financing	*38,481*	*32,932*	*5,532*	*17*	*(43)*	*(5)*	*(34)*	*(4)*
of which: Large corporate clients	*9,703*	*9,184*	*424*	*94*	*(117)*	*(15)*	*(4)*	*(98)*
of which: SME clients	*11,786*	*9,817*	*1,449*	*521*	*(303)*	*(17)*	*(15)*	*(271)*
of which: Lombard	*112,893*	*112,796*	*0*	*98*	*(22)*	*(4)*	*0*	*(18)*
of which: Credit cards	*1,661*	*1,314*	*325*	*22*	*(35)*	*(8)*	*(14)*	*(13)*
of which: Commodity trade finance	*2,844*	*2,826*	*8*	*10*	*(81)*	*(5)*	*0*	*(77)*
Other financial assets measured at amortized cost	23,012	21,985	451	576	(143)	(35)	(13)	(95)
of which: Loans to financial advisors	*2,877*	*2,341*	*334*	*202*	*(109)*	*(29)*	*(11)*	*(70)*
Total financial assets measured at amortized cost	**577,985**	**559,590**	**16,069**	**2,326**	**(915)**	**(124)**	**(137)**	**(655)**
Financial assets measured at fair value through other comprehensive income	**6,345**	**6,345**	**0**	**0**	**0**	**0**	**0**	**0**
Total on-balance sheet financial assets in scope of ECL requirements	**584,329**	**565,935**	**16,069**	**2,326**	**(915)**	**(124)**	**(137)**	**(655)**
	Total exposure				ECL provisions			
Off-balance sheet (in scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Guarantees	18,142	17,757	304	82	(42)	(8)	(1)	(33)
of which: Large corporate clients	*3,687*	*3,461*	*203*	*24*	*(10)*	*(1)*	*0*	*(9)*
of which: SME clients	*1,180*	*1,055*	*67*	*58*	*(24)*	*0*	*0*	*(23)*
of which: Financial intermediaries and hedge funds	*7,966*	*7,950*	*16*	*0*	*(5)*	*(4)*	*0*	*0*
of which: Lombard	*622*	*622*	*0*	*0*	*(1)*	*0*	*0*	*(1)*
of which: Commodity trade finance	*2,334*	*2,320*	*13*	*0*	*(1)*	*(1)*	*0*	*0*
Irrevocable loan commitments	27,547	27,078	419	50	(35)	(30)	(5)	0
of which: Large corporate clients	*18,735*	*18,349*	*359*	*27*	*(27)*	*(24)*	*(3)*	*0*
Forward starting reverse repurchase and securities borrowing agreements	1,657	1,657	0	0	0	0	0	0
Committed unconditionally revocable credit lines	36,979	35,735	1,197	46	(34)	(17)	(17)	0
of which: Real estate financing	*5,242*	*4,934*	*307*	*0*	*(16)*	*(3)*	*(13)*	*0*
of which: Large corporate clients	*4,274*	*4,188*	*69*	*17*	*(1)*	*(1)*	*0*	*0*
of which: SME clients	*4,787*	*4,589*	*171*	*27*	*(9)*	*(8)*	*(1)*	*0*
of which: Lombard	*7,976*	*7,975*	*0*	*1*	*0*	*0*	*0*	*0*
of which: Credit cards	*7,890*	*7,535*	*355*	*0*	*(6)*	*(4)*	*(2)*	*0*
of which: Commodity trade finance	*344*	*344*	*0*	*0*	*0*	*0*	*0*	*0*
Irrevocable committed prolongation of existing loans	3,289	3,285	0	4	(3)	(3)	0	0
Total off-balance sheet financial instruments and other credit lines	**87,614**	**85,513**	**1,920**	**182**	**(114)**	**(58)**	**(23)**	**(33)**
Total allowances and provisions					**(1,029)**	**(181)**	**(160)**	**(688)**

1 The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

Coverage ratios are calculated for the core loan portfolio by taking ECL allowances and provisions divided by the gross carrying amount of the exposures. Core loan exposure is defined as the sum of *Loans and advances to customers* and *Loans to financial advisors*.

These ratios are influenced by the following key factors:
- lending in Switzerland includes government backed COVID-19 loans;
- Lombard loans are generally secured with marketable securities in portfolios that are, as a rule, highly diversified, with strict lending policies that are intended to ensure that credit risk is minimal under most circumstances;
- mortgage loans to private clients and real estate financing are controlled by conservative eligibility criteria, including low loan-to-value ratios and strong debt service capabilities; for example, more than 99% of the aggregated amount of Swiss residential mortgage loans would continue to be fully covered by real estate collateral even if the value of that collateral decreased by 20%, for a 30% reduction, more than 98% would be covered;
- the amount of unsecured retail lending (including credit cards) is insignificant;
- contractual maturities in the loan portfolio, which are a factor in the calculation of ECLs, are generally short, with a large part of the loan portfolio having contractual maturities of 12 months or less; and
- write-offs of ECL allowances against the gross loan balances when all or part of a financial asset is deemed uncollectible or forgiven, reduces the coverage ratios.

Coverage ratios for core loan portfolio

	31.12.20							
	Gross carrying amount (USD million)				ECL coverage (bps)			
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	148,341	138,803	8,540	998	11	2	108	390
Real estate financing	43,492	37,583	5,883	27	15	4	75	1,414
Large corporate clients	15,440	12,684	2,069	686	181	21	192	3,089
SME clients	15,183	12,010	2,277	896	204	16	101	2,991
Lombard	133,886	133,800	0	86	3	0	0	3,592
Credit cards	1,596	1,209	342	46	240	91	333	3,488
Commodity trade finance	3,375	3,219	43	113	315	16	2	8,939
Other loans and advances to customers	20,722	19,229	1,402	91	29	13	25	3,563
Loans to financial advisors	2,677	2,009	142	526	404	135	351	1,446
Total[1]	**384,714**	**360,547**	**20,697**	**3,470**	**30**	**5**	**106**	**2,247**

	Gross exposure (USD million)				ECL coverage (bps)			
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	6,285	6,083	198	3	7	6	16	197
Real estate financing	7,056	6,576	481	0	21	9	185	0
Large corporate clients	32,828	25,026	7,598	205	46	27	92	565
SME clients	9,121	7,239	1,734	148	40	19	63	779
Lombard	14,178	14,170	0	8	2	1	0	1,941
Credit cards	8,661	8,220	430	11	9	8	44	0
Commodity trade finance	1,683	1,658	25	0	10	8	15	8,279
Financial intermediaries and hedge funds	7,690	7,270	448	0	26	13	248	166
Other off-balance sheet commitments	16,309	15,792	482	8	12	6	11	12,414
Total[2]	**103,812**	**92,034**	**11,396**	**382**	**25**	**13**	**91**	**894**

1 Includes Loans and advances to customers of USD 382,036 million and Loans to financial advisors of USD 2,677 million which are presented on the balance sheet line Other assets measured at amortized cost.
2 Excludes Forward starting reverse repurchase and securities borrowing agreements.

Note 9 Financial assets at amortized cost and other positions in scope of expected credit loss measurement (continued)

Coverage ratios for core loan portfolio

	31.12.19							
	Gross carrying amount (USD million)				ECL coverage (bps)			
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	132,756	124,077	7,679	1,000	8	1	72	406
Real estate financing	38,524	32,937	5,567	21	11	2	62	1,765
Large corporate clients	9,819	9,199	429	192	119	16	100	5,088
SME clients	12,089	9,834	1,464	791	251	18	104	3,420
Lombard	112,915	112,799	0	116	2	0	0	1,566
Credit cards	1,696	1,322	339	35	205	60	404	3,718
Commodity trade finance	2,925	2,831	8	87	278	17	3	8,844
Other loans and advances to customers	18,031	17,788	176	67	29	8	15	5,750
Loans to financial advisors	2,987	2,370	344	272	366	122	305	2,570
Total[1]	**331,743**	**313,158**	**16,005**	**2,580**	**26**	**4**	**83**	**2,436**

	Gross exposure (USD million)				ECL coverage (bps)			
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	5,520	5,466	51	2	7	6	100	245
Real estate financing	6,046	5,715	326	4	29	9	390	0
Large corporate clients	26,706	26,009	630	67	14	10	59	1,319
SME clients	6,782	6,407	273	101	53	15	115	2,265
Lombard	9,902	9,895	0	7	1	0	0	1,403
Credit cards	7,890	7,535	355	0	8	5	52	0
Commodity trade finance	2,678	2,664	13	0	5	5	9	2,713
Financial intermediaries and hedge funds	9,676	9,651	25	0	5	5	71	83
Other off-balance sheet commitments	10,759	10,513	246	0	4	3	34	22,592
Total[2]	**85,957**	**83,856**	**1,920**	**182**	**13**	**7**	**120**	**1,822**

1 Includes Loans and advances to customers of USD 328,756 million and Loans to financial advisors of USD 2,987 million which are presented on the balance sheet line Other assets measured at amortized cost.
2 Excludes Forward starting reverse repurchase and securities borrowing agreements.

Note 10 Derivative instruments

Overview

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS AG and its counterparties. Terms are negotiated directly with counterparties and the contracts have industry-standard settlement mechanisms prescribed by ISDA. Regulators in various jurisdictions have begun a phased introduction of rules requiring the payment and collection of initial and variation margin on certain OTC derivative contracts, which may have a bearing on their price and other relevant terms. Due to challenges brought on by COVID-19, the International Organization of Securities Commissions (IOSCO) has extended the deadline for the completion of the final phase-in of margin requirements for non-centrally cleared derivatives, to 1 September 2022.

Other derivative contracts are standardized in terms of their amounts and settlement dates, and are bought and sold on regulated exchanges. These are commonly referred to as exchange-traded derivatives (ETD) contracts. Exchanges offer the benefits of pricing transparency, standardized daily settlement of changes in value and, consequently, reduced credit risk.

Most of UBS AG's derivative transactions relate to sales and market-making activity. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Market-making aims to directly support the facilitation and execution of client activity, and involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume. UBS AG also uses various derivative instruments for hedging purposes.

› **Refer to Notes 16 and 21 for more information about derivative instruments**
› **Refer to Note 25 for more information about derivatives designated in hedge accounting relationships**

Risks of derivative instruments

The derivative financial assets shown on the balance sheet can be an important component of UBS AG 's credit exposure, however, the positive replacement values related to a respective counterparty are rarely an adequate reflection of UBS AG's credit exposure in its derivatives business with that counterparty. This is generally the case because, on the one hand, replacement values can increase over time (potential future exposure), while, on the other hand, exposure may be mitigated by entering into master netting agreements and bilateral collateral arrangements. Both the exposure measures used internally by UBS AG to control credit risk and the capital requirements imposed by regulators reflect these additional factors.

› **Refer to Note 22 for more information about derivative financial assets and liabilities after consideration of netting potential allowed under enforceable netting arrangements**
› **Refer to the "Risk management and control" section of this report for more information about the risks arising from derivative instruments**

Contingent collateral features of derivative liabilities

Certain derivative instruments contain contingent collateral or termination features triggered upon a downgrade of the published credit ratings of UBS AG in the normal course of business. Based on UBS AG's credit ratings as of 31 December 2020, USD 0.0 billion, USD 0.3 billion and USD 0.8 billion would have been required for contractual obligations related to OTC derivatives in the event of a one-notch, two-notch and three-notch reduction in long-term credit ratings, respectively. In evaluating UBS AG's liquidity requirements, UBS AG considers additional collateral or termination payments that would be required in the event of a reduction in UBS AG's long-term credit ratings, and a corresponding reduction in UBS AG's short-term ratings.

Note 10 Derivative instruments (continued)

Derivative instruments

	31.12.20					31.12.19				
USD billion	Derivative financial assets	Notional amounts related to derivative financial assets[2]	Derivative financial liabilities	Notional amounts related to derivative financial liabilities[2]	Other notional amounts[2,3]	Derivative financial assets	Notional amounts related to derivative financial assets[2]	Derivative financial liabilities	Notional amounts related to derivative financial liabilities[2]	Other notional amounts[2,3]
Interest rate contracts	50.9	928.0	43.9	880.4	11,291.5	42.6	1,020.2	36.6	975.2	11,999.2
of which: forward contracts (OTC)[1]	*0.0*	*19.8*	*0.4*	*21.9*	*2,602.5*	*0.0*	*16.3*	*0.3*	*19.6*	*3,136.8*
of which: swaps (OTC)	*40.8*	*407.0*	*30.9*	*364.8*	*8,105.2*	*34.3*	*454.7*	*26.2*	*402.9*	*8,086.0*
of which: options (OTC)	*10.1*	*447.5*	*12.5*	*460.5*		*8.1*	*464.8*	*10.0*	*486.1*	
of which: futures (ETD)					*480.6*					*546.9*
of which: options (ETD)	*0.0*	*53.6*	*0.0*	*33.1*	*103.3*	*0.0*	*84.4*	*0.0*	*66.6*	*229.5*
Credit derivative contracts	2.4	57.6	2.9	64.8		2.0	70.2	3.0	69.9	
of which: credit default swaps (OTC)	*2.2*	*53.6*	*2.6*	*62.3*		*1.7*	*65.0*	*2.2*	*66.0*	
of which: total return swaps (OTC)	*0.1*	*1.9*	*0.3*	*2.5*		*0.3*	*2.0*	*0.8*	*3.3*	
Foreign exchange contracts	68.7	2,951.2	70.5	2,820.4	1.4	52.5	3,173.6	54.0	2,993.8	1.2
of which: forward contracts (OTC)	*27.3*	*779.2*	*29.0*	*853.3*		*22.4*	*935.5*	*23.4*	*966.6*	
of which: swaps (OTC)	*34.3*	*1,727.3*	*34.4*	*1,567.3*		*22.8*	*1,573.2*	*23.8*	*1,418.5*	
of which: options (OTC)	*7.1*	*440.9*	*7.1*	*394.7*		*7.3*	*660.9*	*6.8*	*604.9*	
Equity contracts	34.8	449.6	41.2	581.3	91.3	22.8	420.3	25.5	534.5	122.1
of which: swaps (OTC)	*6.4*	*89.4*	*9.8*	*108.4*		*4.0*	*81.3*	*5.5*	*96.3*	
of which: options (OTC)	*7.0*	*87.1*	*10.9*	*146.2*		*5.0*	*88.6*	*6.8*	*144.1*	
of which: futures (ETD)					*67.9*					*84.9*
of which: options (ETD)	*10.7*	*273.1*	*11.3*	*326.8*	*23.5*	*7.2*	*250.4*	*7.8*	*294.1*	*37.2*
of which: agency transactions (ETD)[4]	*10.7*		*9.1*			*6.6*		*5.4*		
Commodity contracts	2.2	57.8	2.0	49.7	10.1	1.8	56.1	1.7	60.0	12.6
of which: swaps (OTC)	*0.5*	*17.7*	*0.8*	*18.0*		*0.4*	*13.8*	*0.6*	*15.1*	
of which: options (OTC)	*1.0*	*23.5*	*0.7*	*17.8*		*1.0*	*27.4*	*0.4*	*23.6*	
of which: futures (ETD)					*9.3*					*12.0*
of which: forward contracts (ETD)	*0.0*	*8.0*	*0.0*	*6.3*		*0.0*	*5.9*	*0.0*	*4.9*	
Loan commitments measured at FVTPL (OTC)[5]			0.0	10.2				0.0	7.1	
Unsettled purchases of non-derivative financial instruments[6]	0.3	18.3	0.2	10.0		0.1	16.6	0.1	6.9	
Unsettled sales of non-derivative financial instruments[6]	0.2	17.2	0.3	12.9		0.1	15.4	0.1	9.7	
Total derivative instruments, based on IFRS netting[7]	159.6	4,479.6	161.1	4,429.7	11,394.4	121.8	4,772.4	120.9	4,657.0	12,135.1

1 Includes certain forward starting repurchase and reverse repurchase agreements that are classified as measured at fair value through profit or loss and are recognized within derivative instruments. The notional amounts related to these instruments were previously presented in the former Note 34 under Forward starting transactions (refer to the "Consolidated financial statements" section of the Annual Report 2019 for more information). Starting with this report, the presentation of these notionals has been aligned with the fair values presented in this table and prior periods have been amended to ensure comparability. 2 In cases where derivative financial instruments are presented on a net basis on the balance sheet, the respective notional amounts of the netted derivative financial instruments are still presented on a gross basis. 3 Other notional amounts relate to derivatives that are cleared through either a central counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for all periods presented. 4 Notional amounts of exchange-traded agency transactions and OTC-cleared transactions entered into on behalf of clients are not disclosed as they have a significantly different risk profile. 5 These notional amounts relate to derivative loan commitments that were previously presented in the former Note 34 under loan commitments measured at fair value (refer to the "Consolidated financial statements" section of the Annual Report 2019 for more information). Starting with this report, the presentation of these notionals has been aligned with the fair values of the derivative loan commitments presented in this table and prior periods have been amended to ensure comparability. 6 Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as derivative financial instruments. 7 Derivative financial assets and liabilities are presented net on the balance sheet if UBS AG has the unconditional and legally enforceable right to offset the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of the entity and all of the counterparties, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. Refer to Note 22 for more information on netting arrangements.

On a notional amount basis, approximately 50% of OTC interest rate contracts held as of 31 December 2020 (31 December 2019: 54%) mature within one year, 30% (31 December 2019: 28%) within one to five years and 20% (31 December 2019: 18%) after five years. Notional amounts of interest rate contracts cleared through either a central counterparty or an exchange that are legally settled on a daily basis are presented under *Other notional amounts* in the table above and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

Note 11 Financial assets measured at fair value through other comprehensive income

USD million	31.12.20	31.12.19
Financial assets measured at fair value through other comprehensive income[1]		
Debt instruments		
Government and government agencies	8,155	6,162
of which: USA	*7,727*	*5,814*
Banks	103	178
Corporates and other	0	4
Total financial assets measured at fair value through other comprehensive income	8,258	6,345
Unrealized gains, before tax	204	41
Unrealized (losses), before tax	(4)	(25)
Net unrealized gains / (losses), before tax	200	16
Net unrealized gains / (losses), after tax	151	15

1 Refer to Note 21c for more information about product type and fair value hierarchy categorization. Refer also to Note 9 and Note 20 for more information about expected credit loss measurement.

Note 12 Property, equipment and software

At historical cost less accumulated depreciation

USD million	Owned properties	Leased properties[1]	Leasehold improve-ments	IT hardware and communication equipment	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	2020	2019
Historical cost										
Balance at the beginning of the year	6,988	3,630	2,917	963	5,817	302	768	943	22,329	21,365
Additions	25	401[2]	36	90	156	24	18	1,239	1,989	1,740
Disposals / write-offs[3]	(315)	(8)	(169)	(155)	(133)	(46)	(41)	0	(867)	(554)
Reclassifications[4]	(469)	0	208	8	937	1	30	(1,305)	(590)	(391)
Foreign currency translation	633	68	84	26	46	6	31	30	924	169
Balance at the end of the year	6,863	4,091	3,077	931	6,824	287	806	907	23,785	22,329
Accumulated depreciation										
Balance at the beginning of the year	4,074	481	1,729	710	2,735	233	541	0	10,503	9,623
Depreciation	152	512	226	92	703	30	64	0	1,779	1,542
Impairment[5]	0	4	1	0	67	0	0	0	72	34
Disposals / write-offs[3]	(199)	(3)	(164)	(155)	(126)	(46)	(41)	0	(735)	(533)
Reclassifications[4]	(332)	0	6	0	0	0	0	0	(328)	(248)
Foreign currency translation	372	26	69	21	20	6	22	0	535	86
Balance at the end of the year	4,067	1,019	1,868	668	3,398	222	585	0	11,827	10,503
Net book value										
Net book value at the beginning of the year	2,914	3,149	1,188	254	3,082	69	227	943	11,826	11,742
Net book value at the end of the year	**2,796**	**3,072**	**1,209**	**264**	**3,425**	**65**	**220**	**907**[6]	**11,958**	**11,826**

1 Represents right-of-use assets recognized by UBS AG as lessee. Includes immaterial leased IT equipment. The total cash outflow for leases during 2020 was USD 652 million (2019: USD 614 million). Interest expense on lease liabilities is included within Interest expense from financial instruments measured at amortized cost and Lease liabilities are included within Other financial liabilities measured at amortized cost. Refer to Notes 3 and 19a, respectively. Also refer to Note 1 for more information about the nature of UBS AG's leasing activities. 2 In 2020, right-of-use assets included the Additions from sale-and-leaseback transactions, from which UBS AG recognized net gains of USD 140 million, included within Other income. Refer to Note 5. 3 Includes write-offs of fully depreciated assets. 4 The total net reclassification amount for the respective periods represents reclassifications to Properties and other non-current assets held for sale. 5 Impairment charges recorded in 2020 generally relate to assets that are no longer used for which the recoverable amount based on a value in use approach was determined to be zero. Includes the impairment of internally generated software resulting from a decision in the fourth quarter of 2020 to not proceed with an internal business transfer from UBS Switzerland AG to UBS AG. 6 Consists of USD 762 million related to internally generated software, USD 81 million related to Leasehold improvements and USD 63 million related to Owned properties.

Note 13 Goodwill and intangible assets

Introduction

UBS AG performs an impairment test on its goodwill assets on an annual basis or when indicators of impairment exist.

UBS AG considers Asset Management and the Investment Bank, as they are reported in Note 2a, as separate cash-generating units (CGUs), as that is the level at which the performance of investments (and the related goodwill) is reviewed and assessed by management. Given that a significant amount of goodwill in Global Wealth Management relates to the PaineWebber acquisition in 2000, which mainly affected the Americas portion of the business, this goodwill remains separately monitored by the Americas, despite the formation of Global Wealth Management in 2018. Accordingly, goodwill for Global Wealth Management is separately considered for impairment at the level of two CGUs: Americas; and Switzerland and International (consisting of EMEA, Asia Pacific and Global).

The impairment test is performed for each CGU to which goodwill is allocated by comparing the recoverable amount, based on its value in use, with the carrying amount of the respective CGU. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

As of 31 December 2020, total goodwill recognized on the balance sheet was USD 6.2 billion, of which USD 3.7 billion was carried by the Global Wealth Management Americas CGU, USD 1.2 billion was carried by the Global Wealth Management Switzerland and International CGU, and USD 1.2 billion was carried by Asset Management. The Investment Bank CGU had no goodwill. Based on the impairment testing methodology described below, UBS AG concluded that the goodwill balances as of 31 December 2020 allocated to these CGUs are not impaired.

Methodology for goodwill impairment testing

The recoverable amounts are determined using a discounted cash flow model, which has been adapted to use inputs that consider features of the banking business and its regulatory environment. The recoverable amount of a CGU is the sum of the discounted earnings attributable to shareholders from the first three forecast years and the terminal value, adjusted for the effect of the capital assumed to be needed over the next three years and to support growth beyond that period. The terminal value, which covers all periods beyond the third year, is calculated on the basis of the forecast of third-year profit, the discount rate and the long-term growth rate, as well as the implied perpetual capital growth.

The carrying amount for each CGU is determined by reference to the Group's equity attribution framework. Within that framework, which is described in the "Capital, liquidity and funding, and balance sheet" section of this report, UBS attributes equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator (both metrics include resource allocations from Group Functions to the business divisions), their goodwill and their intangible assets, as well as attributed equity related to certain CET1 deduction items. The framework is primarily used for the purpose of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a CGU requires to conduct its business and is currently considered a reasonable approximation of the carrying amount of the CGUs. The attributed equity methodology is aligned with the business planning process, the inputs from which are used in calculating the recoverable amounts of the respective CGU.

› **Refer to the "Capital, liquidity and funding, and balance sheet" section of this report for more information about the equity attribution framework**

Assumptions

Valuation parameters used within UBS AG's impairment test model are linked to external market information, where applicable. The model used to determine the recoverable amount is most sensitive to changes in the forecast earnings available to shareholders in years one to three, to changes in the discount rates and to changes in the long-term growth rate. The applied long-term growth rate is based on long-term economic growth rates for different regions worldwide. Earnings available to shareholders are estimated on the basis of forecast results, which are part of the business plan approved by the Board of Directors.

The discount rates are determined by applying a capital asset pricing model-based approach, as well as considering quantitative and qualitative inputs from both internal and external analysts and the view of management. In addition, they take into account regional differences in risk-free rates at the level of individual CGUs. Consistently, long-term growth rates are determined based on nominal or real GDP growth rate forecasts, depending on the region.

Note 13 Goodwill and intangible assets (continued)

Key assumptions used to determine the recoverable amounts of each CGU are tested for sensitivity by applying a reasonably possible change to those assumptions. Forecast earnings available to shareholders were changed by 20%, the discount rates were changed by 1.5 percentage points and the long-term growth rates were changed by 0.75 percentage points. Under all scenarios, reasonably possible changes in key assumptions did not result in an impairment of goodwill or intangible assets reported by Global Wealth Management Americas, Global Wealth Management Switzerland and International, and Asset Management.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill attributable to Global Wealth Management Americas, Global Wealth Management Switzerland and International, and Asset Management may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce IFRS equity and net profit. It would not affect cash flows and, as goodwill is required to be deducted from capital under the Basel III capital framework, no effect would be expected on UBS AG's capital ratios.

Discount and growth rates

	Discount rates		Growth rates	
In %	31.12.20	31.12.19	31.12.20	31.12.19
Global Wealth Management Americas	9.5	9.5	5.1	4.2
Global Wealth Management Switzerland and International	8.5	8.5	3.7	3.4
Asset Management	8.5	9.0	3.5	3.0
Investment Bank	11.0	11.0	4.8	4.0

	Goodwill	Intangible assets				
USD million	Total	Infrastructure[1]	Customer relationships, contractual rights and other	Total	2020	2019
Historical cost						
Balance at the beginning of the year	6,272	760	788	1,548	7,820	8,018
Additions			147[2]	147	147	11
Disposals	(158)[3]				(158)	(11)
Write-offs			(35)	(35)	(35)	(185)
Foreign currency translation	69		22	22	91	(12)
Balance at the end of the year	6,182	760	922	1,683	7,865	7,820
Accumulated amortization and impairment						
Balance at the beginning of the year		730	621	1,351	1,351	1,371
Amortization		30	25	55	55	65
Impairment[4]			2	2	2	0
Disposals					0	(8)
Write-offs			(35)	(35)	(35)	(75)
Foreign currency translation			11	11	11	(2)
Balance at the end of the year		760	624	1,385	1,385	1,351
Net book value at the end of the year	6,182	0	298	298	6,480	6,469

1 Consists of the branch network intangible asset recognized in connection with the acquisition of PaineWebber Group, Inc. 2 Relates to the establishment of a banking partnership with Banco do Brasil. Refer to Note 29 for more information. 3 Relates to the sale of a majority stake in Fondcenter AG. Refer to Note 29 for more information. 4 Impairment charges recorded in 2020 relate to assets for which the recoverable amount was determined considering their value in use (recoverable amount of the impaired intangible assets in 2020 was USD 5 million).

Note 13 Goodwill and intangible assets (continued)

The table below presents goodwill and intangible assets by CGU for the year ended 31 December 2020.

USD million	Global Wealth Management Americas	Global Wealth Management Switzerland and International	Asset Management	Investment Bank	Group Functions	Total
Goodwill						
Balance at the beginning of the year	3,719	1,198	1,354	0	0	6,272
Additions						0
Disposals			(158)			(158)
Foreign currency translation	5	34	30			69
Balance at the end of the year	3,724	1,233	1,226	0	0	6,182
Intangible assets						
Balance at the beginning of the year	92	92	0	5	7	197
Additions				147		147
Disposals						0
Amortization	(36)	(12)		(4)	(4)	(55)
Impairment	(2)					(2)
Foreign currency translation	(9)	7		12		11
Balance at the end of the year	46	88	0	161	4	298

The table below presents estimated aggregated amortization expenses for intangible assets.

USD million	Intangible assets
Estimated, aggregated amortization expenses for:	
2021	33
2022	28
2023	27
2024	24
2025	23
Thereafter	160
Not amortized due to indefinite useful life	2
Total	298

Note 14 Other assets

a) Other financial assets measured at amortized cost

USD million	31.12.20	31.12.19
Debt securities	18,801	14,141
of which: government bills / bonds	*9,789*	*8,492*
Loans to financial advisors	2,569	2,877
Fee- and commission-related receivables	2,014	1,520
Finance lease receivables	1,447	1,444
Settlement and clearing accounts	614	587
Accrued interest income	592	742
Other	1,182	1,701
Total other financial assets measured at amortized cost	27,219	23,012

b) Other non-financial assets

USD million	31.12.20	31.12.19
Precious metals and other physical commodities	6,264	4,597
Bail deposit[1]	1,418	1,293
Prepaid expenses	731	687
VAT and other tax receivables	392	436
Properties and other non-current assets held for sale	246	199
Other	323	335
Total other non-financial assets	9,374	7,547

1 Refer to item 1 in Note 18b for more information.

Note 15 Amounts due to banks, customer deposits, and funding from UBS Group AG and its subsidiaries

a) Amounts due to banks and customer deposits

USD million	31.12.20	31.12.19
Amounts due to banks	11,050	6,570
Customer deposits	527,929	450,591
of which: demand deposits	*237,604*	*176,972*
of which: retail savings / deposits	*220,898*	*168,581*
of which: time deposits	*42,457*	*63,659*
of which: fiduciary deposits	*26,970*	*41,378*
Total amounts due to banks and customer deposits	538,979	457,161

Customer deposits increased by USD 77 billion, mainly in Switzerland and the Americas, of which USD 50 billion was in Global Wealth Management and USD 27 billion in Personal & Corporate Banking, as a result of clients holding higher levels of cash, as well as currency effects. Demand deposits and retail savings / deposits together increased by USD 113 billion, partly offset by decreases of USD 36 billion in time deposits and fiduciary deposits.

b) Funding from UBS Group AG and its subsidiaries

USD million	31.12.20	31.12.19
Senior unsecured debt that contributes to total loss-absorbing capacity (TLAC)	36,611	30,105
Senior unsecured debt other than TLAC	2,939	3,389
High-trigger loss-absorbing additional tier 1 capital instruments	11,854	11,958
Low-trigger loss-absorbing additional tier 1 capital instruments	2,575	2,415
Total[1]	53,979	47,866

1 UBS AG has also recognized funding from UBS Group AG and its subsidiaries that is designated at fair value. Refer to Note 19b for more information.

Note 16 Debt issued designated at fair value

USD million	31.12.20	31.12.19
Issued debt instruments		
Equity-linked[1]	41,069	41,722
Rates-linked	11,038	16,318
Credit-linked	1,933	1,916
Fixed-rate	3,604	4,636
Commodity-linked	1,497	1,567
Other	726	432
Total debt issued designated at fair value	59,868	66,592
of which: issued by UBS AG with original maturity greater than one year[2]	*46,427*	*51,031*
of which: life-to-date own credit (gain) / loss	*233*	*82*

1 Includes investment fund unit-linked instruments issued. 2 Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. 100% of the balance as of 31 December 2020 was unsecured (31 December 2019: more than 99% of the balance was unsecured).

As of 31 December 2020 and 31 December 2019, the contractual redemption amount at maturity of debt issued designated at fair value through profit or loss was not materially different from the carrying amount.

The table below shows the residual contractual maturity of the carrying amount of debt issued designated at fair value, split between fixed-rate and floating-rate instruments based on the contractual terms, and does not consider any early redemption features. Interest rate ranges for future interest payments related to debt issued designated at fair value have not been included in the table below, as the majority of the debt instruments issued are structured products and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the point in time that each interest payment is made.

› **Refer to Note 24 for maturity information on an undiscounted cash flow basis**

Contractual maturity of carrying amount

USD million	2021	2022	2023	2024	2025	2026–2030	Thereafter	Total 31.12.20	Total 31.12.19
UBS AG[1]									
Non-subordinated debt									
Fixed-rate	4,144	1,473	1,112	512	318	227	1,623	9,409	10,368
Floating-rate	18,145	8,758	5,915	1,727	6,454	6,058	2,471	49,528	55,299
Subtotal	22,289	10,231	7,027	2,239	6,772	6,286	4,094	58,937	65,668
Other subsidiaries[2]									
Non-subordinated debt									
Fixed-rate	88	7	0	0	0	422	22	539	520
Floating-rate	41	185	126	0	0	0	39	392	404
Subtotal	129	192	126	0	0	422	61	931	924
Total	22,418	10,423	7,153	2,239	6,772	6,708	4,155	59,868	66,592

1 Comprises instruments issued by the legal entity UBS AG. 2 Comprises instruments issued by subsidiaries of UBS AG.

Note 17 Debt issued measured at amortized cost

USD million	31.12.20	31.12.19
Certificates of deposit	15,680	5,190
Commercial paper	25,472	14,413
Other short-term debt	5,515	2,235
Short-term debt[1]	46,666	21,837
Senior unsecured debt	18,483	22,356
of which: issued by UBS AG with original maturity greater than one year[2]	*18,464*	*22,349*
Covered bonds	2,796	2,633
Subordinated debt	7,744	7,431
of which: low-trigger loss-absorbing tier 2 capital instruments	*7,201*	*6,892*
of which: non-Basel III-compliant tier 2 capital instruments	*543*	*540*
Debt issued through the Swiss central mortgage institutions	9,660	8,574
Other long-term debt	3	4
Long-term debt[3]	38,685	40,998
Total debt issued measured at amortized cost[4]	85,351	62,835

1 Debt with an original contractual maturity of less than one year. 2 Issued by the legal entity UBS AG. Based on original contractual maturity without considering any early redemption features. As of 31 December 2020, 100% of the balance was unsecured (31 December 2019: 100% of the balance was unsecured). 3 Debt with an original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. 4 Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented.

UBS AG uses interest rate and foreign exchange derivatives to manage the risks inherent in certain debt instruments held at amortized cost. In some cases, UBS AG applies hedge accounting for interest rate risk as discussed in item 2j in Note 1a and Note 25. As a result of applying hedge accounting, the life-to-date adjustment to the carrying amount of debt issued was an increase of USD 761 million as of 31 December 2020 and an increase of USD 574 million as of 31 December 2019, reflecting changes in fair value due to interest rate movements.

Subordinated debt consists of unsecured debt obligations that are contractually subordinated in right of payment to all other present and future non-subordinated obligations of the respective issuing entity. All of the subordinated debt instruments outstanding as of 31 December 2020 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying amount of debt issued, split between fixed-rate and floating-rate based on the contractual terms, and does not consider any early redemption features. The effects from interest rate swaps, which are used to hedge various fixed-rate debt issuances by changing the repricing characteristics into those similar to floating-rate debt, are also not considered in the table below.

› **Refer to Note 24 for maturity information on an undiscounted cash flow basis**

Contractual maturity of carrying amount

USD million	2021	2022	2023	2024	2025	2026–2030	Thereafter	Total 31.12.20	Total 31.12.19
UBS AG[1]									
Non-subordinated debt									
Fixed-rate	40,886	5,813	4,224	0	386	0	1,309	52,618	33,696
Floating-rate	12,007	1,155	1,175	0	962	0	0	15,299	13,119
Subordinated debt									
Fixed-rate	0	2,053	0	2,693	335	2,663	0	7,744	7,431
Subtotal	52,893	9,022	5,398	2,693	1,684	2,663	1,309	75,661	54,247
Other subsidiaries[2]									
Non-subordinated debt									
Fixed-rate	1,152	928	1,038	1,106	1,211	3,580	674	9,690	8,588
Subtotal	1,152	928	1,038	1,106	1,211	3,580	674	9,690	8,588
Total	54,045	9,950	6,437	3,798	2,895	6,243	1,983	85,351	62,835

1 Comprises debt issued by the legal entity UBS AG. 2 Comprises debt issued by subsidiaries of UBS AG.

Note 18 Provisions and contingent liabilities

a) Provisions

The table below presents an overview of total provisions.

USD million	31.12.20	31.12.19
Provisions other than provisions for expected credit losses	2,534	2,825
Provisions for expected credit losses	257	114
Total provisions	2,791	2,938

The following table presents additional information for provisions other than provisions for expected credit losses.

USD million	Litigation, regulatory and similar matters[1]	Restructuring	Other[3]	Total 2020	Total 2019
Balance at the beginning of the year	2,475	99	251	2,825	3,209
Increase in provisions recognized in the income statement	233	88	134	455	376
Release of provisions recognized in the income statement	(33)	(11)	(44)	(88)	(119)
Provisions used in conformity with designated purpose	(603)	(100)	(51)	(755)	(632)
Capitalized reinstatement costs	0	0	11	11	0
Reclassifications	0	(13)	13	0	(1)
Foreign currency translation / unwind of discount	64	4	18	86	(8)
Balance at the end of the year	2,135	67[2]	332	2,534	2,825

1 Comprises provisions for losses resulting from legal, liability and compliance risks. 2 Primarily consists of provisions for onerous contracts of USD 49 million as of 31 December 2020 (31 December 2019: USD 61 million) and personnel-related restructuring provisions of USD 13 million as of 31 December 2020 (31 December 2019: USD 33 million). 3 Mainly includes provisions related to real estate, employee benefits and operational risks.

Restructuring provisions primarily relate to onerous contracts and severance payments. Onerous contracts for property are recognized when UBS AG is committed to pay for non-lease components, such as utilities, service charges, taxes and maintenance, when a property is vacated or not fully recovered from sub-tenants. Severance-related provisions are used within a short time period but potential changes in amount may be triggered when natural staff attrition reduces the number of people affected by a restructuring event and therefore the estimated costs.

Information about provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 18b. There are no material contingent liabilities associated with the other classes of provisions.

b) Litigation, regulatory and similar matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS AG and/or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant. Developments relating to a matter that occur after the relevant reporting period, but prior to the issuance of financial statements, which affect management's assessment of the provision for such matter (because, for example, the developments provide evidence of conditions that existed at the end of the reporting period), are adjusting events after the reporting period under IAS 10 and must be recognized in the financial statements for the reporting period.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either: (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard; or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in the "Provisions" table in Note 18a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require UBS to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although UBS therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, UBS believes that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions.

Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the non-prosecution agreement UBS entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its determination that UBS had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a fine and was subject to probation, which ended in January 2020.

A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require UBS to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate UBS's participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital, liquidity and funding, and balance sheet" section of this report.

Provisions for litigation, regulatory and similar matters by business division and in Group Functions[1]

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	Total 2020	Total 2019
Balance at the beginning of the year	782	113	0	255	1,325	2,475	2,827
Increase in provisions recognized in the income statement	213	0	0	19	1	233	258
Release of provisions recognized in the income statement	(24)	(6)	0	(1)	(2)	(33)	(81)
Provisions used in conformity with designated purpose	(154)	(1)	0	(52)	(395)	(603)	(518)
Reclassifications	0	0	0	(3)	3	0	0
Foreign currency translation / unwind of discount	44	10	0	10	0	64	(12)
Balance at the end of the year	861	115	0	227	932	2,135	2,475

1 Provisions, if any, for matters described in this disclosure are recorded in Global Wealth Management (item 3 and item 4) and Group Functions (item 2). Provisions, if any, for the matters described in items 1 and 6 of this disclosure are allocated between Global Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this disclosure in item 5 are allocated between the Investment Bank and Group Functions.

Note 18 Provisions and contingent liabilities (continued)

1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that the implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests.

The Swiss Federal Administrative Court ruled in 2016 that, in the administrative assistance proceedings related to a French bulk request, UBS has the right to appeal all final FTA client data disclosure orders. On 30 July 2018, the Swiss Federal Administrative Court granted UBS's appeal by holding the French administrative assistance request inadmissible. The FTA filed a final appeal with the Swiss Federal Supreme Court. On 26 July 2019, the Supreme Court reversed the decision of the Federal Administrative Court. In December 2019, the court released its written decision. The decision requires the FTA to obtain confirmation from the French authorities that transmitted data will be used only for the purposes stated in their request before transmitting any data. The stated purpose of the original request was to obtain information relating to taxes owed by account holders. Accordingly, any information transferred to the French authorities must not be passed to criminal authorities or used in connection with the ongoing case against UBS discussed in this item. In February 2020, the FTA ordered that UBS would not be granted party status in the French administrative assistance proceedings. UBS appealed this decision to the Federal Administrative Court. On 15 July, the Federal Administrative Court upheld the FTA's decision, holding that UBS will no longer have party status in these proceedings. The Swiss Federal Supreme Court has determined that it will not hear UBS's appeal of this decision.

Since 2013, UBS (France) S.A., UBS AG and certain former employees have been under investigation in France for alleged complicity in unlawful solicitation of clients on French territory, regarding the laundering of proceeds of tax fraud, and banking and financial solicitation by unauthorized persons. In connection with this investigation, the investigating judges ordered UBS AG to provide bail ("*caution*") of EUR 1.1 billion and UBS (France) S.A. to post bail of EUR 40 million, which was reduced on appeal to EUR 10 million.

A trial in the court of first instance took place from 8 October 2018 until 15 November 2018. On 20 February 2019, the court announced a verdict finding UBS AG guilty of unlawful solicitation of clients on French territory and aggravated laundering of the proceeds of tax fraud, and UBS (France) S.A. guilty of aiding and abetting unlawful solicitation and laundering the proceeds of tax fraud. The court imposed fines aggregating EUR 3.7 billion on UBS AG and UBS (France) S.A. and awarded EUR 800 million of civil damages to the French state. UBS has appealed the decision. Under French law, the judgment is suspended while the appeal is pending. The trial originally scheduled for 2 June 2020 has been rescheduled to 8-24 March 2021. The Court of Appeal will retry the case de novo as to both the law and the facts, and the fines and penalties can be greater than or less than those imposed by the court of first instance. A subsequent appeal to the Cour de Cassation, France's highest court, is possible with respect to questions of law.

UBS believes that based on both the law and the facts the judgment of the court of first instance should be reversed. UBS believes it followed its obligations under Swiss and French law as well as the European Savings Tax Directive. Even assuming liability, which it contests, UBS believes the penalties and damage amounts awarded greatly exceed the amounts that could be supported by the law and the facts. In particular, UBS believes the court incorrectly based the penalty on the total regularized assets rather than on any unpaid taxes on those assets for which a fraud has been characterized and further incorrectly awarded damages based on costs that were not proven by the civil party. Notwithstanding that UBS believes it should be acquitted, our balance sheet at 31 December 2020 reflected provisions with respect to this matter in an amount of EUR 450 million (USD 549 million at 31 December 2020). The wide range of possible outcomes in this case contributes to a high degree of estimation uncertainty. The provision reflected on our balance sheet at 31 December 2020 reflects our best estimate of possible financial implications, although it is reasonably possible that actual penalties and civil damages could exceed the provision amount.

In 2016, UBS was notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud, of banking and financial solicitation by unauthorized persons, and of serious tax fraud.

Our balance sheet at 31 December 2020 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages.

In November 2018, the DOJ filed a civil complaint in the District Court for the Eastern District of New York. The complaint seeks unspecified civil monetary penalties under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 related to UBS's issuance, underwriting and sale of 40 RMBS transactions in 2006 and 2007. UBS moved to dismiss the civil complaint on 6 February 2019. On 10 December 2019, the district court denied UBS's motion to dismiss.

Our balance sheet at 31 December 2020 reflected a provision with respect to matters described in this item 2 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier. Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts totaling approximately EUR 2.1 billion, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee).

A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of approximately USD 125 million of payments alleged to be fraudulent conveyances and preference payments. In 2016, the bankruptcy court dismissed these claims against the UBS entities. In February 2019, the Court of Appeals reversed the dismissal of the BMIS Trustee's remaining claims, and the US Supreme Court subsequently denied a petition seeking review of the Court of Appeals' decision. The case has been remanded to the Bankruptcy Court for further proceedings.

4. Puerto Rico

Declines since 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) led to multiple regulatory inquiries, which in 2014 and 2015, led to settlements with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico, the US Securities and Exchange Commission (SEC) and the Financial Industry Regulatory Authority in relation to their examinations of UBS's operations.

Since that time UBS has received customer complaints and arbitrations with aggregate claimed damages of USD 3.4 billion, of which claims with aggregate claimed damages of USD 2.8 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims have been filed by clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and/or who used their UBS account assets as collateral for UBS non-purpose loans; customer complaint and arbitration allegations include fraud, misrepresentation and unsuitability of the funds and of the loans.

A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied and a request for permission to appeal that ruling was denied by the Puerto Rico Supreme Court.

In 2011, a purported derivative action was filed on behalf of the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. In 2016, the court granted the System's request to join the action as a plaintiff, but ordered that plaintiffs must file an amended complaint. In 2017, the court denied defendants' motion to dismiss the amended complaint. In 2020, the court denied plaintiffs' motion for summary judgment.

Note 18 Provisions and contingent liabilities (continued)

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments on Puerto Rico bonds. In 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board has imposed a stay on the exercise of certain creditors' rights. In 2017, the oversight board placed certain of the bonds into a bankruptcy-like proceeding under the supervision of a Federal District Judge.

In May 2019, the oversight board filed complaints in Puerto Rico federal district court bringing claims against financial, legal and accounting firms that had participated in Puerto Rico municipal bond offerings, including UBS, seeking a return of underwriting and swap fees paid in connection with those offerings. UBS estimates that it received approximately USD 125 million in fees in the relevant offerings.

In August 2019, and February and November 2020, four US insurance companies that insured issues of Puerto Rico municipal bonds sued UBS and several other underwriters of Puerto Rico municipal bonds. The actions collectively seek recovery of an aggregate of USD 955 million in damages from the defendants. The plaintiffs in these cases claim that defendants failed to reasonably investigate financial statements in the offering materials for the insured Puerto Rico bonds issued between 2002 and 2007, which plaintiffs argue they relied upon in agreeing to insure the bonds notwithstanding that they had no contractual relationship with the underwriters.

Our balance sheet at 31 December 2020 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

5. Foreign exchange, LIBOR and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Beginning in 2013, numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. As a result of these investigations, UBS entered into resolutions with the UK Financial Conduct Authority (FCA), the US Commodity Futures Trading Commission (CFTC), FINMA, the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking, the DOJ's Criminal Division and the European Commission. UBS has ongoing obligations under the Cease and Desist Order of the Federal Reserve Board and the Office of the Comptroller of the Currency (as successor to the Connecticut Department of Banking), and to cooperate with relevant authorities and to undertake certain remediation measures. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Investigations relating to foreign exchange matters by certain authorities remain ongoing notwithstanding these resolutions.

Foreign exchange-related civil litigation: Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. UBS has resolved US federal court class actions relating to foreign currency transactions with the defendant banks and persons who transacted in foreign exchange futures contracts and options on such futures under a settlement agreement that provides for UBS to pay an aggregate of USD 141 million and provide cooperation to the settlement classes. Certain class members have excluded themselves from that settlement and have filed individual actions in US and English courts against UBS and other banks, alleging violations of US and European competition laws and unjust enrichment.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of persons and businesses in the US who directly purchased foreign currency from the defendants and alleged co-conspirators for their own end use. In March 2017, the court granted UBS's (and the other banks') motions to dismiss the complaint. The plaintiffs filed an amended complaint in August 2017. In March 2018, the court denied the defendants' motions to dismiss the amended complaint.

In 2017, two putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of persons and entities who had indirectly purchased foreign exchange instruments from a defendant or co-conspirator in the US, and a consolidated complaint was filed in June 2017. In March 2018, the court dismissed the consolidated complaint. In October 2018, the court granted plaintiffs' motion seeking leave to file an amended complaint. UBS and 11 other banks have reached an agreement with the plaintiffs to settle the class action for a total of USD 10 million. The court approved the settlement in November 2020.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office, the Monetary Authority of Singapore, the Hong Kong Monetary Authority, FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. UBS reached settlements or otherwise concluded investigations relating to benchmark interest rates with the investigating authorities. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation measures with respect to benchmark interest rate submissions. UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and the Swiss Competition Commission (WEKO), in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO, as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are a number of other actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. The complaints allege manipulation, through various means, of certain benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, SGD SIBOR and SOR and Australian BBSW, and seek unspecified compensatory and other damages under varying legal theories.

USD LIBOR class and individual actions in the US: In 2013 and 2015, the district court in the USD LIBOR actions dismissed, in whole or in part, certain plaintiffs' antitrust claims, federal racketeering claims, CEA claims, and state common law claims. Although the Second Circuit vacated the district court's judgment dismissing antitrust claims, the district court again dismissed antitrust claims against UBS in 2016. Certain plaintiffs have appealed that decision to the Second Circuit. Separately, in 2018, the Second Circuit reversed in part the district court's 2015 decision dismissing certain individual plaintiffs' claims and certain of these actions are now proceeding. UBS entered into an agreement in 2016 with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received final court approval. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs sought permission to appeal that ruling to the Second Circuit. In July 2018, the Second Circuit denied the petition to appeal of the class of USD lenders and in November 2018 denied the petition of the USD exchange class. In December 2019, UBS entered into an agreement with representatives of the class of USD lenders to settle their USD LIBOR class action. The agreement has received final court approval. In January 2019, a putative class action was filed in the District Court for the Southern District of New York against UBS and numerous other banks on behalf of US residents who, since 1 February 2014, directly transacted with a defendant bank in USD LIBOR instruments. The complaint asserts antitrust claims. The defendants moved to dismiss the complaint in August 2019. On 26 March 2020 the court granted defendants' motion to dismiss the complaint in its entirety. Plaintiffs have appealed the dismissal. In August 2020, an individual action was filed in the Northern District of California against UBS and numerous other banks alleging that the defendants conspired to fix the interest rate used as the basis for loans to consumers by jointly setting the USD LIBOR rate and monopolized the market for LIBOR-based consumer loans and credit cards.

Other benchmark class actions in the US: In 2014, 2015 and 2017, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiffs' claims, including plaintiffs' federal antitrust and racketeering claims. In August 2020, the court granted defendants' motion for judgment on the pleadings and dismissed the lone remaining claim in the action as impermissibly extraterritorial. Plaintiffs have appealed. In 2017, the court dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds. In April 2020, the appeals court reversed the dismissal and in August 2020 plaintiffs in that action filed an amended complaint. Defendants moved to dismiss the amended complaint in October 2020. In 2017, the court dismissed the CHF LIBOR action on standing grounds and failure to state a claim. Plaintiffs filed an amended complaint following the dismissal, and the court granted a renewed motion to dismiss in September 2019. Plaintiffs have appealed. Also in 2017, the court in the EURIBOR lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs have appealed. In October 2018, the court in the SIBOR / SOR action dismissed all but one of plaintiffs' claims against UBS. Plaintiffs filed an amended complaint following the dismissal, and the courts granted a renewed motion to dismiss in July 2019. Plaintiffs have appealed. In November 2018, the court in the BBSW lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Following that dismissal, plaintiffs filed an amended complaint in April 2019, which UBS and other defendants named in the amended complaint moved to dismiss. In February 2020, the court in the BBSW action granted in part and denied in part defendants' motions to dismiss the amended complaint. In August 2020, UBS and other BBSW defendants joined a motion for judgment on the pleadings. The court dismissed the GBP LIBOR action in August 2019. Plaintiffs have appealed.

Government bonds: Putative class actions have been filed since 2015 in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. A consolidated complaint was filed in 2017 in the US District Court for the Southern District of New York alleging that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction and in the secondary market and asserting claims under the antitrust laws and for unjust enrichment. Defendants' motions to dismiss the consolidated complaint are pending. Similar class actions have been filed concerning European government bonds and other government bonds.

UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above, our balance sheet at 31 December 2020 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 18 Provisions and contingent liabilities (continued)

6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver. FINMA issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 December 2020 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 19 Other liabilities

a) Other financial liabilities measured at amortized cost

USD million	31.12.20	31.12.19
Other accrued expenses	1,508	1,697
Accrued interest expenses	1,382	1,596
Settlement and clearing accounts	1,181	1,368
Lease liabilities	3,821	3,858
Other[1]	2,530	1,854
Total other financial liabilities measured at amortized cost	**10,421**	**10,373**

1 In 2020 UBS AG modified the conditions for continued vesting of certain outstanding deferred compensation awards for qualifying employees. Refer to Note 1b for more information.

b) Other financial liabilities designated at fair value

USD million	31.12.20	31.12.19
Financial liabilities related to unit-linked investment contracts	20,975	28,145
Securities financing transactions	7,317	5,742
Over-the-counter debt instruments	2,060	2,022
Funding from UBS Group AG and its subsidiaries	1,375	217
Other	46	31
Total other financial liabilities designated at fair value	**31,773**	**36,157**
of which: life-to-date own credit (gain) / loss	*148*	*6*

c) Other non-financial liabilities

USD million	31.12.20	31.12.19
Compensation-related liabilities[1]	4,776	4,339
of which: financial advisor compensation plans[1]	*1,497*	*1,502*
of which: other compensation plans	*2,034*	*1,750*
of which: net defined benefit liability	*711*	*629*
of which: other compensation-related liabilities[2]	*534*	*458*
Deferred tax liabilities	558	311
Current tax liabilities	943	780
VAT and other tax payables	470	445
Deferred income	212	134
Other	61	202
Total other non-financial liabilities	**7,018**	**6,211**

1 Comparative-period information has been restated. Refer to Note 1b for more information. 2 Includes liabilities for payroll taxes and untaken vacation.

Additional information

Note 20 Expected credit loss measurement

a) Expected credit losses in the period

Total net credit loss expenses were USD 695 million in 2020, reflecting net credit loss expenses of USD 266 million related to stage 1 and 2 positions and USD 429 million net credit loss expenses related to credit-impaired (stage 3) positions.

Stage 1 and 2 net credit loss expenses of USD 266 million were primarily driven by a net expense of USD 200 million from updating the forward-looking scenarios and their associated weightings, factoring in updated macroeconomic assumptions to reflect the effects of the COVID-19 pandemic, with approximately half from the baseline scenario and half from the severe downside scenario. The main drivers included updated GDP and unemployment assumptions in Switzerland and the US, primarily impacting *Large corporate clients* and, to a lesser extent, *Private clients with mortgages*, *Real estate financing* and *SME clients*. These scenario updates impacted remeasurements for stage 1 and 2 positions without stage transfers and triggered exposure movements between stages, primarily from stage 1 to stage 2 as probabilities of default increased.

In addition to the scenario related effects, stage 1 and 2 expenses of USD 73 million arose from new transactions, net of releases from derecognized transactions, primarily from *Large corporate clients* and *SME clients*. A further USD 32 million stage 1 and 2 net release of expenses resulted from a number of model updates, primarily impacting *Financial intermediaries*, *Real estate financing* and *SME clients*. The remaining stage 1 and 2 expenses of USD 24 million mainly reflect the effects of post-model adjustments for selected exposures to Swiss *SME clients*, as well as remeasurements within the loan book, mainly in the Investment Bank.

The changes in the macroeconomic environment in the second half of 2020 generally included more optimistic forward-looking assumptions for both the baseline and severe downside scenarios compared with those applied in the first half of the year. Management applied a post-model expense adjustment of USD 117 million to offset the stage 1 and 2 releases that would have otherwise arisen, deeming them to be premature given the high degree of prevailing uncertainties and the wide range of reasonable possible outcomes.

› **Refer to Note 20b for more information**

Stage 3 net expenses of USD 429 million were recognized across a number of defaulted positions. In the Investment Bank, stage 3 net expenses of USD 217 million were recognized, of which USD 81 million related to an exposure to a client in the travel sector. In Personal & Corporate Banking, stage 3 net expenses of USD 128 million were recognized, of which USD 59 million related to a case of fraud at a commodity trade finance counterparty, which affected a number of lenders, including UBS AG. In Global Wealth Management, stage 3 net expenses of USD 40 million were recognized, primarily across a small number of collateralized and securities-based lending positions. In Group Functions, stage 3 expenses of USD 42 million were recognized from one energy-related exposure in the Non-core and Legacy Portfolio.

Credit loss (expense) / release

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	Total
For the year ended 31.12.20						
Stages 1 and 2	(48)	(129)	0	(88)	0	(266)
Stage 3	(40)	(128)	(2)	(217)	(42)	(429)
Total credit loss (expense) / release	(88)	(257)	(2)	(305)	(42)	(695)
For the year ended 31.12.19						
Stages 1 and 2	3	23	0	(4)	0	22
Stage 3	(23)	(44)	0	(26)	(7)	(100)
Total credit loss (expense) / release	**(20)**	**(21)**	**0**	**(30)**	**(7)**	**(78)**
For the year ended 31.12.18						
Stages 1 and 2	0	0	0	(9)	0	(9)
Stage 3	(15)	(56)	0	(29)	(8)	(109)
Total credit loss (expense) / release	**(15)**	**(56)**	**0**	**(38)**	**(8)**	**(117)**

Note 20 Expected credit loss measurement (continued)

b) Changes to ECL models, scenarios, scenario weights and key inputs

Refer to Note 1a for information about the principles governing ECL models, scenarios, scenario weights and key inputs applied.

During 2020, management carefully considered guidance issued by supervisory authorities concerning the interpretation of key elements of IFRS 9, *Financial instruments*, in the context of COVID-19.

Governance

Comprehensive cross-functional and cross-divisional governance processes are in place and used to discuss and approve scenario updates and weights, to assess whether significant increases in credit risk resulted in stage transfers, to review model outputs and to reach conclusions regarding post-model adjustments.

Model changes

During 2020, the probability of default (PD) and loss given default (LGD) models applied to *Financial intermediaries*, *Large corporate clients*, *Real estate financing* and *SME clients* were revised to reflect updates to PD and LGD risk drivers and macroeconomic dependencies.

The model updates resulted in a USD 32 million decrease in ECL allowances, primarily in Personal & Corporate Banking across *Financial intermediaries*, *Real estate financing* and *SME clients*.

Scenario and key input updates

During 2020, the four scenarios and related macroeconomic factors that were applied at the end of 2019 were reviewed in light of the economic and political conditions and prevailing uncertainties through a series of governance meetings, with input from UBS AG risk and finance experts across the regions and business divisions. Scenario assumptions are benchmarked against external data, e.g., from Bloomberg Consensus, Oxford Economics and the International Monetary Fund World Economic Outlook (IMF WEO). The hypothetical scenarios, in particular the upside and mild downside scenarios, were viewed less plausible. Given the considerable uncertainties associated with the economic conditions, an exceptional interim design of these scenarios was not deemed appropriate. Therefore, management concluded that the probability weights of the upside and the mild downside scenarios would be set to zero.

The baseline scenario, which is aligned to the economic and market assumptions used for UBS AG's business planning purposes, and the severe downside scenario, which is the Group's binding stress scenario, were updated throughout 2020 using the most recent available macroeconomic and market information.

The baseline scenario updates during the first half of 2020 assumed a deterioration of GDP in relevant markets, especially in the US and in Switzerland, increasing unemployment, including a sharp increase in the US to previously unseen levels, lower equity prices and higher market volatility. House prices were assumed to be largely flat in Switzerland over 2020 but to decrease in the US. Overall, only modest economic improvements were expected from the second half of 2020. The severe downside assumptions were considered to be consistent with assumptions for COVID-19-related disruption but to a significantly more adverse degree than what was considered under the baseline scenario, with a full year contraction expected to continue into 2021 and only a moderate recovery starting from the end of 2021.

Improvements in macroeconomic forward-looking assumptions started from the third quarter 2020, with the fourth quarter 2020 in particular including more optimistic assumptions for the baseline, with increased GDP growth forecasts and lower unemployment levels in the US and in Switzerland in particular, given improvements in economic activity as well as greater optimism regarding the availability and effective distribution of vaccines and continued government support. In addition, the assumptions for the severe downside scenario were made less pessimistic in the second half of 2020.

The table on the following page details the key assumptions for the baseline and severe downside scenarios applied as of 31 December 2020. The outlook of the one-year and three-year cumulative GDP growth rates in the baseline are significantly higher than those seen at the end of 2019, as the economy is expected to recover from the sharp contractions seen in mid-2020. However, GDP levels are expected to remain below 31 December 2019 levels until 2022 in the US and Switzerland, and until 2023 in the Eurozone. The GDP growth rates in the severe downside scenario are also higher, to reflect the recovery from the weaker starting levels. Under the baseline scenario, US unemployment is expected to decline to 5.5% by the end of the first year and to 4.5% by the end of the third year. Unemployment rates in the Eurozone and Switzerland are expected to rise modestly in the first year in the baseline scenario but to recover by the end of the third year. The severe downside scenario includes marked increases in unemployment.

Scenario weights and post-model adjustments

As a consequence of the exceptional circumstances and prevailing uncertainties during 2020 and as at 31 December 2020, the weight allocations shifted significantly since 2019, with the baseline scenario weighted at 70% and the severe downside scenario at 30% through the end of the third quarter of 2020, to best reflect management's sentiment regarding the boundaries of economic outcomes. During the fourth quarter of 2020, changes in the macro-economic environment generally included more optimistic forward-looking assumptions as stated above. However, developments as at 31 December 2020, including an increase in infection and hospitalization rates, as well as strict lockdowns in many jurisdictions, led to a continued high level of uncertainty in relation to the effects of the pandemic and its impact on the global economy. These developments gave rise to questions around whether the assumptions will play out as forecasted. As a consequence, in the fourth quarter 2020, management decreased the weight placed on the baseline scenario from 70% to 60% and increased the weight placed on the severe downside scenario from 30% to 40%, and applied additionally a post-model adjustment of USD 117 million to offset the stage 1 and 2 ECL releases which would have otherwise arisen from the scenario update effects.

ECL scenario	Assigned weights in %	
	31.12.20	31.12.19
Upside	0.0	7.5
Baseline	60.0	42.5
Mild downside	0.0	35.0
Severe downside	40.0	15.0

Scenario assumptions	One year		Three years cumulative	
31.12.20	Baseline	Severe downside	Baseline	Severe downside
Real GDP growth (% change)				
United States	2.7	(5.9)	9.1	(3.8)
Eurozone	2.5	(8.7)	9.9	(10.3)
Switzerland	3.3	(6.6)	9.0	(5.7)
Consumer price index (% change)				
United States	1.7	(1.2)	5.5	0.4
Eurozone	1.4	(1.3)	3.9	(1.7)
Switzerland	0.3	(1.8)	0.9	(1.6)
Unemployment rate (end-of-period level, %)[1]				
United States	5.5	12.1	4.5	9.9
Eurozone	9.5	14.1	8.0	16.4
Switzerland	3.8	6.1	3.2	6.8
Fixed income: 10-year government bonds (change in yields, basis points)				
USD	22.0	(50.0)	46.0	(15.0)
EUR	4.0	(35.0)	21.0	(25.0)
CHF	13.0	(70.0)	31.0	(35.0)
Equity indices (% change)				
S&P 500	(2.9)	(50.2)	(1.7)	(40.1)
EuroStoxx 50	3.8	(57.6)	13.5	(50.4)
SPI	(0.8)	(53.6)	5.8	(44.2)
Swiss real estate (% change)				
Single-Family Homes	3.4	(17.0)	7.1	(30.0)
Other real estate (% change)				
United States (S&P / Case-Shiller)	2.5	(15.3)	9.2	(28.7)
Eurozone (House Price Index)	1.1	(22.9)	7.2	(35.4)

1 2020 unemployment rate is presented as an end-of-period level. 2019 unemployment rate was presented as a change in levels. The 2020 change in level would have been: One year shock in the baseline scenario: United States: -3.5%, Eurozone: 0.4% and Switzerland: 0.4% and for the global crisis scenario: United States: 3.1%, Eurozone: 5.0% and Switzerland: 2.6%. Three year shock in the baseline scenario: United States: -4.5%, Eurozone: -1.2% and Switzerland: -0.2% and for the global crisis scenario: United States: 0.9%, Eurozone: 7.2% and Switzerland: 3.4%

Note 20 Expected credit loss measurement (continued)

Scenario assumptions	One year		Three years cumulative	
31.12.19	Baseline	Severe downside	Baseline	Severe downside
Real GDP growth (% change)				
United States	1.9	(6.4)	6.4	(4.3)
Eurozone	1.0	(9.1)	2.8	(10.8)
Switzerland	1.5	(7.0)	4.8	(6.2)
Consumer price index (% change)				
United States	1.8	(1.2)	6.2	0.4
Eurozone	1.3	(1.3)	4.3	(1.7)
Switzerland	0.8	(1.8)	2.7	(1.6)
Unemployment rate (change, percentage points)				
United States	(0.4)	5.7	(0.5)	5.6
Eurozone	(0.1)	5.6	(0.2)	7.9
Switzerland	0.1	2.6	0.3	3.6
Fixed income: 10-year government bonds (change in yields, basis points)				
USD	0.2	(100.0)	10.1	(75.0)
EUR	8.4	(30.0)	28.2	(20.0)
CHF	9.5	(70.0)	30.0	(35.0)
Equity indices (% change)				
S&P 500	3.5	(53.0)	9.5	(42.9)
EuroStoxx 50	0.5	(60.0)	4.4	(52.9)
SPI	1.4	(56.2)	5.3	(46.8)
Swiss real estate (% change)				
Single-Family Homes	0.1	(15.2)	2.3	(27.0)
Other real estate (% change)				
United States (S&P / Case-Shiller)	4.0	(13.3)	16.7	(23.4)
Eurozone (House Price Index)	1.2	(23.0)	2.2	(33.2)

c) Development of ECL allowances and provisions

The ECL allowances and provisions recognized in the period are impacted by a variety of factors, such as:
- origination of new instruments during the period;
- effect of passage of time as the ECLs on an instrument for the remaining lifetime decrease (all other factors remaining the same);
- discount unwind within ECLs as it is measured on a present value basis;
- derecognition of instruments in the period;
- change in individual asset quality of instruments;
- effect of updating forward-looking scenarios and the respective weights;
- movements from a maximum 12-month ECL to the recognition of lifetime ECLs (and vice versa) following transfers between stages 1 and 2;
- movements from stages 1 and 2 to stage 3 (credit-impaired status) when default has become certain and probability of default (PD) increases to 100% (or vice versa);
- changes in models or updates to model parameters; and
- foreign exchange translations for assets denominated in foreign currencies and other movements.

Note 20 Expected credit loss measurement (continued)

The following table explains the changes in the ECL allowances and provisions for on- and off-balance sheet financial instruments and other credit lines in scope of ECL requirements between the beginning and the end of the period due to the factors listed on the previous page.

Development of ECL allowances and provisions

USD million	Total	Stage 1	Stage 2	Stage 3
Balance as of 31 December 2019	(1,029)	(181)	(160)	(688)
Net movement from new and derecognized transactions[1]	(28)	(90)	17	46
of which: Private clients with mortgages	*(2)*	*(3)*	*2*	*0*
of which: Real estate financing	*(3)*	*(5)*	*2*	*0*
of which: Large corporate clients	*(32)*	*(29)*	*(4)*	*0*
of which: SME clients	*(16)*	*(14)*	*(3)*	*0*
of which: Other	*26*	*(39)*	*20*	*46*
of which: Securities financing transactions REIT	*32*	*(1)*	*15*	*17*
of which: Loans to financial advisors	*9*	*(1)*	*9*	*0*
of which: Lombard loans	*23*	*(6)*	*0*	*29*
of which Financial intermediaries	*(20)*	*(15)*	*(5)*	*0*
Remeasurements with stage transfers[2]	(427)	45	(134)	(338)
of which: Private clients with mortgages	*(19)*	*(2)*	*(17)*	*0*
of which: Real estate financing	*(6)*	*3*	*(9)*	*0*
of which: Large corporate clients	*(224)*	*34*	*(83)*	*(175)*
of which: SME clients	*(43)*	*(1)*	*(11)*	*(31)*
of which: Other	*(134)*	*11*	*(14)*	*(131)*
of which: Securities financing transactions REIT	*(36)*	*0*	*(18)*	*(19)*
of which: Loans to financial advisors	*(12)*	*7*	*(7)*	*(11)*
of which: Lombard loans	*(36)*	*0*	*0*	*(36)*
of which Commodity Trade Finance	*(59)*	*0*	*0*	*(59)*
Remeasurements without stage transfers[3]	(271)	(88)	(47)	(136)
of which: Private clients with mortgages	*(34)*	*(19)*	*(8)*	*(7)*
of which: Real estate financing	*(14)*	*(4)*	*(11)*	*1*
of which: Large corporate clients	*(149)*	*(53)*	*(17)*	*(79)*
of which: SME clients	*(13)*	*0*	*(7)*	*(6)*
of which: Other	*(60)*	*(11)*	*(4)*	*(44)*
of which: Loans to financial advisors	*(18)*	*(12)*	*(3)*	*(3)*
of which: Lombard loans	*(3)*	*6*	*0*	*(9)*
of which: Credit cards	*(12)*	*0*	*0*	*(12)*
Model changes[4]	32	21	11	0
Total ECL allowance movements with profit or loss impact[5]	(694)	(112)	(154)	(429)
Write-offs, FX and other movements (without profit or loss impact)[6]	254	(14)	(19)	287
Balance as of 31 December 2020	(1,468)	(306)	(333)	(829)

1 Represents the increase and decrease in allowances and provisions resulting from financial instruments (including guarantees and facilities) that were newly originated, purchased or renewed and from the final derecognition of loans or facilities on their maturity date or earlier. 2 Represents the remeasurement between 12-month and lifetime ECL due to stage transfers. 3 Represents the change in allowances and provisions related to changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions, changes in the exposure profile, PD and LGD changes, and unwinding of the time value. 4 Represents the change in the allowances and provisions related to changes in models and methodologies. 5 Includes ECL movements from new and derecognized transactions, remeasurement changes, model and methodology changes. 6 Represents the decrease in allowances and provisions resulting from write-offs of the ECL allowance against the gross carrying amount when all or part of a financial asset is deemed uncollectible or forgiven and movements in foreign exchange rates.

In 2020, ECL allowances and provisions increased by USD 694 million from net credit loss expenses impacting profit or loss:

– a USD 28 million net increase from new and derecognized transactions that resulted from a USD 90 million stage 1 increase primarily in *Large corporate clients* and *SME clients*, offset by a USD 63 million net release from stage 2 and 3 transactions, driven by transactions that were terminated before their contractual maturity, mainly in *Lombard lending* and *Securities financing transactions Real estate investment trusts (SFT-REITs)*;
– a USD 697 million net increase from book quality movements that resulted from a USD 427 million net increase from transactions moving from stages 1 and 2 into stages 2 and 3, respectively, of which approximately half related to *Large corporate clients,* with further substantial effects from *Commodity trade finance, SME clients, SFT REITs* and *Lombard loans*, and USD 271 million from remeasurements without stage transfers, approximately half relating to *Large corporate clients*, and another significant portion relating to real estate related lending, primarily due to the updates of macroeconomic factors;
– a USD 32 million net decrease that resulted from a number of model revisions, primarily impacting *Financial intermediaries*, *Real estate financing* and *SME clients*, from updates to the PD and LGD risk drivers and macroeconomic dependencies.

In addition to the movements impacting profit or loss, allowances decreased by USD 346 million as a result of a number of write offs. A further USD 75 million allowance increase resulted from foreign exchange movements, almost entirely due to the Swiss franc strengthening against the US dollar.

Note 20 Expected credit loss measurement (continued)

The following table explains the changes in the ECL allowances and provisions for on- and off-balance sheet financial instruments and other credit lines in scope of ECL requirements between the beginning and the end of the prior period due to the factors listed earlier in this note.

USD million	Total	Stage 1	Stage 2	Stage 3
Balance as of 31 December 2018	(1,054)	(176)	(183)	(695)
Net movement from new and derecognized transactions[1]	(53)	(66)	10	3
of which: Private clients with mortgages	*(1)*	*(4)*	*3*	*0*
of which: Real estate financing	*(3)*	*(5)*	*2*	*0*
of which: Large corporate clients	*(6)*	*(14)*	*8*	*0*
of which: SME clients	*(16)*	*(14)*	*(2)*	*0*
Remeasurements with stage transfers[2]	(125)	14	(35)	(105)
of which: Private clients with mortgages	*(5)*	*1*	*(5)*	*(1)*
of which: Real estate financing	*5*	*4*	*1*	*0*
of which: Large corporate clients	*(45)*	*4*	*(11)*	*(38)*
of which: SME clients	*(64)*	*2*	*(11)*	*(55)*
Remeasurements without stage transfers[3]	73	31	41	1
of which: Private clients with mortgages	*22*	*2*	*30*	*(9)*
of which: Real estate financing	*1*	*0*	*0*	*1*
of which: Large corporate clients	*(24)*	*(10)*	*0*	*(14)*
of which: SME clients	*35*	*9*	*10*	*17*
Model changes[4]	26	17	9	0
Total ECL allowance movements with profit or loss impact[5]	(78)	(4)	25	(100)
Write-offs, FX and other movements (without profit or loss impact)[6]	105	(1)	(2)	108
Balance as of 31 December 2019	(1,029)	(181)	(160)	(688)

1 Represents the increase and decrease in allowances and provisions resulting from financial instruments (including guarantees and facilities) that were newly originated, purchased or renewed and from the final derecognition of loans or facilities on their maturity date or earlier. 2 Represents the remeasurement between 12-month and lifetime ECL due to stage transfers. 3 Represents the change in allowances and provisions related to changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions, changes in the exposure profile, PD and LGD changes, and unwinding of the time value. 4 Represents the change in the allowances and provisions related to changes in models and methodologies. 5 To align to the table format for the 2020 ECL allowance and provision movement, UBS has adjusted the 2019 table format. Includes ECL movements from new and derecognized transactions, remeasurement changes, model and methodology changes. 6 Represents the decrease in allowances and provisions resulting from write-offs of the ECL allowance against the gross carrying amount when all or part of a financial asset is deemed uncollectible or forgiven and movements in foreign exchange rates.

As explained in Note 1a, the assessment of an SICR considers a number of qualitative and quantitative factors to determine whether a stage transfer between stage 1 and stage 2 is required. The primary assessment considers changes in probability of default (PD) based on rating analyses and economic outlook. Additionally, UBS AG considers counterparties that have moved to a credit watch list and those with payments that are at least 30 days past due.

Stage 2 classification by trigger

	ECL allowances / provisions as of 31 December 2020			
USD million	Stage 2	*of which: PD layer*	*of which: watch list*	*of which: ≥30 days past due*
On-and off-balance sheet	(333)	*(252)*	*(41)*	*(40)*
of which: Private clients with mortgages	*(93)*	*(83)*	*0*	*(11)*
of which: Real estate financing	*(53)*	*(45)*	*(2)*	*(6)*
of which: Large corporate clients	*(110)*	*(89)*	*(20)*	*0*
of which: SME clients	*(38)*	*(16)*	*(16)*	*(5)*
of which: Financial intermediaries and hedge funds	*(19)*	*(19)*	*0*	*0*
of which: Loans to financial advisors	*(5)*	*0*	*(1)*	*(4)*
of which: Credit cards	*(14)*	*0*	*0*	*(14)*
of which: Other	*(2)*	*0*	*(2)*	*0*

Note 20 Expected credit loss measurement (continued)

d) Maximum exposure to credit risk

The tables below and on the following page provide UBS AG's maximum exposure to credit risk for financial instruments subject to ECL requirements and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The "Risk management and control" section of this report describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS.

Maximum exposure to credit risk

	31.12.20								
		Collateral[1]				Credit enhancements[1]			
USD billion	Maximum exposure to credit risk	Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral[2]	Netting	Credit derivative contracts	Guarantees	Exposure to credit risk after collateral and credit enhancements
Financial assets measured at amortized cost on the balance sheet									
Cash and balances at central banks	158.2								158.2
Loans and advances to banks[3]	15.3		0.1						15.2
Receivables from securities financing transactions	74.2	0.0	67.1		7.0				0.0
Cash collateral receivables on derivative instruments[4, 5]	32.7					21.1			11.6
Loans and advances to customers[6]	381.0	27.0	118.2	194.6	21.7		0.0	4.4	15.1
Other financial assets measured at amortized cost	27.2	0.1	0.2	0.0	1.3				25.5
Total financial assets measured at amortized cost	688.7	27.2	185.7	194.6	30.1	21.1	0.0	4.4	225.6
Financial assets measured at fair value through other comprehensive income – debt	8.3								8.3
Total maximum exposure to credit risk reflected on the balance sheet in scope of ECL	697.0	27.2	185.7	194.6	30.1	21.1	0.0	4.4	233.9
Guarantees[7]	17.0	0.7	5.0	0.2	1.7			2.5	7.0
Loan commitments[7]	41.2	0.0	4.2	2.1	6.8		0.4	2.4	25.3
Forward starting transactions, reverse repurchase and securities borrowing agreements	3.2		3.2						0.0
Committed unconditionally revocable credit lines	42.0	0.1	10.3	6.2	2.7			0.0	22.7
Total maximum exposure to credit risk not reflected on the balance sheet, in scope of ECL	103.5	0.8	22.7	8.5	11.2	0.0	0.4	4.9	54.9

	31.12.19								
		Collateral[1]				Credit enhancements[1]			
USD billion	Maximum exposure to credit risk	Cash collateral received	Collateralized by securities	Secured by real estate	Other collateral[2]	Netting	Credit derivative contracts	Guarantees	Exposure to credit risk after collateral and credit enhancements
Financial assets measured at amortized cost on the balance sheet									
Cash and balances at central banks	107.1								107.1
Loans and advances to banks[3]	12.4		0.0						12.3
Receivables from securities financing transactions	84.2		77.6		5.8				0.8
Cash collateral receivables on derivative instruments[4, 5]	23.3					14.4			8.9
Loans and advances to customers[6]	328.0	19.4	101.4	174.7	17.1			1.1	14.3
Other financial assets measured at amortized cost	23.0	0.1	0.4	0.0	1.3				21.2
Total financial assets measured at amortized cost	**578.0**	**19.5**	**179.4**	**174.7**	**24.3**	**14.4**	**0.0**	**1.1**	**164.6**
Financial assets measured at fair value through other comprehensive income – debt	**6.3**								**6.3**
Total maximum exposure to credit risk reflected on the balance sheet in scope of ECL	**584.3**	**19.5**	**179.4**	**174.7**	**24.3**	**14.4**	**0.0**	**1.1**	**171.0**
Guarantees[7]	18.1	1.0	3.0	0.1	1.7			2.5	9.8
Loan commitments[7]	27.5	0.2	1.9	1.3	5.8		0.2	0.2	18.0
Forward starting transactions, reverse repurchase and securities borrowing agreements	1.7		1.7						0.0
Committed unconditionally revocable credit lines	36.9	0.3	8.3	4.9	3.6			0.0	19.8
Total maximum exposure to credit risk not reflected on the balance sheet, in scope of ECL	**84.2**	**1.5**	**14.9**	**6.3**	**11.0**	**0.0**	**0.2**	**2.8**	**47.6**

1 Of which: USD 1,983 million for 31 December 2020 (31 December 2019: USD 1,720 million) relates to total credit-impaired financial assets measured at amortized cost and USD 154 million for 31 December 2020 (31 December 2019: USD 27 million) to total off-balance sheet financial instruments and other credit lines for credit-impaired positions. 2 Includes but is not limited to life insurance contracts, inventory, mortgage loans, gold and other commodities. 3 Loans and advances to banks include amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. 4 Included within Cash collateral receivables on derivative instruments are margin balances due from exchanges or clearing houses. Some of these margin balances reflect amounts transferred on behalf of clients who retain the associated credit risk. 5 The amount shown in the "Netting" column represents the netting potential not recognized on the balance sheet. Refer to Note 22 for more information. 6 Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. 7 The amount shown in the "Guarantees" column includes sub-participations.

Note 20 Expected credit loss measurement (continued)

e) Financial assets subject to credit risk by rating category

The table below shows the credit quality and the maximum exposure to credit risk based on the Group's internal credit rating system and year-end stage classification. Under IFRS 9, the credit risk rating reflects the Group's assessment of the probability of default of individual counterparties, prior to substitutions. The amounts presented are gross of impairment allowances.

› **Refer to the "Risk management and control" section of this report for more details regarding the Group's internal grading system**

Financial assets subject to credit risk by rating category

USD million	31.12.20								
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Credit-impaired (defaulted)	Total gross carrying amount	ECL allowances	Net carrying amount (maximum exposure to credit risk)
Financial assets measured at amortized cost									
Cash and balances at central banks	156,250	1,981	0	0	0	0	158,231	0	158,231
of which: stage 1	*156,250*	*1,981*	*0*	*0*	*0*	*0*	*158,231*	*0*	*158,231*
Loans and advances to banks	543	12,029	1,344	1,182	260	1	15,360	(16)	15,344
of which: stage 1	*543*	*11,974*	*1,277*	*1,145*	*231*	*0*	*15,170*	*(9)*	*15,160*
of which: stage 2	*0*	*55*	*67*	*37*	*29*	*0*	*189*	*(5)*	*184*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*(1)*	*0*
Receivables from securities financing transactions	22,998	16,009	15,367	17,995	1,842	0	74,212	(2)	74,210
of which: stage 1	*22,998*	*16,009*	*15,367*	*17,995*	*1,842*	*0*	*74,212*	*(2)*	*74,210*
Cash collateral receivables on derivative instruments	8,196	13,477	7,733	3,243	88	0	32,737	0	32,737
of which: stage 1	*8,196*	*13,477*	*7,733*	*3,243*	*88*	*0*	*32,737*	*0*	*32,737*
Loans and advances to customers	5,813	215,755	67,270	69,217	21,038	2,943	382,036	(1,060)	380,977
of which: stage 1	*5,813*	*214,418*	*63,000*	*59,447*	*15,860*	*0*	*358,538*	*(142)*	*358,396*
of which: stage 2	*0*	*1,338*	*4,269*	*9,770*	*5,178*	*0*	*20,556*	*(215)*	*20,341*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*2,943*	*2,943*	*(703)*	*2,240*
Other financial assets measured at amortized cost	15,404	4,043	280	6,585	481	560	27,352	(133)	27,219
of which: stage 1	*15,404*	*4,040*	*269*	*6,334*	*389*	*0*	*26,435*	*(34)*	*26,401*
of which: stage 2	*0*	*3*	*11*	*251*	*91*	*0*	*357*	*(9)*	*348*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*560*	*560*	*(90)*	*469*
Total financial assets measured at amortized cost	209,204	263,295	91,993	98,223	23,709	3,505	689,929	(1,211)	688,717
On-balance sheet financial instruments									
Financial assets measured at FVOCI – debt instruments	3,212	5,014	0	32	0	0	8,258	0	8,258
Total on balance sheet financial instruments	212,417	268,309	91,993	98,255	23,709	3,505	698,187	(1,211)	696,976

Off-balance sheet positions subject to expected credit loss by rating category

USD million	31.12.20							
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Credit-impaired (defaulted)	Total off - balance sheet exposure (maximum exposure to credit risk)	ECL provisions
Off-balance sheet financial instruments								
Guarantees	3,482	4,623	3,522	4,293	991	170	17,081	(63)
of which: stage 1	*3,482*	*4,219*	*2,688*	*3,558*	*739*	*0*	*14,687*	*(14)*
of which: stage 2	*0*	*404*	*834*	*736*	*252*	*0*	*2,225*	*(15)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*170*	*170*	*(34)*
Irrevocable loan commitments	3,018	14,516	8,583	9,302	5,850	104	41,372	(142)
of which: stage 1	*3,018*	*13,589*	*6,873*	*8,739*	*4,676*	*0*	*36,894*	*(74)*
of which: stage 2	*0*	*927*	*1,711*	*563*	*1,174*	*0*	*4,374*	*(68)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*104*	*104*	*0*
Forward starting reverse repurchase and securities borrowing agreements	82	150	0	3,015	0	0	3,247	0
Total off balance sheet financial instruments	6,583	19,289	12,105	16,610	6,840	273	61,700	(205)
Other credit lines								
Committed unconditionally revocable credit lines	574	15,448	5,958	8,488	11,501	108	42,077	(50)
of which: stage 1	*574*	*14,883*	*4,517*	*6,609*	*10,593*	*0*	*37,176*	*(29)*
of which: stage 2	*0*	*565*	*1,441*	*1,879*	*908*	*0*	*4,792*	*(21)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*108*	*108*	*0*
Irrevocable committed prolongation of existing loans	14	1,349	931	632	357	0	3,282	(2)
of which: stage 1	*14*	*1,349*	*930*	*630*	*355*	*0*	*3,277*	*(2)*
of which: stage 2	*0*	*1*	*1*	*2*	*1*	*0*	*5*	*0*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Total other credit lines	588	16,797	6,889	9,119	11,858	109	45,359	(52)

1 Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information about rating categories.

Note 20 Expected credit loss measurement (continued)

Financial assets subject to credit risk by rating category

USD million	31.12.19								
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Credit-impaired (defaulted)	Total gross carrying amount	ECL allowances	Net carrying amount (maximum exposure to credit risk)
Financial assets measured at amortized cost									
Cash and balances at central banks	105,195	1,873	0	0	0	0	107,068	0	107,068
of which: stage 1	*105,195*	*1,873*	*0*	*0*	*0*	*0*	*107,068*	*0*	*107,068*
Loans and advances to banks	309	9,764	1,326	687	298	1	12,386	(6)	12,379
of which: stage 1	*309*	*9,764*	*1,326*	*677*	*228*	*0*	*12,303*	*(4)*	*12,298*
of which: stage 2	*0*	*0*	*0*	*10*	*71*	*0*	*81*	*(1)*	*80*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*1*	*1*	*(1)*	*0*
Receivables from securities financing transactions	21,089	16,889	14,366	28,815	3,088	0	84,246	(2)	84,245
of which: stage 1	*21,089*	*16,889*	*14,366*	*28,815*	*3,088*	*0*	*84,246*	*(2)*	*84,245*
Cash collateral receivables on derivative instruments	4,899	10,553	5,033	2,765	39	0	23,289	0	23,289
of which: stage 1	*4,899*	*10,553*	*5,033*	*2,765*	*39*	*0*	*23,289*	*0*	*23,289*
Loans and advances to customers	1,744	176,189	59,240	70,528	18,748	2,308	328,756	(764)	327,992
of which: stage 1	*1,744*	*175,534*	*56,957*	*62,435*	*14,117*	*0*	*310,787*	*(82)*	*310,705*
of which: stage 2	*0*	*655*	*2,283*	*8,093*	*4,631*	*0*	*15,661*	*(123)*	*15,538*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*2,308*	*2,308*	*(559)*	*1,749*
Other financial assets measured at amortized cost	13,030	1,592	390	7,158	312	672	23,154	(143)	23,012
of which: stage 1	*13,030*	*1,581*	*381*	*6,747*	*280*	*0*	*22,019*	*(35)*	*21,985*
of which: stage 2	*0*	*11*	*9*	*412*	*32*	*0*	*463*	*(13)*	*451*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*672*	*672*	*(95)*	*576*
Total financial assets measured at amortized cost	146,267	216,860	80,354	109,952	22,485	2,981	578,899	(915)	577,985
On-balance sheet financial instruments									
Financial assets measured at FVOCI – debt instruments	5,854	450	0	41	0	0	6,345	0	6,345
Total on balance sheet financial instruments	152,120	217,309	80,354	109,994	22,485	2,981	585,245	(915)	584,329

Off-balance sheet positions subject to expected credit loss by rating category

USD million	31.12.19							
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Credit-impaired (defaulted)	Total off - balance sheet exposure (maximum exposure to credit risk)	ECL provisions
Off-balance sheet financial instruments								
Guarantees	857	4,932	6,060	5,450	761	82	18,142	(42)
of which: stage 1	*857*	*4,931*	*6,048*	*5,218*	*704*	*0*	*17,757*	*(8)*
of which: stage 2	*0*	*1*	*12*	*233*	*57*	*0*	*304*	*(1)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*82*	*82*	*(33)*
Irrevocable loan commitments	2,548	10,068	4,862	5,859	4,160	50	27,547	(35)
of which: stage 1	*2,548*	*10,068*	*4,862*	*5,722*	*3,878*	*0*	*27,078*	*(30)*
of which: stage 2	*0*	*0*	*0*	*137*	*282*	*0*	*419*	*(5)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*50*	*50*	*0*
Forward starting reverse repurchase and securities borrowing agreements	0	672	50	936	0	0	1,657	0
Total off balance sheet financial instruments	3,405	15,672	10,972	12,245	4,922	132	47,347	(77)
Other credit lines								
Committed unconditionally revocable credit lines	632	14,346	6,231	7,169	8,554	46	36,979	(34)
of which: stage 1	*632*	*14,309*	*6,120*	*6,789*	*7,885*	*0*	*35,735*	*(17)*
of which: stage 2	*0*	*37*	*111*	*380*	*669*	*0*	*1,197*	*(17)*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*46*	*46*	*0*
Irrevocable committed prolongation of existing loans	25	1,399	870	633	359	4	3,289	(3)
of which: stage 1	*25*	*1,399*	*870*	*633*	*359*	*0*	*3,285*	*(3)*
of which: stage 2	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
of which: stage 3	*0*	*0*	*0*	*0*	*0*	*4*	*4*	*0*
Total other credit lines	657	15,745	7,101	7,801	8,913	50	40,268	(37)

1 Refer to the "Internal UBS rating scale and mapping of external ratings" table in the "Risk management and control" section of this report for more information about rating categories.

Note 20 Expected credit loss measurement (continued)

f) Sensitivity information

As outlined in Note 1a, ECL estimates involve significant uncertainties at the time they are made.

ECL model

The models applied to determine point-in-time PDs and LGDs rely on market and statistical data, which has been found to correlate well with historically observed defaults in sufficiently homogeneous segments. The risk sensitivities for each of the IFRS 9 ECL reporting segments to such factors are summarized in Note 9.

Forward-looking scenarios

Depending on the scenario selection and related macroeconomic assumptions for the risk factors, the components of the relevant weighted average ECL change. This is particularly relevant for interest rates, which can move in both directions under a given growth assumption (for example, low growth with high interest rates in a stagflation scenario, versus low growth and falling interest rates in a recession). Management generally look for scenario narratives that reflect the key risk drivers of a given credit portfolio.

As forecasting models are complex, due to the combination of multiple factors, simple what-if analyses involving a change of individual parameters do not necessarily provide realistic information on the exposure of segments to changes in the macroeconomy. Portfolio-specific analyses based on their key risk factors would also not be meaningful, as potential compensatory effects in other segments would be ignored. The table below indicates some sensitivities to ECLs if a key macroeconomic variable for the forecasting period is amended across all scenarios with all other factors remaining unchanged.

Potential effect on stage 1 and stage 2 positions from changing key parameters as at 31 December 2020

USD million	Baseline	Severe downside	Weighted average
Change in key parameters			
Fixed income: 10-year government bonds (absolute change)			
–0.5%	(1.36)	(1.84)	(1.93)
+0.5%	2.10	3.19	3.23
+1.00%	5.69	6.86	7.19
Unemployment rate (absolute change)			
–1.00%	(7.40)	(63.01)	(27.83)
–0.5%	(3.78)	(33.54)	(15.67)
+0.5%	4.15	36.97	16.99
+1.00%	8.50	75.93	33.74
Real GDP growth (relative change)			
-2.00%	3.72	16.14	9.10
-1.00%	1.86	9.84	5.09
+1.00%	(1.46)	(3.30)	(2.36)
+2.00%	(2.97)	(9.44)	(5.93)
House Price Index (relative change)			
–5.00%	8.04	144.34	51.46
–2.50%	3.45	65.80	23.28
+2.50%	(2.79)	(56.60)	(19.09)
+5.00%	(5.16)	(105.61)	(35.29)
Equity (S&P500, EuroStoxx, SMI) (relative change)			
–10.00%	3.94	9.66	6.78
–5.00%	1.91	4.29	3.34
+5.00%	(8.30)	(4.23)	(7.27)
+10.00%	(10.14)	(8.58)	(10.22)

Sensitivities can be more meaningfully assessed in the context of coherent scenarios with consistently developed macroeconomic factors. The table on the previous page outlines favorable and unfavorable effects, based on reasonably possible alternative changes to the economic conditions for stage 1 and stage 2 positions. The ECL impact is calculated for material portfolios and disclosed for each scenario.

The forecasting horizon is limited to three years, with a model-based mean reversion of PD and LGD assumed thereafter. Changes to these timelines may have an effect on ECLs: depending on the cycle, a longer or shorter forecasting horizon will lead to different annualized lifetime PD and average LGD estimations. This is currently not deemed to be material for UBS AG, as a large proportion of loans, including mortgages in Switzerland, have maturities that are within the forecasting horizon.

Scenario weights

ECL is sensitive to changing scenario weights, in particular if narratives and parameters are selected that are not close to the baseline scenario, highlighting the non-linearity of credit losses.

As shown in the table on the bottom of this page, the ECL for stage 1 and stage 2 positions would have been USD 442 million (31 December 2019: USD 234 million) instead of USD 639 million (31 December 2019: USD 341 million) if ECL had been determined solely on the baseline scenario. The weighted average ECL therefore amounts to 145% (31 December 2019: 149%) of the baseline value.

Stage allocation and SICR

The determination of what constitutes a significant increase in credit risk (SICR) is based on management judgment as explained in Note 1a. Changing the SICR trigger will have a direct effect on ECLs, as more or fewer positions would be subject to lifetime ECLs under any scenario.

The relevance of the SICR trigger on overall ECL is demonstrated in the table below with the indication that the ECL allowances and provisions for stage 1 and stage 2 positions would have been USD 1,336 million if all non-impaired positions across the portfolio had been measured for lifetime ECLs irrespective of their actual SICR status. This amount compares to actual stage 1 and 2 allowances and provisions of USD 639 million as of 31 December 2020.

Maturity profile

The maturity profile of the assets is an important driver for changes in ECL due to transfers to stage 2 and from stage 2 to stage 1. The current maturity profile of most lending books is relatively short; hence a movement to stage 2 may have a limited effect on ECLs. A significant portion of our lending to SMEs is documented under multi-purpose credit agreements, which allow for various forms of utilization but are unconditionally cancelable by UBS AG at any time. The relevant maturity for drawings under such agreements with a fixed maturity is the respective term, or a maximum of 12 months in stage 1. For unused credit lines and all drawings that have no fixed maturity (e.g., current accounts), UBS AG generally applies a 12-month maturity from the reporting date, given the credit review policies, which require either continuous monitoring of key indicators and behavioral patterns for smaller positions or an annual formal review for any other limit. The ECLs for these products is sensitive to shortening or extending the maturity assumption.

Potential effect on stage 1 and stage 2 positions from changing scenario weights or moving to an ECL lifetime calculation as at 31 December 2020

	Actual ECL allowances and provisions (as per Note 9)		Pro forma ECL allowances and provisions, assuming application of 100% weighting				Pro forma ECL allowances and provisions, assuming all positions being subject to lifetime ECL	
Scenarios	Weighted average		Baseline		Severe downside		Weighted average	
USD million, except where indicated	ECL	in % of baseline	ECL	in % of baseline	ECL	in % of baseline	ECL	in % of baseline
Segmentation								
Private clients with mortgages	(131)	244	(54)	100	(302)	562	(385)	717
Real estate financing	(76)	138	(55)	100	(123)	224	(131)	237
Large corporate clients	(206)	149	(138)	100	(298)	216	(307)	222
SME clients	(74)	115	(64)	100	(93)	144	(129)	200
Other segments	(152)	116	(131)	100	(183)	140	(385)	294
Total	(639)	**145**	(442)	**100**	**(999)**	**226**	(1,336)	**302**

Note 21 Fair value measurement

a) Valuation principles

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels in accordance with IFRS. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which an instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

– Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
– Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
– Level 3 – valuation techniques for which significant inputs are not based on observable market data.

Fair values are determined using quoted prices in active markets for identical assets or liabilities, where available. Where the market for a financial instrument or non-financial asset or liability is not active, fair value is established using a valuation technique, including pricing models. Valuation adjustments may be made to allow for additional factors, including model, liquidity, credit and funding risks, which are not explicitly captured within the valuation technique, but which would nevertheless be considered by market participants when establishing a price. The limitations inherent in a particular valuation technique are considered in the determination of the classification of an asset or liability within the fair value hierarchy. Generally, the unit of account for a financial instrument is the individual instrument, and UBS applies valuation adjustments at an individual instrument level, consistent with that unit of account. However, if certain conditions are met, UBS may estimate the fair value of a portfolio of financial assets and liabilities with substantially similar and offsetting risk exposures on the basis of the net open risks.

› **Refer to Note 21d for more information**

b) Valuation governance

UBS's fair value measurement and model governance framework includes numerous controls and other procedural safeguards that are intended to maximize the quality of fair value measurements reported in the financial statements. New products and valuation techniques must be reviewed and approved by key stakeholders from the risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions.

Fair value estimates are validated by the risk and finance control functions, which are independent of the business divisions. Independent price verification is performed by Finance through benchmarking the business divisions' fair value estimates with observable market prices and other independent sources. A governance framework and associated controls are in place in order to monitor the quality of third-party pricing sources where used. For instruments where valuation models are used to determine fair value, independent valuation and model control groups within Finance and Risk Control evaluate UBS's models on a regular basis, including valuation and model input parameters, as well as pricing. As a result of the valuation controls employed, valuation adjustments may be made to the business divisions' estimates of fair value to align with independent market data and the relevant accounting standard.

› **Refer to Note 21d for more information**

Note 21 Fair value measurement (continued)

c) Fair value hierarchy

The table below provides the fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value. The narrative that follows describes valuation techniques used in measuring their fair value of different product types (including significant valuation inputs and assumptions used), and the factors considered in determining their classification within the fair value hierarchy.

Determination of fair values from quoted market prices or valuation techniques[1]

	31.12.20				31.12.19			
USD million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value on a recurring basis								
Financial assets at fair value held for trading	107,526	15,630	2,337	125,492	113,635	12,248	1,812	127,695
of which:								
Equity instruments	*90,327*	*1,101*	*171*	*91,599*	*96,162*	*400*	*226*	*96,788*
Government bills / bonds	*9,028*	*2,207*	*10*	*11,245*	*9,630*	*1,770*	*64*	*11,464*
Investment fund units	*7,374*	*1,794*	*23*	*9,192*	*7,088*	*1,729*	*50*	*8,867*
Corporate and municipal bonds	*789*	*8,432*	*817*	*10,038*	*755*	*6,796*	*542*	*8,093*
Loans	*0*	*1,860*	*1,134*	*2,995*	*0*	*1,180*	*791*	*1,971*
Asset-backed securities	*8*	*236*	*181*	*425*	*0*	*372*	*140*	*512*
Derivative financial instruments	795	157,069	1,754	159,618	356	120,224	1,264	121,843
of which:								
Foreign exchange contracts	*319*	*68,425*	*5*	*68,750*	*240*	*52,228*	*8*	*52,476*
Interest rate contracts	*0*	*50,353*	*537*	*50,890*	*6*	*42,288*	*263*	*42,558*
Equity / index contracts	*0*	*33,990*	*853*	*34,842*	*7*	*22,220*	*597*	*22,825*
Credit derivative contracts	*0*	*2,008*	*350*	*2,358*	*0*	*1,612*	*394*	*2,007*
Commodity contracts	*0*	*2,211*	*6*	*2,217*	*0*	*1,820*	*0*	*1,821*
Brokerage receivables	0	24,659	0	24,659	0	18,007	0	18,007
Financial assets at fair value not held for trading	40,986	35,110	3,942	80,038	40,608	39,065	3,962	83,636
of which:								
Financial assets for unit-linked investment contracts	*20,628*	*101*	*2*	*20,731*	*27,568*	*118*	*0*	*27,686*
Corporate and municipal bonds	*290*	*16,957*	*372*	*17,619*	*653*	*18,732*	*0*	*19,385*
Government bills / bonds	*19,704*	*3,593*	*0*	*23,297*	*12,089*	*3,700*	*0*	*15,790*
Loans	*0*	*7,699*	*862*	*8,561*	*0*	*10,206*	*1,231*	*11,438*
Securities financing transactions	*0*	*6,629*	*122*	*6,751*	*0*	*6,148*	*147*	*6,294*
Auction rate securities	*0*	*0*	*1,527*	*1,527*	*0*	*0*	*1,536*	*1,536*
Investment fund units	*278*	*121*	*105*	*505*	*194*	*140*	*98*	*432*
Equity instruments	*86*	*0*	*544*	*631*	*103*	*4*	*451*	*559*
Other	*0*	*10*	*408*	*418*	*0*	*16*	*499*	*515*
Financial assets measured at fair value through other comprehensive income on a recurring basis								
Financial assets measured at fair value through other comprehensive income	1,144	7,114	0	8,258	1,906	4,439	0	6,345
of which:								
Asset-backed securities	*0*	*6,624*	*0*	*6,624*	*0*	*3,955*	*0*	*3,955*
Government bills / bonds	*1,103*	*47*	*0*	*1,150*	*1,859*	*16*	*0*	*1,875*
Corporate and municipal bonds	*40*	*444*	*0*	*485*	*47*	*468*	*0*	*515*
Non-financial assets measured at fair value on a recurring basis								
Precious metals and other physical commodities	6,264	0	0	6,264	4,597	0	0	4,597
Non-financial assets measured at fair value on a non-recurring basis								
Other non-financial assets[2]	0	1	245	246	0	0	199	199
Total assets measured at fair value	156,716	239,583	8,278	404,576	161,102	193,983	7,237	362,322

Note 21 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)[1]

	31.12.20				31.12.19			
USD million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial liabilities measured at fair value on a recurring basis								
Financial liabilities at fair value held for trading	26,889	6,652	55	33,595	25,791	4,726	75	30,591
of which:								
Equity instruments	*22,519*	*425*	*40*	*22,985*	*22,526*	*149*	*59*	*22,734*
Corporate and municipal bonds	*31*	*4,048*	*9*	*4,089*	*40*	*3,606*	*16*	*3,661*
Government bills / bonds	*3,642*	*1,036*	*0*	*4,678*	*2,820*	*646*	*0*	*3,466*
Investment fund units	*696*	*1,127*	*5*	*1,828*	*404*	*294*	*0*	*698*
Derivative financial instruments	746	156,884	3,471	161,102	385	118,498	1,996	120,880
of which:								
Foreign exchange contracts	*316*	*70,149*	*61*	*70,527*	*248*	*53,705*	*60*	*54,013*
Interest rate contracts	*0*	*43,389*	*527*	*43,916*	*7*	*36,434*	*130*	*36,571*
Equity / index contracts	*0*	*38,870*	*2,306*	*41,176*	*3*	*24,171*	*1,293*	*25,468*
Credit derivative contracts	*0*	*2,403*	*528*	*2,931*	*0*	*2,448*	*512*	*2,960*
Commodity contracts	*0*	*2,003*	*24*	*2,027*	*0*	*1,707*	*0*	*1,707*
Financial liabilities designated at fair value on a recurring basis								
Brokerage payables designated at fair value	0	38,742	0	38,742	0	37,233	0	37,233
Debt issued designated at fair value	0	50,273	9,595	59,868	0	56,943	9,649	66,592
Other financial liabilities designated at fair value	0	29,682	2,091	31,773	0	35,119	1,039	36,157
of which:								
Financial liabilities related to unit-linked investment contracts	*0*	*20,975*	*0*	*20,975*	*0*	*28,145*	*0*	*28,145*
Securities financing transactions	*0*	*7,317*	*0*	*7,317*	*0*	*5,742*	*0*	*5,742*
Over-the-counter debt instruments	*0*	*1,363*	*697*	*2,060*	*0*	*1,231*	*791*	*2,022*
Total liabilities measured at fair value	27,635	282,233	15,212	325,080	26,176	252,518	12,759	291,452

1 Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are not included in this table. The fair value of these derivatives was not material for the periods presented. 2 Other non-financial assets primarily consist of properties and other non-current assets held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

Valuation techniques

UBS uses widely recognized valuation techniques for determining the fair value of financial and non-financial instruments that are not actively traded and quoted. The most frequently applied valuation techniques include discounted value of expected cash flows, relative value and option pricing methodologies.

Discounted value of expected cash flows is a valuation technique that measures fair value using estimated expected future cash flows from assets or liabilities and then discounts these cash flows using a discount rate or discount margin that reflects the credit and / or funding spreads required by the market for instruments with similar risk and liquidity profiles to produce a present value. When using such valuation techniques, expected future cash flows are estimated using an observed or implied market price for the future cash flows or by using industry standard cash flow projection models. The discount factors within the calculation are generated using industry-standard yield curve modeling techniques and models.

Relative value models measure fair value based on the market prices of equivalent or comparable assets or liabilities, making adjustments for differences between the characteristics of the observed instrument and the instrument being valued.

Option pricing models incorporate assumptions regarding the behavior of future price movements of an underlying referenced asset or assets to generate a probability-weighted future expected payoff for the option. The resulting probability-weighted expected payoff is then discounted using discount factors generated from industry-standard yield curve modeling techniques and models. The option pricing model may be implemented using a closed-form analytical formula or other mathematical techniques (e.g., binomial tree or Monte Carlo simulation).

Where available, valuation techniques use market-observable assumptions and inputs. If such data is not available, inputs may be derived by reference to similar assets in active markets, from recent prices for comparable transactions or from other observable market data. In such cases, the inputs selected are based on historical experience and practice for similar or analogous instruments, derivation of input levels based on similar products with observable price levels, and knowledge of current market conditions and valuation approaches.

For more complex instruments, fair values may be estimated using a combination of observed transaction prices, consensus pricing services and relevant quotes. Consideration is given to the nature of the quotes (e.g., indicative or firm) and the relationship of recently evidenced market activity to the prices provided by consensus pricing services. UBS also uses internally developed models, which are typically based on valuation methods and techniques recognized as standard within the industry. Assumptions and inputs used in valuation techniques include benchmark interest rate curves, credit and funding spreads used in estimating discount rates, bond and equity prices, equity index prices, foreign exchange rates, levels of market volatility and correlation. Refer to Note 21f for more information. The discount curves used by UBS incorporate the funding and credit characteristics of the instruments to which they are applied.

Financial instruments excluding derivatives: valuation and classification in the fair value hierarchy

Product	Valuation and classification in the fair value hierarchy	
Government bills and bonds	Valuation	– Generally valued using prices obtained directly from the market. – Instruments not priced directly using active-market data are valued using discounted cash flow valuation techniques that incorporate market data for similar government instruments.
	Fair value hierarchy	– Generally traded in active markets with prices that can be obtained directly from these markets, resulting in classification as Level 1, while the remaining positions are classified as Level 2 and Level 3.
Corporate and municipal bonds	Valuation	– Generally valued using prices obtained directly from the market for the security, or similar securities, adjusted for seniority, maturity and liquidity. – When prices are not available, instruments are valued using discounted cash flow valuation techniques incorporating the credit spread of the issuer or similar issuers. – For convertible bonds without directly comparable prices, issuances may be priced using a convertible bond model.
	Fair value hierarchy	– Generally classified as Level 1 or Level 2, depending on the depth of trading activity behind price sources. – Level 3 instruments have no suitable pricing information available.
Traded loans and loans measured at fair value	Valuation	– Valued directly using market prices that reflect recent transactions or quoted dealer prices, where available. – Where no market price data is available, loans are valued by relative value benchmarking using pricing derived from debt instruments in comparable entities or different products in the same entity, or by using a credit default swap valuation technique, which requires inputs for credit spreads, credit recovery rates and interest rates. Recently originated commercial real estate loans are measured using a securitization approach based on rating agency guidelines.
	Fair value hierarchy	– Instruments with suitably deep and liquid pricing information are classified as Level 2. – Positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

Note 21 Fair value measurement (continued)

Product	Valuation and classification in the fair value hierarchy	
Investment fund units	Valuation	– Predominantly exchange-traded, with readily available quoted prices in liquid markets. – Where market prices are not available, fair value may be measured using net asset values (NAVs).
	Fair value hierarchy	– Listed units are classified as Level 1, provided there is sufficient trading activity to justify active-market classification, while other positions are classified as Level 2. – Positions for which NAVs are not available are classified as Level 3.
Asset-backed securities (ABS)	Valuation	– For liquid securities, the valuation process will use trade and price data, updated for movements in market levels between the time of trading and the time of valuation. Less liquid instruments are measured using discounted expected cash flows incorporating price data for instruments or indices with similar risk profiles.
	Fair value hierarchy	– RMBS, CMBS and other ABS are generally classified as Level 2. However, if significant inputs are unobservable, or if market or fundamental data is not available, they are classified as Level 3.
Auction rate securities (ARS)	Valuation	– Effective from the fourth quarter of 2020, ARS are valued utilizing a discounted cash flow methodology. The model captures interest rate risk emanating from the note coupon, credit risk attributable to the underlying closed-end fund investments, liquidity risk as a function of the level of trading volume in these positions, and extension risk as ARS are perpetual instruments that require an assumption regarding their maturity or issuer redemption date. – Previously, ARS were valued using market prices that reflected recent transactions after applying an adjustment for trade size or quoted dealer prices, where available. However, due to significant deterioration in the volume and size of transactions in relevant ARS markets following the outbreak of the COVID-19 pandemic, a model-based approach provides a superior indication of orderly exit prices until such time as markets re-develop.
	Fair value hierarchy	– Granular and liquid pricing information is generally not available for ARS. As a result, these securities are classified as Level 3.
Equity instruments	Valuation	– Listed equity instruments are generally valued using prices obtained directly from the market. – Unlisted equity holdings, including private equity positions, are initially marked at their transaction price and are revalued when reliable evidence of price movement becomes available or when the position is deemed to be impaired.
	Fair value hierarchy	– The majority of equity securities are actively traded on public stock exchanges where quoted prices are readily and regularly available, resulting in Level 1 classification.
Financial assets for unit-linked investment contracts	Valuation	– The majority of assets are listed on exchanges and fair values are determined using quoted prices.
	Fair value hierarchy	– Most assets are classified as Level 1 if actively traded, or Level 2 if trading is not active. – Instruments for which prices are not readily available are classified as Level 3.
Securities financing transactions	Valuation	– These instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are relevant to the collateral eligibility terms.
	Fair value hierarchy	– Collateral funding curves for these instruments are generally observable and, as a result, these positions are classified as Level 2. – Where the collateral terms are non-standard, the funding curve may be considered unobservable and these positions are classified as Level 3.
Brokerage receivables and payables	Valuation	– Fair value is determined based on the value of the underlying balances.
	Fair value hierarchy	– Due to their on-demand nature, these receivables and payables are deemed as Level 2.
Amounts due under unit-linked investment contracts	Valuation	– The fair values of investment contract liabilities are determined by reference to the fair value of the corresponding assets.
	Fair value hierarchy	– The liabilities themselves are not actively traded, but are mainly referenced to instruments that are actively traded and are therefore classified as Level 2.

Derivative instruments: valuation and classification in the fair value hierarchy

The curves used for discounting expected cash flows in the valuation of collateralized derivatives reflect the funding terms associated with the relevant collateral arrangement for the instrument being valued. These collateral arrangements differ across counterparties with respect to the eligible currency and interest terms of the collateral. The majority of collateralized derivatives are measured using a discount curve that is based on funding rates derived from overnight interest in the cheapest eligible currency for the respective counterparty collateral agreement.

Uncollateralized and partially collateralized derivatives are discounted using the LIBOR (or equivalent) curve for the currency of the instrument. As described in Note 21d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by credit valuation adjustments (CVAs), debit valuation adjustments (DVAs) and funding valuation adjustment (FVAs), as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS's own credit risk, and funding costs and benefits.

› **Refer to Note 10 for more information about derivative instruments**

Derivative product	Valuation and classification in the fair value hierarchy	
Interest rate contracts	Valuation	– Interest rate swap contracts are valued by estimating future interest cash flows and discounting those cash flows using a rate that reflects the appropriate funding rate for the position being measured. The yield curves used to estimate future index levels and discount rates are generated using market-standard yield curve models using interest rates associated with current market activity. The key inputs to the models are interest rate swap rates, forward rate agreement rates, short-term interest rate futures prices, basis swap spreads and inflation swap rates. – Interest rate option contracts are valued using various market-standard option models, using inputs that include interest rate yield curves, inflation curves, volatilities and correlations. – When the maturity of an interest rate swap or option contract exceeds the term for which standard market quotes are observable for a significant input parameter, the contracts are valued by extrapolation from the last observable point using standard assumptions or by reference to another observable comparable input parameter to represent a suitable proxy for that portion of the term.
	Fair value hierarchy	– The majority of interest rate swaps are classified as Level 2 as the standard market contracts that form the inputs for yield curve models are generally traded in active and observable markets. – Options are generally treated as Level 2 as the calibration process enables the model output to be validated to active-market levels. Models calibrated in this way are then used to revalue the portfolio of both standard options and more exotic products. – Interest rate swap or option contracts are classified as Level 3 when the terms exceed standard market-observable quotes. – Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3.
Credit derivative contracts	Valuation	– Credit derivative contracts are valued using industry-standard models based primarily on market credit spreads, upfront pricing points and implied recovery rates. Where a derivative credit spread is not directly available, it may be derived from the price of the reference cash bond. – Asset-backed credit derivatives are valued using a valuation technique similar to that of the underlying security with an adjustment to reflect the funding differences between cash and synthetic form.
	Fair value hierarchy	– Single-entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads and recovery rates are determined from actively traded observable market data. Where the underlying reference name(s) are not actively traded and the correlation cannot be directly mapped to actively traded tranche instruments, these contracts are classified as Level 3. – Asset-backed credit derivatives follow the characteristics of the underlying security and are therefore distributed across Level 2 and Level 3.

Note 21 Fair value measurement (continued)

Derivative product	Valuation and classification in the fair value hierarchy	
Foreign exchange contracts	Valuation	– Open spot FX contracts are valued using the FX spot rate observed in the market. – Forward FX contracts are valued using the FX spot rate adjusted for forward pricing points observed from standard market-based sources. – OTC FX option contracts are valued using market-standard option valuation models. The models used for shorter-dated options (i.e., maturities of five years or less) tend to be different than those used for longer-dated options because the models needed for longer-dated OTC FX contracts require additional consideration of interest rate and FX rate interdependency. – The valuation for multi-dimensional FX options uses a multi-local volatility model, which is calibrated to the observed FX volatilities for all relevant FX pairs.
	Fair value hierarchy	– The markets for FX spot and FX forward pricing points are both actively traded and observable and therefore such FX contracts are generally classified as Level 2. – A significant proportion of OTC FX option contracts are classified as Level 2 as inputs are derived mostly from standard market contracts traded in active and observable markets. – OTC FX option contracts classified as Level 3 include multi-dimensional FX options and long-dated FX exotic option contracts where there is no active market from which to derive volatility or correlation inputs.
Equity / index contracts	Valuation	– Equity forward contracts have a single stock or index underlying and are valued using market-standard models. The key inputs to the models are stock prices, estimated dividend rates and equity funding rates (which are implied from prices of forward contracts observed in the market). Estimated cash flows are then discounted using market-standard discounted cash flow models using a rate that reflects the appropriate funding rate for that portion of the portfolio. When no market data is available for the instrument maturity, they are valued by extrapolation of available data, use of historical dividend data, or use of data for a related equity. – Equity option contracts are valued using market-standard models that estimate the equity forward level as described for equity forward contracts and incorporate inputs for stock volatility and for correlation between stocks within a basket. The probability-weighted expected option payoff generated is then discounted using market-standard discounted cash flow models applying a rate that reflects the appropriate funding rate for that portion of the portfolio. When volatility, forward or correlation inputs are not available, they are valued using extrapolation of available data, historical dividend, correlation or volatility data, or the equivalent data for a related equity.
	Fair value hierarchy	– As inputs are derived mostly from standard market contracts traded in active and observable markets, a significant proportion of equity forward contracts are classified as Level 2. – Equity option positions for which inputs are derived from standard market contracts traded in active and observable markets are also classified as Level 2. Level 3 positions are those for which volatility, forward or correlation inputs are not observable.
Commodity contracts	Valuation	– Commodity forward and swap contracts are measured using market-standard models that use market forward levels on standard instruments. – Commodity option contracts are measured using market-standard option models that estimate the commodity forward level as described for commodity forward and swap contracts, incorporating inputs for the volatility of the underlying index or commodity. For commodity options on baskets of commodities or bespoke commodity indices, the valuation technique also incorporates inputs for the correlation between different commodities or commodity indices.
	Fair value hierarchy	– Individual commodity contracts are typically classified as Level 2, because active forward and volatility market data is available.

d) Valuation adjustments

The output of a valuation technique is always an estimate of a fair value that cannot be measured with complete certainty. As a result, valuations are adjusted, where appropriate and when such factors would be considered by market participants in estimating fair value, to reflect close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors.

Deferred day-1 profit or loss reserves

For new transactions where the valuation technique used to measure fair value requires significant inputs that are not based on observable market data, the financial instrument is initially recognized at the transaction price. The transaction price may differ from the fair value obtained using a valuation technique, where any such difference is deferred and not initially recognized in the income statement.

Deferred day-1 profit or loss is generally released into *Other net income from financial instruments measured at fair value through profit or loss* when pricing of equivalent products or the underlying parameters becomes observable or when the transaction is closed out.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss reserves

USD million	2020	2019	2018
Reserve balance at the beginning of the year	146	255	338
Profit / (loss) deferred on new transactions	362	171	341
(Profit) / loss recognized in the income statement	(238)	(278)	(417)
Foreign currency translation	0	(2)	(6)
Reserve balance at the end of the year	269	146	255

Own credit

Own credit risk is reflected in the valuation of UBS's fair value option liabilities where this component is considered relevant for valuation purposes by UBS's counterparties and other market participants.

Changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit are recognized in *Other comprehensive income* directly within *Retained earnings,* with no reclassification to the income statement in future periods. This presentation does not create or increase an accounting mismatch in the income statement, as UBS does not hedge changes in own credit.

Own credit is estimated using own credit adjustment (OCA) curves, which incorporate observable market data, including market-observed secondary prices for UBS's debt, UBS's credit default swap spreads and debt curves of peers. In the table below the change in unrealized own credit consists of changes in fair value that are attributable to the change in UBS's credit spreads, as well as the effect of changes in fair values attributable to factors other than credit spreads, such as redemptions, effects from time decay and changes in interest and other market rates. Realized own credit is recognized when an instrument with an associated unrealized own credit adjustment is repurchased prior to the contractual maturity date. Life-to-date amounts reflect the cumulative unrealized change since initial recognition.

› **Refer to Note 16 for more information about debt issued designated at fair value**

Own credit adjustments on financial liabilities designated at fair value

	Included in Other comprehensive income		
	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Recognized during the period:			
Realized gain / (loss)	2	8	(3)
Unrealized gain / (loss)	(295)	(408)	519
Total gain / (loss), before tax	(293)	(400)	517

	As of		
USD million	31.12.20	31.12.19	31.12.18
Recognized on the balance sheet as of the end of the period:			
Unrealized life-to-date gain / (loss)	(381)	(88)	320

Note 21 Fair value measurement (continued)

Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments that are classified as *Financial assets at fair value not held for trading,* CVAs are necessary to reflect the credit risk of the counterparty inherent in these instruments. This amount represents the estimated fair value of protection required to hedge the counterparty credit risk of such instruments. A CVA is determined for each counterparty, considering all exposures with that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses, funding spreads and other contractual factors.

Funding valuation adjustments

FVAs reflect the costs and benefits of funding associated with uncollateralized and partially collateralized derivative receivables and payables and are calculated as the valuation effect from moving the discounting of the uncollateralized derivative cash flows from LIBOR to OCA using the CVA framework, including the probability of counterparty default. An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

Debit valuation adjustments

A DVA is estimated to incorporate own credit in the valuation of derivatives where an FVA is not already recognized. The DVA calculation is effectively consistent with the CVA framework, being determined for each counterparty, considering all exposures with that counterparty and taking into account collateral netting agreements, expected future mark-to-market movements and UBS's credit default spreads.

Other valuation adjustments

Instruments that are measured as part of a portfolio of combined long and short positions are valued at mid-market levels to ensure consistent valuation of the long- and short-component risks. A liquidity valuation adjustment is then made to the overall net long or short exposure to move the fair value to bid or offer as appropriate, reflecting current levels of market liquidity. The bid–offer spreads used in the calculation of this valuation adjustment are obtained from market transactions and other relevant sources and are updated periodically.

Uncertainties associated with the use of model-based valuations are incorporated into the measurement of fair value through the use of model reserves. These reserves reflect the amounts that UBS estimates should be deducted from valuations produced directly by models to incorporate uncertainties in the relevant modeling assumptions, in the model and market inputs used, or in the calibration of the model output to adjust for known model deficiencies. In arriving at these estimates, UBS considers a range of market practices, including how it believes market participants would assess these uncertainties. Model reserves are reassessed periodically in light of data from market transactions, consensus pricing services and other relevant sources.

Valuation adjustments on financial instruments

	As of	
Life-to-date gain / (loss), USD million	31.12.20	31.12.19
Credit valuation adjustments[1]	(66)	(48)
Funding valuation adjustments[2]	(73)	(93)
Debit valuation adjustments	0	1
Other valuation adjustments	(820)	(566)
of which: liquidity	*(340)*	*(300)*
of which: model uncertainty	*(479)*	*(266)*

1 Amounts do not include reserves against defaulted counterparties. 2 Includes FVAs on structured financing transactions of USD 6 million as of 31 December 2020 and USD 43 million as of 31 December 2019.

e) Transfers between Level 1 and Level 2

The amounts disclosed in this section reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets and liabilities transferred from Level 2 to Level 1 during 2020 were not material. Assets and liabilities transferred from Level 1 to Level 2 during 2020 were also not material.

Note 21 Fair value measurement (continued)

f) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities, together with the valuation techniques used to measure fair value, the inputs used in a given valuation technique that are considered significant as of 31 December 2020 and unobservable, and a range of values for those unobservable inputs.

The range of values represents the highest- and lowest-level inputs used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input or an assessment of the reasonableness of UBS's estimates and assumptions, but rather the different underlying characteristics of the relevant assets and liabilities held by UBS. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Furthermore, the ranges of unobservable inputs may differ across other financial institutions, reflecting the diversity of the products in each firm's inventory.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

	Fair value						Range of inputs						
	Assets		Liabilities				31.12.20			31.12.19			
USD billion	31.12.20	31.12.19	31.12.20	31.12.19	Valuation technique(s)	Significant unobservable input(s)[1]	low	high	weighted average[2]	low	high	weighted average[2]	unit[1]
Financial assets and liabilities at fair value held for trading and Financial assets at fair value not held for trading													
Corporate and municipal bonds	*1.2*	*0.5*	*0.0*	*0.0*	Relative value to market comparable	Bond price equivalent	1	143	100	0	143	101	points
					Discounted expected cash flows	Discount margin	268	268					basis points
Traded loans, loans measured at fair value, loan commitments and guarantees	*2.4*	*2.4*	*0.0*	*0.0*	Relative value to market comparable	Loan price equivalent	0	101	99	0	101	99	points
					Discounted expected cash flows	Credit spread	190	800		225	530		basis points
					Market comparable and securitization model	Credit spread	40	1,858	333	45	1,412	244	basis points
Auction rate securities[3]	*1.5*	*1.5*			Relative value to market comparable	Bond price equivalent				79	98	88	points
					Discounted expected cash flows	Credit spread	100	188	140				basis points
Investment fund units[4]	*0.1*	*0.1*	*0.0*	*0.0*	Relative value to market comparable	Net asset value							
Equity instruments[4]	*0.7*	*0.7*	*0.0*	*0.1*	Relative value to market comparable	Price							
Debt issued designated at fair value[5]			*9.6*	*9.6*									
Other financial liabilities designated at fair value			*2.1*	*1.0*	Discounted expected cash flows	Funding spread	42	175		44	175		basis points
Derivative financial instruments													
Interest rate contracts	*0.5*	*0.3*	*0.5*	*0.1*	Option model	Volatility of interest rates	29	69		15	63		basis points
Credit derivative contracts	*0.3*	*0.4*	*0.5*	*0.5*	Discounted expected cash flows	Credit spreads	1	489		1	700		basis points
						Bond price equivalent	0	100		0	100		points
Equity / index contracts	*0.9*	*0.6*	*2.3*	*1.3*	Option model	Equity dividend yields	0	13		0	14		%
						Volatility of equity stocks, equity and other indices	4	100		4	105		%
						Equity-to-FX correlation	(34)	65		(45)	71		%
						Equity-to-equity correlation	(16)	100		(17)	98		%

1 The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par (e.g., 100 points would be 100% of par). 2 Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts, as this would not be meaningful. 3 Bond price equivalent prior to the fourth quarter of 2020; discounted cash flow model thereafter. 4 The range of inputs is not disclosed as there is a dispersion of values given the diverse nature of the investments. 5 Debt issued designated at fair value is composed primarily of UBS structured notes, which include variable maturity notes with various equity and foreign exchange underlying risks, rates-linked and credit-linked notes, all of which have embedded derivative parameters that are considered to be unobservable. The equivalent derivative instrument parameters are presented in the respective derivative financial instruments lines in this table.

Note 21 Fair value measurement (continued)

Significant unobservable inputs in Level 3 positions

This section discusses the significant unobservable inputs used in the valuation of Level 3 instruments and assesses the potential effect that a change in each unobservable input in isolation may have on a fair value measurement. Relationships between observable and unobservable inputs have not been included in the summary below.

Input	Description
Bond price equivalent	– Where market prices are not available for a bond, fair value is measured by comparison with observable pricing data from similar instruments. Factors considered when selecting comparable instruments include credit quality, maturity and industry of the issuer. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield (either as an outright yield or as a spread to LIBOR). – For corporate and municipal bonds, the range represents the range of prices from reference issuances used in determining fair value. Bonds priced at 0 are distressed to the point that no recovery is expected, while prices significantly in excess of 100 or par relate to inflation-linked or structured issuances that pay a coupon in excess of the market benchmark as of the measurement date. – For credit derivatives, the bond price range represents the range of prices used for reference instruments, which are typically converted to an equivalent yield or credit spread as part of the valuation process.
Loan price equivalent	– Where market prices are not available for a traded loan, fair value is measured by comparison with observable pricing data for similar instruments. Factors considered when selecting comparable instruments include industry segment, collateral quality, maturity and issuer-specific covenants. Fair value may be measured either by a direct price comparison or by conversion of an instrument price into a yield. The range represents the range of prices derived from reference issuances of a similar credit quality used to measure fair value for loans classified as Level 3. Loans priced at 0 are distressed to the point that no recovery is expected, while a current price of 100 represents a loan that is expected to be repaid in full.
Credit spread	– Valuation models for many credit derivatives require an input for the credit spread, which is a reflection of the credit quality of the associated referenced underlying. The credit spread of a particular security is quoted in relation to the yield on a benchmark security or reference rate, typically either US Treasury or LIBOR, and is generally expressed in terms of basis points. An increase / (decrease) in credit spread will increase / (decrease) the value of credit protection offered by credit default swaps and other credit derivative products. The income statement effect from such changes depends on the nature and direction of the positions held. Credit spreads may be negative where the asset is more creditworthy than the benchmark against which the spread is calculated. A wider credit spread represents decreasing creditworthiness. The range represents a diverse set of underlyings, with the lower end of the range representing credits of the highest quality (e.g., approximating the risk of LIBOR) and the upper end of the range representing greater levels of credit risk.
Discount margin	– The discount margin (DM) spread represents the discount rates applied to present value cash flows of an asset to reflect the market return required for uncertainty in the estimated cash flows. DM spreads are a rate or rates applied on top of a floating index (e.g., LIBOR) to discount expected cash flows. Generally, a decrease / (increase) in the DM in isolation would result in a higher / (lower) fair value. – The high end of the range relates to securities that are priced low within the market relative to the expected cash flow schedule. This indicates that the market is pricing an increased risk of credit loss into the security that is greater than what is being captured by the expected cash flow generation process. The low ends of the ranges are typical of funding rates on better-quality instruments.
Funding spread	– Structured financing transactions are valued using synthetic funding curves that best represent the assets that are pledged as collateral for the transactions. They are not representative of where UBS can fund itself on an unsecured basis, but provide an estimate of where UBS can source and deploy secured funding with counterparties for a given type of collateral. The funding spreads are expressed in terms of basis points over or under LIBOR, and if funding spreads widen, this increases the effect of discounting. – A small proportion of structured debt instruments and non-structured fixed-rate bonds within financial liabilities designated at fair value had an exposure to funding spreads that was longer in duration than the actively traded market.
Volatility	– Volatility measures the variability of future prices for a particular instrument and is generally expressed as a percentage, where a higher number reflects a more volatile instrument, for which future price movements are more likely to occur. Volatility is a key input into option models, where it is used to derive a probability-based distribution of future prices for the underlying instrument. The effect of volatility on individual positions within the portfolio is driven primarily by whether the option contract is a long or short position. In most cases, the fair value of an option increases as a result of an increase in volatility and is reduced by a decrease in volatility. Generally, volatility used in the measurement of fair value is derived from active-market option prices (referred to as implied volatility). A key feature of implied volatility is the volatility "smile" or "skew", which represents the effect of pricing options of different option strikes at different implied volatility levels. – Volatilities of low interest rates tend to be much higher than volatilities of high interest rates. In addition, different currencies may have significantly different implied volatilities.

Note 21 Fair value measurement (continued)

Input	Description
Correlation	– Correlation measures the interrelationship between the movements of two variables. It is expressed as a percentage between –100% and +100%, where +100% represents perfectly correlated variables (meaning a movement of one variable is associated with a movement of the other variable in the same direction) and –100% implies that the variables are inversely correlated (meaning a movement of one variable is associated with a movement of the other variable in the opposite direction). The effect of correlation on the measurement of fair value depends on the specific terms of the instruments being valued, reflecting the range of different payoff features within such instruments. – Equity-to-FX correlation is important for equity options based on a currency other than the currency of the underlying stock. Equity-to-equity correlation is particularly important for complex options that incorporate, in some manner, different equities in the projected payoff.
Equity dividend yields	– The derivation of a forward price for an individual stock or index is important for measuring fair value for forward or swap contracts and for measuring fair value using option pricing models. The relationship between the current stock price and the forward price is based on a combination of expected future dividend levels and payment timings, and, to a lesser extent, the relevant funding rates applicable to the stock in question. Dividend yields are generally expressed as an annualized percentage of the share price, with the lowest limit of 0% representing a stock that is not expected to pay any dividend. The dividend yield and timing represents the most significant parameter in determining fair value for instruments that are sensitive to an equity forward price.

g) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible favorable and unfavorable alternative assumptions would change fair value significantly, and the estimated effect thereof. The table below does not represent the estimated effect of stress scenarios. Interdependencies between Level 1, 2 and 3 parameters have not been incorporated in the table. Furthermore, direct inter-relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data is estimated using a number of techniques, including the estimation of price dispersion among different market participants, variation in modeling approaches and reasonably possible changes to assumptions used within the fair value measurement process. The sensitivity ranges are not always symmetrical around the fair values, as the inputs used in valuations are not always precisely in the middle of the favorable and unfavorable range.

Sensitivity data is determined at a product or parameter level and then aggregated assuming no diversification benefit. Diversification would incorporate estimated correlations across different sensitivity results and, as such, would result in an overall sensitivity that would be less than the sum of the individual component sensitivities. However, UBS believes that the diversification benefit is not significant to this analysis.

Sensitivity of fair value measurements to changes in unobservable input assumptions[1]

	31.12.20		31.12.19	
USD million	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Traded loans, loans designated at fair value, loan commitments and guarantees	29	(28)	46	(21)
Securities financing transactions	40	(52)	11	(11)
Auction rate securities	105	(105)	87	(87)
Asset-backed securities	41	(41)	35	(40)
Equity instruments	129	(96)	140	(80)
Interest rate derivative contracts, net	11	(16)	8	(17)
Credit derivative contracts, net[2]	10	(14)	31	(35)
Foreign exchange derivative contracts, net	20	(15)	12	(8)
Equity / index derivative contracts, net	318	(294)	183	(197)
Other	91	(107)	47	(51)
Total	794	(768)	600	(547)

1 Sensitivity of issued and over-the-counter debt instruments is reported with the equivalent derivative or securities financing instrument. 2 Includes refinements applied in estimating valuation uncertainty, resulting from a move to use issuer-specific proxy credit default swap curves rather than generic curves.

Note 21 Fair value measurement (continued)

h) Level 3 instruments: movements during the period

The table below presents additional information about material movements in Level 3 assets and liabilities measured at fair value on a recurring basis, excluding any related hedging activity.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Movements of Level 3 instruments[1]

		Total gains / losses included in comprehensive income									
USD billion	Balance as of 31 December 2018	Net gains / losses included in income[2]	*of which: related to Level 3 instruments held at the end of the reporting period*	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2019
Financial assets at fair value held for trading	2.0	(0.1)	*0.0*	0.5	(1.3)	1.0	0.0	0.2	(0.4)	0.0	1.8
of which:											
Investment fund units	*0.4*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.0*
Corporate and municipal bonds	*0.7*	*0.0*	*0.0*	*0.3*	*(0.2)*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.5*
Loans	*0.7*	*(0.1)*	*0.0*	*0.0*	*(0.8)*	*1.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.8*
Other	*0.2*	*0.0*	*(0.1)*	*0.1*	*0.0*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.4*
Derivative financial instruments – assets	1.4	(0.1)	*0.0*	0.0	0.0	0.4	(0.2)	0.1	(0.3)	0.0	1.3
of which:											
Interest rate contracts	*0.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.3*
Equity / index contracts	*0.5*	*0.0*	*0.1*	*0.0*	*0.0*	*0.1*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.6*
Credit derivative contracts	*0.5*	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.2*	*(0.1)*	*0.0*	*(0.1)*	*0.0*	*0.4*
Other	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Financial assets at fair value not held for trading	4.4	0.0	*0.0*	1.2	(0.6)	0.0	0.0	0.1	(1.2)	0.0	4.0
of which:											
Loans	*1.8*	*0.0*	*0.0*	*0.7*	*(0.1)*	*0.0*	*0.0*	*0.1*	*(1.2)*	*0.0*	*1.2*
Auction rate securities	*1.7*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.5*
Equity instruments	*0.5*	*0.0*	*0.0*	*0.1*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*
Other	*0.5*	*0.0*	*0.0*	*0.5*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.7*
Derivative financial instruments – liabilities	2.2	0.1	*0.1*	0.0	0.0	0.2	(0.4)	0.2	(0.3)	0.0	2.0
of which:											
Interest rate contracts	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.1*
Equity / index contracts	*1.4*	*0.3*	*0.2*	*0.0*	*0.0*	*0.0*	*(0.3)*	*0.1*	*(0.2)*	*0.0*	*1.3*
Credit derivative contracts	*0.5*	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.5*
Other	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*
Debt issued designated at fair value	11.0	0.8	*0.7*	0.0	0.0	5.6	(5.4)	0.7	(3.1)	0.0	9.6
Other financial liabilities designated at fair value	1.0	0.2	*0.1*	0.0	0.0	0.5	(0.7)	0.0	0.0	0.0	1.0

1 Effective 1 January 2020, UBS has enhanced its disclosure of Level 3 movements by excluding from the table the impacts of instruments purchased during the period and sold prior to the end of the period. Prior-period comparatives have been restated accordingly. 2 Net gains / losses included in comprehensive income are composed of Net interest income, Other net income from financial instruments measured at fair value through profit or loss and Other income. 3 Total Level 3 assets as of 31 December 2020 were USD 8.3 billion (31 December 2019: USD 7.2 billion). Total Level 3 liabilities as of 31 December 2020 were USD 15.2 billion (31 December 2019: USD 12.8 billion).

	Total gains / losses included in comprehensive income									
Balance as of 31 December 2019[3]	Net gains / losses included in income[2]	*of which: related to Level 3 instruments held at the end of the reporting period*	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 December 2020[3]
1.8	(0.1)	*(0.1)*	0.8	(1.4)	1.0	0.0	0.3	0.0	0.0	2.3
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
0.5	*0.0*	*0.0*	*0.7*	*(0.5)*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.8*
0.8	*0.0*	*(0.1)*	*0.0*	*(0.7)*	*1.0*	*0.0*	*0.1*	*0.0*	*0.0*	*1.1*
0.4	*0.0*	*0.0*	*0.1*	*(0.3)*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.4*
1.3	0.3	*0.4*	0.0	0.0	0.7	(0.5)	0.1	(0.2)	0.1	1.8
0.3	*0.2*	*0.2*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*
0.6	*0.1*	*0.1*	*0.0*	*0.0*	*0.6*	*(0.3)*	*0.0*	*(0.1)*	*0.0*	*0.9*
0.4	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.2)*	*0.1*	*0.0*	*0.0*	*0.3*
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
4.0	0.0	*0.1*	0.8	(0.9)	0.0	0.0	0.1	0.0	0.0	3.9
1.2	*0.0*	*0.0*	*0.3*	*(0.7)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.9*
1.5	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.5*
0.5	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*
0.7	*0.0*	*0.0*	*0.4*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.0*
2.0	1.3	*1.2*	0.0	0.0	1.2	(0.9)	0.4	(0.6)	0.1	3.5
0.1	*0.3*	*0.3*	*0.0*	*0.0*	*0.3*	*(0.2)*	*0.2*	*(0.2)*	*0.0*	*0.5*
1.3	*1.0*	*0.8*	*0.0*	*0.0*	*0.8*	*(0.6)*	*0.1*	*(0.2)*	*0.0*	*2.3*
0.5	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.1*	*(0.2)*	*0.0*	*0.5*
0.1	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*
9.6	0.0	*(0.2)*	0.0	0.0	6.6	(5.6)	0.5	(1.7)	0.2	9.6
1.0	0.2	*0.2*	0.0	0.0	1.4	(0.6)	0.0	0.0	0.0	2.1

Note 21 Fair value measurement (continued)

i) Maximum exposure to credit risk for financial instruments measured at fair value

The tables below provide UBS AG's maximum exposure to credit risk for financial instruments measured at fair value and the respective collateral and other credit enhancements mitigating credit risk for these classes of financial instruments.

The maximum exposure to credit risk includes the carrying amounts of financial instruments recognized on the balance sheet subject to credit risk and the notional amounts for off-balance sheet arrangements. Where information is available, collateral is presented at fair value. For other collateral, such as real estate, a reasonable alternative value is used. Credit enhancements, such as credit derivative contracts and guarantees, are included at their notional amounts. Both are capped at the maximum exposure to credit risk for which they serve as security. The "Risk management and control" section of this report describes management's view of credit risk and the related exposures, which can differ in certain respects from the requirements of IFRS.

Maximum exposure to credit risk

	31.12.20								
		Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
USD billion	Maximum exposure to credit risk	Cash collateral received	Collateral-ized by securities	Secured by real estate	Other collateral	Netting	Credit derivative contracts	Guarantees	
Financial assets measured at fair value on the balance sheet									
Financial assets at fair value held for trading – debt instruments[1,2]	24.7								24.7
Derivative financial instruments[3,4]	159.6		6.0			138.4			15.2
Brokerage receivables	24.7		24.4						0.3
Financial assets at fair value not held for trading – debt instruments[5]	58.2		13.2						45.0
Total financial assets measured at fair value	267.2	0.0	43.6	0.0	0.0	138.4	0.0	0.0	85.2
Guarantees[6]	0.5				0.1			0.3	0.0

	31.12.19								
		Collateral				Credit enhancements			Exposure to credit risk after collateral and credit enhancements
USD billion	Maximum exposure to credit risk	Cash collateral received	Collateral-ized by securities	Secured by real estate	Other collateral	Netting	Credit derivative contracts	Guarantees	
Financial assets measured at fair value on the balance sheet									
Financial assets at fair value held for trading – debt instruments[1,2]	22.0								22.0
Derivative financial instruments[3,4]	121.8		3.3			107.4			11.1
Brokerage receivables	18.0	0.0	17.8						0.2
Financial assets at fair value not held for trading – debt instruments[5]	55.0	0.1	16.3		0.1				38.6
Total financial assets measured at fair value	216.8	0.1	37.4	0.0	0.1	107.4	0.0	0.0	71.9
Guarantees[6]	1.0							0.3	0.7

1 These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. 2 Does not include investment fund units. 3 Includes USD 0 million (31 December 2019: USD 0 million) fair values of loan commitments and forward starting reverse repurchase agreements classified as derivatives. The full contractual committed amount of forward starting reverse repurchase agreements (generally highly collateralized) of USD 21.9 billion (31 December 2019: USD 20.3 billion) and derivative loan commitments (generally unsecured) of USD 9.4 billion, of which USD 0.8 billion has been sub-participated (31 December 2019: USD 6.3 billion, of which USD 0.8 billion had been sub-participated) is presented in Note 10 under notional amounts. 4 The amount shown in the "Netting" column represents the netting potential not recognized on the balance sheet. Refer to Note 22 for more information. 5 Financial assets at fair value not held for trading collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. 6 The amount shown in the "Guarantees" column largely relates to sub-participations.

Note 21 Fair value measurement (continued)

j) Financial instruments not measured at fair value

The table below provides the estimated fair values of financial instruments not measured at fair value.

Financial instruments not measured at fair value

	31.12.20						31.12.19					
	Carrying amount	Fair value					Carrying amount	Fair value				
USD billion	Total	Carrying amount approximates fair value[1]	Level 1	Level 2	Level 3	Total	Total	Carrying amount approximates fair value[1]	Level 1	Level 2	Level 3	Total
Assets[2]												
Cash and balances at central banks	158.2	158.1	0.1	0.0	0.0	158.2	107.1	107.0	0.1	0.0	0.0	107.1
Loans and advances to banks	15.3	14.6	0.0	0.6	0.1	15.3	12.4	11.7	0.0	0.5	0.2	12.4
Receivables from securities financing transactions	74.2	64.9	0.0	7.6	1.7	74.2	84.2	74.0	0.0	8.6	1.6	84.2
Cash collateral receivables on derivative instruments	32.7	32.7	0.0	0.0	0.0	32.7	23.3	23.3	0.0	0.0	0.0	23.3
Loans and advances to customers	381.0	173.1	0.0	34.2	174.9	382.3	328.0	152.5	0.0	25.7	152.2	330.3
Other financial assets measured at amortized cost	27.2	5.4	9.4	10.9	2.3	28.0	23.0	5.8	8.4	6.4	2.8	23.3
Liabilities												
Amounts due to banks	11.0	8.5	0.0	2.6	0.0	11.1	6.6	5.6	0.0	0.9	0.0	6.6
Payables from securities financing transactions	6.3	6.0	0.0	0.2	0.0	6.3	7.8	7.5	0.0	0.3	0.0	7.8
Cash collateral payables on derivative instruments	37.3	37.3	0.0	0.0	0.0	37.3	31.4	31.4	0.0	0.0	0.0	31.4
Customer deposits	527.9	521.8	0.0	6.2	0.0	528.0	450.6	440.5	0.0	10.2	0.0	450.7
Funding from UBS Group AG and its subsidiaries	54.0	0.0	0.0	55.6	0.0	55.6	47.9	0.0	0.0	49.6	0.0	49.6
Debt issued measured at amortized cost	85.4	16.4	0.0	70.0	0.0	86.3	62.8	8.7	0.0	55.5	0.0	64.3
Other financial liabilities measured at amortized cost[3]	6.6	6.6	0.0	0.0	0.1	6.7	6.5	6.5	0.0	0.0	0.0	6.5

1 Includes certain financial instruments where the carrying amount is a reasonable approximation of the fair value due to the instruments' short-term nature (instruments that are receivable or payable on demand, or with a remaining maturity (excluding the effects of callable features) of three months or less). 2 As of 31 December 2020, USD 0 billion of Loans and advances to banks, USD 1 billion of Receivables from securities financing transactions, USD 163 billion of Loans and advances to customers and USD 20 billion of Other financial assets measured at amortized cost were expected to be recovered or settled after 12 months. As of 31 December 2019, USD 0 billion of Loans and advances to banks, USD 1 billion of Receivables from securities financing transactions, USD 140 billion of Loans and advances to customers and USD 16 billion of Other financial assets measured at amortized cost were expected to be recovered or settled after 12 months. 3 Excludes lease liabilities.

The fair values included in the table above have been calculated for disclosure purposes only. The valuation techniques and assumptions described below relate only to the fair value of UBS's financial instruments not measured at fair value. Other institutions may use different methods and assumptions for their fair value estimations, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another. The following principles were applied when determining fair value estimates for financial instruments not measured at fair value:

– For financial instruments with remaining maturities greater than three months, the fair value was determined from quoted market prices, if available.
– Where quoted market prices were not available, the fair values were estimated by discounting contractual cash flows using current market interest rates or appropriate yield curves for instruments with similar credit risk and maturity. These estimates generally include adjustments for counterparty credit risk or UBS's own credit.
– For short-term financial instruments with remaining maturities of three months or less, the carrying amount, which is net of credit loss allowances, is generally considered a reasonable estimate of fair value.

Note 22 Offsetting financial assets and financial liabilities

UBS AG enters into netting agreements with counterparties to manage the credit risks associated primarily with repurchase and reverse repurchase transactions, securities borrowing and lending, over-the-counter derivatives and exchange-traded derivatives. These netting agreements and similar arrangements generally enable the counterparties to set off liabilities against available assets received in the ordinary course of business and / or in the event that the counterparties to the transaction are unable to fulfill their contractual obligations. The right of setoff is a legal right to settle or otherwise eliminate all or a portion of an amount due by applying an amount receivable from the same counterparty against it, thus reducing credit exposure.

The table below provides a summary of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral received to mitigate credit exposures for these financial assets. The gross financial assets of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial liabilities with the same counterparties that have been offset on the balance sheet and other financial assets not subject to an enforceable netting arrangement or similar agreement, as well as other out-of-scope items. Furthermore, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown so as to arrive at financial assets after consideration of netting potential.

UBS AG engages in a variety of counterparty credit risk mitigation strategies in addition to netting and collateral arrangements. Therefore, the net amounts presented in the tables on this and on the next page do not purport to represent their actual credit risk exposure.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

	Assets subject to netting arrangements								
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet[3]			Assets not subject to netting arrangements[4]	Total assets	
As of 31.12.20, USD billion	Gross assets before netting	Netting with gross liabilities[2]	Net assets recognized on the balance sheet	Financial liabilities	Collateral received	Assets after consideration of netting potential	Assets recognized on the balance sheet	Total assets after consideration of netting potential	Total assets recognized on the balance sheet
Receivables from securities financing transactions	70.3	(13.4)	57.0	(1.7)	(55.3)	0.0	17.3	17.3	74.2
Derivative financial instruments	156.9	(5.0)	151.9	(117.2)	(27.2)	7.5	7.7	15.2	159.6
Cash collateral receivables on derivative instruments[1]	31.9	0.0	31.9	(19.6)	(1.5)	10.8	0.8	11.6	32.7
Financial assets at fair value not held for trading	85.6	(79.1)	6.5	(0.8)	(5.8)	0.0	73.5	73.5	80.0
of which: reverse repurchase agreements	*85.6*	*(79.1)*	*6.5*	*(0.8)*	*(5.8)*	*0.0*	*0.2*	*0.2*	*6.7*
Total assets	344.8	(97.5)	247.3	(139.3)	(89.8)	18.3	99.3	117.6	346.6
As of 31.12.19, USD billion									
Receivables from securities financing transactions	83.2	(14.0)	69.2	(1.2)	(68.0)	0.0	15.0	15.0	84.2
Derivative financial instruments	120.2	(3.4)	116.8	(89.3)	(21.4)	6.1	5.0	11.1	121.8
Cash collateral receivables on derivative instruments[1]	26.4	(4.0)	22.4	(13.3)	(1.1)	8.0	0.9	8.9	23.3
Financial assets at fair value not held for trading	83.1	(77.5)	5.6	0.0	(5.6)	0.0	78.0	78.0	83.6
of which: reverse repurchase agreements	*83.0*	*(77.5)*	*5.4*	*0.0*	*(5.4)*	*0.0*	*0.9*	*0.9*	*6.3*
Total assets	**313.0**	**(98.9)**	**214.0**	**(103.8)**	**(96.1)**	**14.1**	**99.0**	**113.1**	**313.0**

1 The net amount of Cash collateral receivables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and exchange-traded derivatives that are economically settled on a daily basis. 2 The logic of the table results in amounts presented in the "Netting with gross liabilities" column corresponding directly to the amounts presented in the "Netting with gross assets" column in the liabilities table presented on the following page. Netting in this column for reverse repurchase agreements presented within the lines "Receivables from securities financing transactions" and "Financial assets at fair value not held for trading" taken together corresponds to the amounts presented for repurchase agreements in the "Payables from securities financing transactions" and "Other financial liabilities designated at fair value" lines in the liabilities table presented on the following page. 3 For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped so as not to exceed the net amount of financial assets presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. 4 Includes assets not subject to enforceable netting arrangements and other out-of-scope items.

Note 22 Offsetting financial assets and financial liabilities (continued)

The table below provides a summary of financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements, as well as financial collateral pledged to mitigate credit exposures for these financial liabilities. The gross financial liabilities of UBS AG that are subject to offsetting, enforceable netting arrangements and similar agreements are reconciled to the net amounts presented within the associated balance sheet line, after giving effect to financial assets with the same counterparties that have been offset on the balance sheet and other financial liabilities not subject to an enforceable netting arrangement or similar agreement. Furthermore, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown so as to arrive at financial liabilities after consideration of netting potential.

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

	Liabilities subject to netting arrangements						Liabilities not subject to netting arrangements[4]	Total liabilities	
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet[3]					
As of 31.12.20, USD billion	Gross liabilities before netting	Netting with gross assets[2]	Net liabilities recognized on the balance sheet	Financial assets	Collateral pledged	Liabilities after consideration of netting potential	Liabilities recognized on the balance sheet	Total liabilities after consideration of netting potential	Total liabilities recognized on the balance sheet
Payables from securities financing transactions	18.2	(13.3)	4.9	(1.6)	(3.3)	0.0	1.4	1.4	6.3
Derivative financial instruments	157.1	(5.0)	152.1	(117.2)	(23.9)	10.9	9.0	19.9	161.1
Cash collateral payables on derivative instruments[1]	35.6	0.0	35.6	(19.6)	(2.1)	13.9	1.7	15.7	37.3
Other financial liabilities designated at fair value	87.0	(79.2)	7.8	(0.8)	(6.3)	0.7	24.0	24.7	31.8
of which: repurchase agreements	*86.2*	*(79.2)*	*7.0*	*(0.8)*	*(6.3)*	*0.0*	*0.3*	*0.3*	*7.3*
Total liabilities	297.8	(97.5)	200.3	(139.2)	(35.5)	25.6	36.2	61.7	236.5
As of 31.12.19, USD billion									
Payables from securities financing transactions	19.8	(14.0)	5.8	(0.8)	(5.0)	0.0	2.0	2.0	7.8
Derivative financial instruments	118.1	(3.4)	114.8	(89.3)	(16.8)	8.6	6.1	14.8	120.9
Cash collateral payables on derivative instruments[1]	34.2	(4.0)	30.1	(16.5)	(1.7)	12.0	1.3	13.3	31.4
Other financial liabilities designated at fair value	83.5	(77.6)	5.9	(0.4)	(5.6)	0.0	30.2	30.2	36.2
of which: repurchase agreements	*83.1*	*(77.6)*	*5.5*	*(0.4)*	*(5.2)*	*0.0*	*0.2*	*0.2*	*5.7*
Total liabilities	**255.6**	**(98.9)**	**156.6**	**(107.0)**	**(29.0)**	**20.6**	**39.6**	**60.2**	**196.2**

1 The net amount of Cash collateral payables on derivative instruments recognized on the balance sheet includes certain OTC derivatives that are net settled on a daily basis either legally or in substance under IAS 32 principles and exchange-traded derivatives that are economically settled on a daily basis. 2 The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding to the amounts presented in the "Netting with gross liabilities" column in the assets table presented on the previous page. Netting in this column for repurchase agreements presented within the lines "Payables from securities financing transactions" and "Other financial liabilities designated at fair value" taken together corresponds to the amounts presented for reverse repurchase agreements in the "Receivables from securities financing transactions" and "Financial assets at fair value not held for trading" lines in the assets table presented on the previous page. 3 For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped so as not to exceed the net amount of financial liabilities presented on the balance sheet; i.e., over-collateralization, where it exists, is not reflected in the table. 4 Includes liabilities not subject to enforceable netting arrangements and other out-of-scope items.

Note 23 Restricted and transferred financial assets

This Note provides information about restricted financial assets (Note 23a), transfers of financial assets (Note 23b and 23c) and financial assets that are received as collateral with the right to resell or repledge these assets (Note 23d).

a) Restricted financial assets

Restricted financial assets consist of assets pledged as collateral against an existing liability or contingent liability and other assets that are otherwise explicitly restricted such that they cannot be used to secure funding.

Financial assets are mainly pledged as collateral in securities lending transactions, in repurchase transactions, against loans from Swiss mortgage institutions and in connection with the issuance of covered bonds. UBS AG generally enters into repurchase and securities lending arrangements under standard market agreements. For securities lending, the cash received as collateral may be more or less than the fair value of the securities loaned, depending on the nature of the transaction. For repurchase agreements, the fair value of the collateral sold under an agreement to repurchase is generally in excess of the cash borrowed. Pledged mortgage loans serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances of USD 12,456 million as of 31 December 2020 (31 December 2019: USD 11,206 million).

Other restricted financial assets include assets protected under client asset segregation rules, assets held by UBS AG's insurance entities to back related liabilities to the policy holders, assets held in certain jurisdictions to comply with explicit minimum local asset maintenance requirements and assets held in consolidated bankruptcy remote entities, such as certain investment funds and other structured entities. The carrying amount of the liabilities associated with these other restricted financial assets is generally equal to the carrying amount of the assets, with the exception of assets held to comply with local asset maintenance requirements, for which the associated liabilities are greater.

Restricted financial assets

USD million	31.12.20	31.12.19
Financial assets pledged as collateral		
Financial assets at fair value held for trading	64,418	56,548
of which: assets pledged as collateral that may be sold or repledged by counterparties	*47,098*	*41,285*
Loans and advances to customers	20,361	18,399
of which: mortgage loans[1]	*18,191*	*18,399*
Financial assets at fair value not held for trading	2,140	188
of which: assets pledged as collateral that may be sold or repledged by counterparties	*2,140*	*188*
Debt securities classified as Other financial assets measured at amortized cost	2,506	1,212
of which: assets pledged as collateral that may be sold or repledged by counterparties	*2,506*	*1,212*
Financial assets measured at fair value through other comprehensive income	149	0
of which: assets pledged as collateral that may be sold or repledged by counterparties	*149*	*0*
Total financial assets pledged as collateral[2]	89,574	76,347
Other restricted financial assets		
Loans and advances to banks	3,730	2,353
Financial assets at fair value held for trading	741	242
Cash collateral receivables on derivative instruments	3,765	2,986
Loans and advances to customers	756	620
Financial assets at fair value not held for trading	22,917	29,368
Financial assets measured at fair value through other comprehensive income	0	176
Other	110	382
Total other restricted financial assets	32,019	36,126
Total financial assets pledged and other restricted financial assets	121,593	112,474

1 All related to mortgage loans that serve as collateral for existing liabilities toward Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately USD 2.7 billion for 31 December 2020 (31 December 2019: approximately USD 6.3 billion) could be withdrawn or used for future liabilities or covered bond issuances without breaching existing collateral requirements. 2 Does not include assets placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes (31 December 2020: USD 1.3 billion; 31 December 2019: USD 0.6 billion).

Note 23 Restricted and transferred financial assets (continued)

In addition to restrictions on financial assets, UBS AG and its subsidiaries are, in certain cases, subject to regulatory requirements that affect the transfer of dividends and capital within UBS AG, as well as intercompany lending. Supervisory authorities also may require entities to measure capital and leverage ratios on a stressed basis, such as the Federal Reserve Board's Comprehensive Capital Analysis and Review (CCAR) process, which may limit the relevant subsidiaries' ability to make distributions of capital based on the results of those tests.

Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries.

Non-regulated subsidiaries are generally not subject to such requirements and transfer restrictions. However, restrictions can also be the result of different legal, regulatory, contractual, entity- or country-specific arrangements and / or requirements.

› **Refer to the "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" section of this report for financial information about significant regulated subsidiaries of UBS AG**

b) Transferred financial assets that are not derecognized in their entirety

The table below presents information for financial assets that have been transferred but are subject to continued recognition in full, as well as recognized liabilities associated with those transferred assets.

Transferred financial assets subject to continued recognition in full

USD million	31.12.20		31.12.19	
	Carrying amount of transferred assets	Carrying amount of associated liabilities recognized on balance sheet	Carrying amount of transferred assets	Carrying amount of associated liabilities recognized on balance sheet
Financial assets at fair value held for trading that may be sold or repledged by counterparties	47,098	18,874	41,285	16,671
relating to securities lending and repurchase agreements in exchange for cash received	*19,177*	*18,874*	*16,945*	*16,671*
relating to securities lending agreements in exchange for securities received	*27,595*	*0*	*24,082*	*0*
relating to other financial asset transfers	*326*	*0*	*258*	*0*
Financial assets at fair value not held for trading that may be sold or repledged by counterparties	2,140	1,378	188	187
Debt securities classified as Other financial assets measured at amortized cost that may be sold or repledged by counterparties[1]	2,506	1,963	1,212	690
Financial assets measured at fair value through other comprehensive income that may be sold or repledged by counterparties	149	148	0	0
Total financial assets transferred[1]	51,893	22,363	42,685	17,548

1 Comparative information has been amended to include Debt securities classified as Other financial assets measured at amortized cost that may be sold or repledged by counterparties.

Transactions in which financial assets are transferred, but continue to be recognized in their entirety on UBS AG's balance sheet include securities lending and repurchase agreements, as well as other financial asset transfers. Repurchase and securities lending arrangements are, for the most part, conducted under standard market agreements and are undertaken with counterparties subject to UBS AG's normal credit risk control processes.

› **Refer to Note 1a item 2e for more information about repurchase and securities lending agreements**

As of 31 December 2020, approximately 40% of the transferred financial assets were assets held for trading transferred in exchange for cash, in which case the associated recognized liability represents the amount to be repaid to counterparties. For securities lending and repurchase agreements, a haircut between 0% and 15% is generally applied to the transferred assets, which results in associated liabilities having a carrying amount below the carrying amount of the transferred assets. The counterparties to the associated liabilities presented in the table above have full recourse to UBS AG.

In securities lending arrangements entered into in exchange for the receipt of other securities as collateral, neither the securities received nor the obligation to return them are recognized on UBS AG's balance sheet, as the risks and rewards of ownership are not transferred to UBS AG. In cases where such financial assets received are subsequently sold or repledged in another transaction, this is not considered to be a transfer of financial assets.

Other financial asset transfers primarily include securities transferred to collateralize derivative transactions, for which the carrying amount of associated liabilities is not provided in the table above, because those replacement values are managed on a portfolio basis across counterparties and product types, and therefore there is no direct relationship between the specific collateral pledged and the associated liability.

Transferred financial assets that are not subject to derecognition in full but remain on the balance sheet to the extent of UBS AG's continuing involvement were not material as of 31 December 2020 and as of 31 December 2019.

Note 23 Restricted and transferred financial assets (continued)

c) Transferred financial assets that are derecognized in their entirety with continuing involvement

Continuing involvement in a transferred and fully derecognized financial asset may result from contractual provisions in the transfer agreement or from a separate agreement with the counterparty or a third party entered into in connection with the transfer.

The fair value and carrying amount of UBS AG's continuing involvement from transferred positions as of 31 December 2020 and 31 December 2019 was not material. Life-to-date losses reported in prior periods primarily relate to legacy positions in securitization vehicles which have been fully marked down, with no remaining exposure to loss.

d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged and that are not recognized on the balance sheet, but that are held as collateral, including amounts that have been sold or repledged.

Off-balance sheet assets received

USD million	31.12.20	31.12.19
Fair value of assets received that can be sold or repledged	500,689	475,726
received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative and other transactions[1]	*487,904*	*466,045*
received in unsecured borrowings	*12,785*	*9,681*
Thereof sold or repledged[2]	367,258	351,327
in connection with financing activities	*315,603*	*306,212*
to satisfy commitments under short sale transactions	*33,595*	*30,591*
in connection with derivative and other transactions[1]	*18,059*	*14,524*

1 Includes securities received as initial margin from its clients that UBS AG is required to remit to central counterparties, brokers and deposit banks through its exchange-traded derivative clearing and execution services. 2 Does not include off-balance sheet securities (31 December 2020: USD 18.9 billion; 31 December 2019: USD 19.6 billion) placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there are no associated liabilities or contingent liabilities.

Note 24 Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2020 are based on the earliest date on which UBS AG could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2019. Derivative positions and trading liabilities, predominantly made up of short sale transactions, are assigned to the column *Due within 1 month,* as this provides a conservative reflection of the nature of these trading activities. The contractual maturities may extend over significantly longer periods.

Maturity analysis of financial liabilities

	31.12.20					
USD billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Financial liabilities recognized on balance sheet[1]						
Amounts due to banks	6.1	2.4	2.1	0.5	0.0	11.1
Payables from securities financing transactions	5.6	0.4	0.3	0.0	0.0	6.3
Cash collateral payables on derivative instruments	37.3					37.3
Customer deposits	514.0	7.8	3.5	2.8	0.2	528.2
Funding from UBS Group AG and its subsidiaries[2]	0.1	0.3	6.2	29.1	24.8	60.5
Debt issued measured at amortized cost[2]	8.8	7.8	38.2	24.5	8.9	88.2
Other financial liabilities measured at amortized cost	5.3	0.1	0.5	2.0	1.8	9.6
of which: lease liabilities	*0.1*	*0.1*	*0.5*	*2.0*	*1.8*	*4.4*
Total financial liabilities measured at amortized cost	577.2	18.9	50.7	58.8	35.8	741.3
Financial liabilities at fair value held for trading[3,4]	33.6					33.6
Derivative financial instruments[3,5]	161.1					161.1
Brokerage payables designated at fair value	38.7					38.7
Debt issued designated at fair value[6]	21.9	16.8	7.1	9.2	6.0	61.0
Other financial liabilities designated at fair value	27.9	0.6	0.6	0.7	4.6	34.3
Total financial liabilities measured at fair value through profit or loss	283.2	17.4	7.7	9.8	10.6	328.8
Total	860.3	36.3	58.4	68.6	46.4	1,070.0
Guarantees, commitments and forward starting transactions						
Loan commitments[7]	40.5	0.5	0.4	0.0		41.4
Guarantees	17.5					17.5
Forward starting transactions, reverse repurchase and securities borrowing agreements[7]	3.2					3.2
Total	61.3	0.5	0.4	0.0	0.0	62.2

Note 24 Maturity analysis of financial liabilities (continued)

	31.12.19					
USD billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Financial liabilities recognized on balance sheet[1]						
Amounts due to banks	5.4	0.3	0.4	0.5	0.0	6.6
Payables from securities financing transactions	7.4	0.1	0.3		0.0	7.8
Cash collateral payables on derivative instruments	31.4					31.4
Customer deposits	423.9	16.5	7.3	3.5	0.0	451.2
Funding from UBS Group AG and its subsidiaries[2]	0.0	0.2	2.3	29.0	24.6	56.2
Debt issued measured at amortized cost[2]	4.3	4.7	27.8	20.7	9.0	66.5
Other financial liabilities measured at amortized cost	5.2	0.1	0.5	1.9	2.0	9.6
of which: lease liabilities	*0.1*	*0.1*	*0.5*	*1.9*	*2.0*	*4.5*
Total financial liabilities measured at amortized cost	477.6	22.0	38.5	55.6	35.6	629.3
Financial liabilities at fair value held for trading[3,4]	30.6					30.6
Derivative financial instruments[3,5]	120.9					120.9
Brokerage payables designated at fair value	37.2					37.2
Debt issued designated at fair value[6]	21.3	17.4	9.5	12.7	7.1	68.0
Other financial liabilities designated at fair value	34.0	0.4	0.5	0.4	0.9	36.1
Total financial liabilities measured at fair value through profit or loss	244.0	17.8	9.9	13.1	8.0	292.9
Total	**721.6**	**39.9**	**48.4**	**68.7**	**43.6**	**922.2**
Guarantees, commitments and forward starting transactions						
Loan commitments[7]	26.8	0.5	0.3	0.0		27.5
Guarantees	19.1					19.1
Forward starting transactions, reverse repurchase and securities borrowing agreements[7]	1.6		0.0			1.7
Total	**47.5**	**0.5**	**0.3**	**0.0**	**0.0**	**48.3**

1 Except for financial liabilities at fair value held for trading and derivative financial instruments (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. 2 The time-bucket Due after 5 years includes perpetual loss-absorbing additional tier 1 capital instruments. 3 Carrying amount is fair value. Management believes that this best represents the cash flows that would have to be paid if these positions had to be settled or closed out. 4 Contractual maturities of financial liabilities at fair value held for trading are: USD 32.6 billion due within 1 month (2019: USD 30 billion), USD 1.0 billion due between 1 month and 1 year (2019: USD 0.6 billion) and USD 0 billion due between 1 and 5 years (2019: USD 0 billion). 5 Includes USD 32 million (2019: 0 million) related to fair values of derivative loan commitments and forward starting reverse repurchase agreements classified as derivatives, presented within "Due within 1 month." The full contractual committed amount of USD 31.3 billion (2019: USD 26.6 billion) is presented in Note 10 under notional amounts. 6 Future interest payments on variable-rate liabilities are determined by reference to the applicable interest rate prevailing as of the reporting date. Future principal payments that are variable are determined by reference to the conditions existing at the reporting date. 7 Excludes derivative loan commitments and forward starting reverse repurchase agreements measured at fair value. The committed amounts of these instruments were previously presented in the former Note 34 (refer to the "Consolidated financial statements" section of the Annual Report 2019 for more information). Starting with this report, they are presented in Note 10 under notional amounts and prior-period information in this table has been amended to ensure comparability.

Derivatives designated in hedge accounting relationships

UBS AG applies hedge accounting to interest rate risk and foreign exchange risk including structural foreign exchange risk related to net investments in foreign operations.

› **Refer to "Market risk" in the "Risk management and control" section of this report for more information about how risks arise and how they are managed by the UBS AG**

Hedging instruments and hedged risk

Interest rate swaps are designated in fair value hedges or cash flow hedges of interest rate risk arising solely from changes in benchmark interest rates. Fair value changes arising from such risk are usually the largest component of the overall change in the fair value of the hedged position in transaction currency.

Cross-currency swaps are designated as fair value hedges of foreign exchange risk. FX forwards and FX swaps are mainly designated as hedges of structural foreign exchange risk related to net investments in foreign operations. In both cases the hedged risk arises solely from changes in spot foreign exchange rate.

The notional of the designated hedging instruments matches the notional of the hedged items, except when the interest rate swaps are re-designated in cash flow hedges, in which case the hedge ratio designated is determined based on the swap sensitivity.

Hedged items and hedge designation

Fair value hedges of interest rate risk related to debt instruments

Fair value hedges of interest rate risk related to debt instruments involve swapping fixed cash flows associated with the debt issued or debt securities held to floating cash flows by entering into interest rate swaps that receive fixed and pay floating cash flows or that pay fixed and receive floating cash flows, respectively. The variable future cash flows are based on the following benchmark rates: USD LIBOR, CHF LIBOR, EURIBOR, GBP LIBOR, AUD LIBOR, JPY LIBOR and SGD LIBOR.

Fair value hedges of portfolio interest rate risk related to loans designated under IAS 39

UBS AG hedges an open portfolio of long-term fixed-rate mortgage loans in CHF using interest rate swaps that pay a fixed rate of interest and receive a floating rate of interest. Both the hedged portfolio and the hedging instruments are adjusted on a monthly basis to reflect changes in size and the maturity profile of the hedged portfolio. The existing hedge relationship is discontinued and a new one is designated. Changes in the portfolio are driven by new loans originated or existing loans repaid.

Cash flow hedges of forecast transactions

UBS AG hedges forecast cash flows on non-trading financial assets and liabilities that bear interest at variable rates or are expected to be refinanced or reinvested in the future, due to movements in future market rates. The amounts and timing of future cash flows, representing both principal and interest flows, are projected on the basis of contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying the non-trading interest rate risk of UBS AG, which is hedged with interest rate swaps, the maximum maturity of which is 10 years. Cash flow forecasts and risk exposures are monitored and adjusted on an ongoing basis, and consequently additional hedging instruments are traded and designated, or are alternatively terminated resulting in a hedge discontinuance.

Fair value hedges of foreign exchange risk related to debt instruments

Debt instruments denominated in currencies other than the US dollar are designated in fair value hedges of spot foreign exchange risk, in addition to and separate from the fair value hedges of interest rate risk. Cross currency swaps economically convert debt denominated in currencies other than the US dollar to US dollars. This hedge accounting program started on 1 January 2020, with the adoption of the hedge accounting requirements of IFRS 9, *Financial Instruments,* by UBS.

› **Refer to Note 1b for more information**

Hedges of net investments in foreign operations

UBS AG applies hedge accounting for certain net investments in foreign operations, which include subsidiaries, branches and associates. Upon maturity of hedging instruments, typically two months, the hedge relationship is terminated and new designations are made to reflect any changes in the net investments in foreign operations.

Note 25 Hedge accounting (continued)

Economic relationship between hedged item and hedging instrument

For hedges designated under IFRS 9, the economic relationship between the hedged item and the hedging instrument is determined based on a qualitative analysis of their critical terms. In cases where hedge designation takes place after origination of the hedging instrument, a quantitative analysis of the possible behavior of hedging derivative and the hedged item during their respective terms is also performed.

For the fair value hedge of portfolio interest rate risk related to loans, designated under IAS 39, hedge effectiveness is assessed by comparing changes in the fair value of the hedged portfolio of loans attributable to changes in the designated benchmark interest rate with the changes in the fair value of the interest rate swaps.

Sources of hedge ineffectiveness

In hedges of interest rate risk, hedge ineffectiveness can arise from mismatches of critical terms and / or the use of different curves to discount the hedged item and instrument, or from entering into a hedge relationship after the trade date of the hedging derivative.

In hedges of foreign exchange risk related to debt issued, hedge ineffectiveness can arise due to the discounting of the hedging instruments and undesignated risk components and lack of such discounting and risk components in the hedged items.

In hedges of net investments in foreign operations, ineffectiveness is unlikely unless the hedged net assets fall below the designated hedged amount. The exceptions are hedges where the hedging currency is not the same as the currency of the foreign operation, where the currency basis may cause ineffectiveness.

Derivatives not designated in hedge accounting relationships

Non-hedge accounted derivatives are mandatorily held for trading with all fair value movements taken to *Other net income from financial instruments measured at fair value through profit or loss*, even when held as an economic hedge or to facilitate client clearing. The one exception relates to forward points on certain short- and long-duration foreign exchange contracts acting as economic hedges, which are reported in *Net interest income*.

All hedges: designated hedging instruments and hedge ineffectiveness

	As of or for the year ended 31.12.20					
		Carrying amount				
USD million	Notional amount	Derivative financial assets	Derivative financial liabilities	Changes in fair value of hedging instruments[1]	Changes in fair value of hedged items[1]	Hedge ineffectiveness recognized in Other net income from financial instruments measured at fair value through profit or loss
Interest rate risk						
Fair value hedges	80,759		12	1,231	(1,247)	(16)
Cash flow hedges	72,732	18		2,213	(2,012)	201
Foreign exchange risk						
Fair value hedges[2,3]	21,555	449	7	(1,735)	1,715	(20)
Hedges of net investments in foreign operations	13,634	3	193	(939)	938	(2)

	As of or for the year ended 31.12.19					
		Carrying amount				
USD million	Notional amount	Derivative financial assets	Derivative financial liabilities	Changes in fair value of hedging instruments[1]	Changes in fair value of hedged items[1]	Hedge ineffectiveness recognized in Other net income from financial instruments measured at fair value through profit or loss
Interest rate risk						
Fair value hedges	69,750	33	14	1,389	(1,376)	13
Cash flow hedges	69,443	16		1,639	(1,571)	68
Foreign exchange risk						
Hedges of net investments in foreign operations	11,875	9	170	(153)	144	(8)

1 Amounts used as the basis for recognizing hedge ineffectiveness for the period. 2 Fair value hedges of foreign exchange risk started on 1 January 2020. 3 The foreign currency basis spread of cross-currency swaps designated as hedging derivatives is excluded from the hedge accounting designation and accounted for as a cost of hedging with amounts deferred in Other comprehensive income within Equity.

Note 25 Hedge accounting (continued)

Fair value hedges: designated hedged items

USD million	31.12.20 Interest rate risk	31.12.20 FX risk[2]	31.12.19 Interest rate risk
Debt issued measured at amortized cost			
Carrying amount of designated debt issued	24,247	10,889	26,120
of which: accumulated amount of fair value hedge adjustment	*761*		*574*
Funding from UBS Group AG and its subsidiaries			
Carrying amount of designated debt instruments	46,182	10,666	41,258
of which: accumulated amount of fair value hedge adjustment	*1,640*		*525*
Other financial assets measured at amortized cost – debt securities			
Carrying amount of designated debt securities	3,242		
of which: accumulated amount of fair value hedge adjustment	*(38)*		
Loans and advances to customers designated in fair value hedges of portfolio interest rate risk under IAS 39			
Carrying amount of designated loans	10,374		4,494
of which: accumulated amount of fair value hedge adjustment on the portfolio that was subject to hedge accounting[1]	*100*		*117*
of which: accumulated amount of fair value hedge adjustment subject to amortization attributable to the portion of the portfolio that ceased to be part of hedge accounting[1]	*111*		*172*

1 Amounts presented within Other financial assets measured at amortized cost and Other financial liabilities measured at amortized cost. 2 Fair value hedges of foreign exchange risk started on 1 January 2020.

Fair value hedges related to debt issued and debt securities: profile of the timing of the nominal amount of the hedging instrument

31.12.20						
USD billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Interest rate swaps	0	4	9	46	12	70
Cross-currency swaps[1]	0	0	4	16	2	22

31.12.19						
USD billion	Due within 1 month	Due between 1 and 3 months	Due between 3 and 12 months	Due between 1 and 5 years	Due after 5 years	Total
Interest rate swaps		3	9	40	14	65

1 Fair value hedges of foreign exchange risk using cross-currency swaps started on 1 January 2020.

Cash flow hedge reserve on a pre-tax basis

USD million	31.12.20	31.12.19
Amounts related to hedge relationships for which hedge accounting continues to be applied	2,560	1,596
Amounts related to hedge relationships for which hedge accounting is no longer applied	296	(43)
Total other comprehensive income recognized directly in equity related to cash flow hedges, on a pre-tax basis	2,856	1,554

Foreign currency translation reserve on a pre-tax basis

USD million	31.12.20	31.12.19
Amounts related to hedge relationships for which hedge accounting continues to be applied	(569)	377
Amounts related to hedge relationships for which hedge accounting is no longer applied	268	257
Total other comprehensive income recognized directly in equity related to hedging instruments designated as net investment hedges, on a pre-tax basis	(302)	634

Note 25 Hedge accounting (continued)

Interest rate benchmark reform

UBS AG continues to apply the relief provided by *Interest Rate Benchmark Reform* (amendments to IFRS 9, IAS 39 and IFRS 7), published by the IASB in September 2019.

The interest rate benchmarks subject to interest rate benchmark reforms to which UBS AG's hedge relationships are exposed are USD LIBOR, CHF LIBOR, GBP LIBOR, AUD LIBOR, JPY LIBOR, HKD LIBOR, SGD LIBOR and EONIA. Existing financial instruments designated in hedge relationships referencing these interest rate benchmarks will transition to alternative reference rates (ARRs) unless they mature before the transition takes place.

UBS AG's hedge relationships are also exposed to Euro Interbank Offered Rate (EURIBOR), for which there is no uncertainty arising from the interest rate benchmark reform. EURIBOR is expected to continue to exist as a benchmark rate for the foreseeable future. Thus, UBS AG does not consider its hedges involving the EURIBOR benchmark interest rate to be directly affected by the interest rate benchmark reform.

UBS AG established a cross-divisional, cross-regional governance structure and change program to address the scale and complexity of this transition.

Apart from EURIBOR hedges, UBS AG applies the relief to all its fair value hedges of interest rate risk and to those cash flow hedge relationships where the hedged risk is LIBOR or EONIA. The following table provides details on the notional amount and carrying amount of the hedging instruments in those hedge relationships maturing after 31 December 2021 or 30 June 2023 for USD LIBOR hedges, which are the expected cessation dates of the applicable interest rate benchmarks. The comparative information in the table below has been amended to consistently reflect this approach.

Hedges of net investments in foreign operations are not affected by the amendments.

› **Refer to Note 1a item 2j for more information about the relief provided by the amendments to IFRS 9, IAS 39 and IFRS 7 related to interest rate benchmark reform**

Hedging instruments referencing LIBOR

	31.12.20			31.12.19		
		Carrying amount			Carrying amount	
USD million	Notional amount	Derivative financial assets	Derivative financial liabilities	Notional amount	Derivative financial assets	Derivative financial liabilities
Interest rate risk						
Fair value hedges	37,146	1	(12)	26,355	1	(14)
Cash flow hedges	11,179	0	0	5,895	0	0

Note 26 Post-employment benefit plans

The table below provides a breakdown of expenses related to pension and other post-employment benefit plans recognized in the income statement within *Personnel expenses*.

Income statement – expenses related to post-employment benefit plans

USD million	31.12.20	31.12.19	31.12.18
Net periodic expenses for defined benefit plans	306	291	140
of which: related to major plans [1]	*289*	*271*	*141*
of which: Swiss pension plan [2]	*269*	*248*	*108*
of which: UK pension plan	*3*	*3*	*11*
of which: US and German pension plans	*18*	*21*	*22*
of which: related to remaining plans and other expenses [3]	*17*	*19*	*(1)*
Expenses for defined contribution plans[4]	291	278	223
of which: UK plans	*36*	*34*	*35*
of which: US plan	*190*	*173*	*127*
of which: remaining plans	*65*	*71*	*61*
Total post-employment benefit plan expenses[5]	597	569	363

1 Refer to Note 26a for more information. 2 Changes to the Swiss pension plan announced in 2018 resulted in a pre-tax gain of USD 132 million related to past service. Refer to Note 26a for more information on these changes. 3 Other expenses include differences between actual and estimated performance award accruals. 4 Refer to Note 26b for more information. 5 Refer to Note 6.

The table below provides a breakdown of amounts recognized in *Other comprehensive income* for defined benefit plans.

Other comprehensive income – gains / (losses) on defined benefit plans

USD million	31.12.20	31.12.19	31.12.18
Major plans[1]	(219)	(128)	(79)
of which: Swiss pension plan	*(172)*	*(15)*	*(201)*
of which: UK pension plan	*(61)*	*(78)*	*130*
of which: US and German pension plans	*14*	*(35)*	*(8)*
Remaining plans	(3)	(1)	9
Gains / (losses) recognized in other comprehensive income, before tax	(222)	(129)	(70)
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	88	(41)	245
Gains / (losses) recognized in other comprehensive income, net of tax[2]	(134)	(170)	175

1 Refer to Note 26a for more information. 2 Refer to the "Statement of comprehensive income."

The table below provides a breakdown of the assets and liabilities recognized on the balance sheet within *Other non-financial assets* and *Other non-financial liabilities* related to defined benefit plans.

Balance sheet – net defined benefit asset

USD million	31.12.20	31.12.19
Major plans[1]	42	9
of which: Swiss pension plan [2]	*0*	*0*
of which: UK pension plan	*0*	*4*
of which: US and German pension plans	*42*	*5*
Total net defined benefit asset	42	9

1 Refer to Note 26a for more information. 2 As of 31 December 2020 and 31 December 2019, the Swiss pension plan was in a surplus situation. No net defined benefit asset was recognized on the balance sheet due to the IFRS asset ceiling restriction. Refer to Note 26a for more information.

Balance sheet – net defined benefit liability

USD million	31.12.20	31.12.19
Major plans[1]	599	527
of which: UK pension plan	*13*	*0*
of which: US and German pension plans [2]	*586*	*527*
Remaining plans	112	103
Total net defined benefit liability[3]	711	629

1 Refer to Note 26a for more information. 2 Of the total liability recognized as of 31 December 2020, USD 88 million related to US plans and USD 498 million related to German plans (31 December 2019: USD 111 million and USD 416 million, respectively). 3 Refer to Note 19c.

Note 26 Post-employment benefit plans (continued)

a) Defined benefit plans

UBS AG has established defined benefit plans for its employees in various jurisdictions in accordance with local regulations and practices. The major plans are located in Switzerland, the UK, the US and Germany. The level of benefits depends on the specific plan rules.

For the funded plans, the plan assets are invested in a diversified portfolio of financial assets. Volatility arises in each plan's net asset / liability position because the fair value of the plan's financial assets is not fully correlated to movements in the value of the plan's defined benefit obligation (DBO). UBS AG's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations are the primary drivers for determining when contributions are required.

Swiss pension plan

The Swiss pension plan covers employees of UBS AG and employees of companies having close economic or financial ties with UBS AG, and exceeds the minimum benefit requirements under Swiss pension law.

In 2017, a significant number of employees transferred from UBS AG to UBS Business Solutions AG, which is a directly held subsidiary of UBS Group AG. There continues to be one pooled pension plan in Switzerland covering the employees of UBS AG and those transferred to UBS Business Solutions AG. UBS AG and UBS Business Solutions AG both are legal sponsors of UBS's Swiss pension plan. Since the date of the employee transfer, UBS AG and UBS Business Solutions AG apply proportionate defined benefit accounting, i.e., the net pension cost and the net pension asset / liability of the Swiss pension plan are allocated proportionally between UBS AG and UBS Business Solutions AG based on the aggregated net pension cost and defined benefit obligations related to their employees.

The Swiss plan offers retirement, disability and survivor benefits and is governed by a Pension Foundation Board. The responsibilities of this board are defined by Swiss pension law and the plan rules.

Savings contributions to the Swiss plan are paid by both employer and employee. Depending on the age of the employee, UBS AG pays a savings contribution that ranges between 6.5% and 27.5% of contributory base salary and between 2.8% and 9% of contributory variable compensation. UBS AG also pays risk contributions that are used to fund disability and survivor benefits. Employees can choose the level of savings contributions paid by them, which vary between 2.5% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation, depending on age and choice of savings contribution category.

The plan offers to members at the normal retirement age of 65 a choice between a lifetime pension and a partial or full lump sum payment. Participants can choose to draw early retirement benefits starting from the age of 58, but can also continue employment and remain active members of the plan until the age of 70. Employees have the opportunity to make additional purchases of benefits to fund early retirement benefits.

The pension amount payable to a participant is calculated by applying a conversion rate to the accumulated balance of the participant's retirement savings account at the retirement date. The balance is based on credited vested benefits transferred from previous employers, purchases of benefits, and the employee and employer contributions that have been made to the participant's retirement savings account, as well as the interest accrued. The interest rate is defined annually by the Pension Foundation Board.

Although the Swiss plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IFRS, primarily because of the obligation to accrue interest on the participants' retirement savings accounts and the payment of lifetime pension benefits.

An actuarial valuation in accordance with Swiss pension law is performed regularly. Should an underfunded situation on this basis occur, the Pension Foundation Board is required to take the necessary measures to ensure that full funding can be expected to be restored within a maximum period of 10 years. If a Swiss plan were to become significantly underfunded on a Swiss pension law basis, additional employer and employee contributions could be required. In this situation, the risk is shared between employer and employees, and the employer is not legally obliged to cover more than 50% of the additional contributions required. As of 31 December 2020, the Swiss plan had a technical funding ratio under Swiss pension law of 132.6% (31 December 2019: 127.1%).

The investment strategy of the Swiss plan complies with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions on the composition of plan assets; e.g., there is a limit of 50% for investments in equities. The investment strategy of the Swiss plan is aligned with the defined risk budget set out by the Pension Foundation Board. The risk budget is determined on the basis of regularly performed asset and liability management analyses. In order to implement the risk budget, the Swiss plan may use direct investments, investment funds and derivatives. To mitigate foreign currency risk, a specific currency hedging strategy is in place. The Pension Foundation Board strives for a medium- and long-term balance between assets and liabilities.

As of 31 December 2020, the Swiss plan was in a surplus situation on an IFRS measurement basis, as the fair value of the plan's assets exceeded the DBO by USD 2,739 million (31 December 2019: a surplus of USD 2,099 million). However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit, which equals the difference between the present value of the estimated future net service cost and the present value of the estimated future employer contributions. As of both 31 December 2020 and 31 December 2019, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet.

In the first quarter of 2020, UBS AG adopted an enhanced methodology for measuring the estimated future economic benefits available under the Swiss pension plan, whereby future net service cost is measured individually for each future year, considering the individually applicable discount rate. In addition, an enhanced discount curve methodology was adopted, utilizing the FINMA-published ultimate forward rate, which represents the average long-term historical real rate plus expected inflation over the long-dated periods where discount rates are unobservable. No changes have been made to the methodology for measuring the defined benefit obligation.

Changes to the Swiss pension plan

As a result of the effects of continuing low and in some cases negative interest rates, diminished investment return expectations and increasing life expectancy, the pension fund of UBS AG in Switzerland and UBS AG agreed to measures that took effect from the start of 2019 to support the long-term financial stability of the Swiss pension fund. As a result, the conversion rate was lowered, the regular retirement age was increased from 64 to 65, employee contributions were increased, and savings contributions started from age 20 instead of 25. Pensions already in payment on 1 January 2019 were not affected.

To mitigate the effects of the reduction of the conversion rate on future pensions, UBS AG committed to pay an extraordinary contribution of up to CHF 450 million (USD 508 million based on the closing exchange rate as of 31 December 2020) in three installments in 2020, 2021 and 2022. In accordance with IFRS, these measures led to a reduction in the pension obligation recognized by UBS AG, resulting in a pre-tax gain of USD 132 million in 2018. This effect was recognized as a reduction in Personnel expenses with a corresponding effect in Other comprehensive income (OCI). The first installment of USD 143 million was paid in 2020 and reduced OCI with no effect on the income statement. If the Swiss plan remains in an asset ceiling position, the two payments in 2021 and 2022, adjusted for expected forfeitures, are expected to reduce OCI by USD 262 million, with no effect on the income statement.

The second installment of USD 152 million was paid in January 2021 and the regular employer contributions expected to be made to the Swiss plan in 2021 are estimated to be USD 292 million.

UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. The normal retirement age for participants in the UK plan is 60. The plan provides guaranteed lifetime pension benefits to plan participants upon retirement. Since 2000, the UK plan has been closed to new entrants and, since 2013, plan participants are no longer accruing benefits for current or future service. Instead, employees participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board and UBS AG. The employer contributions to the pension fund reflect agreed-upon deficit funding contributions, which are determined on the basis of the most recent actuarial valuation using assumptions agreed by the Pension Trustee Board and UBS AG. In the event of underfunding, UBS AG and the Pension Trustee Board must agree on a deficit recovery plan within statutory deadlines. In 2020, UBS AG made deficit funding contributions of USD 46 million to the UK plan. In 2019, UBS AG made deficit funding contributions of USD 242 million.

Note 26 Post-employment benefit plans (continued)

The plan assets are invested in a diversified portfolio of financial assets. In 2020, the UK Pension Trustee Board entered into a longevity swap with an external insurance company, which is recognized as a plan asset. The longevity swap enables the UK pension plan to hedge the risk between expected and actual longevity, which should mitigate volatility in the net defined benefit asset / liability. The longevity swap had nil value on 31 December 2020.

In 2019, UBS AG and the Pension Trustee Board entered into an arrangement whereby a collateral pool was established to provide security for the pension fund. The value of the collateral pool as of 31 December 2020 was USD 347 million (31 December 2019: USD 364 million) and includes corporate bonds, government-related debt instruments and other financial assets. The arrangement provides the Pension Trustee Board dedicated access to a pool of assets in the event of UBS AG's insolvency or not paying a required deficit funding contribution.

In 2021, no contributions are expected to be made to the UK defined benefit plan, subject to regular funding reviews during the year.

US pension plans

There are two distinct major defined benefit plans in the US, both with a normal retirement age of 65. Since 1998 and 2001, respectively, the plans have been closed to new entrants, who instead can participate in defined contribution plans.

One of the defined benefit plans is a contribution-based plan in which each participant accrues a percentage of salary in a retirement savings account. The retirement savings account is credited annually with interest based on a rate that is linked to the average yield on one-year US government bonds. For the other defined benefit plan, retirement benefits accrue based on the career-average earnings of each individual plan participant. Former employees with vested benefits have the option to take a lump sum payment or a lifetime annuity.

As required under applicable pension laws, both plans have fiduciaries who, together with UBS AG, are responsible for the governance of the plans. UBS AG regularly reviews the contribution strategy for these plans, considering statutory funding rules and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan.

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each plan's fiduciaries are responsible for the investment decisions with respect to the plan assets.

The employer contributions expected to be made to the US defined benefit plans in 2021 are estimated at USD 10 million.

German pension plans

There are two defined benefit plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are paid directly by UBS AG. The normal retirement age for the participants in the German plans is 65. Within the larger of the two plans, each participant accrues a percentage of salary in a retirement savings account. The accumulated account balance of the plan participant is credited on an annual basis with guaranteed interest at a rate of 5%. In the other plan, amounts are accrued annually based on employee elections related to variable compensation. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 6% for amounts accrued before 2010, of 4% for amounts accrued from 2010 to 2017 and of 0.9% for amounts accrued after 2017. Both plans are subject to German pension law, whereby the responsibility to pay pension benefits when they are due resides entirely with UBS AG. A portion of the pension payments is directly increased in line with price inflation.

The benefits expected to be paid by UBS AG to the participants of the German plans in 2021 are estimated at USD 11 million.

Financial information by plan

The tables on the following pages provide an analysis of the movement in the net asset / liability recognized on the balance sheet for defined benefit plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Note 26 Post-employment benefit plans (continued)

Defined benefit plans

USD million	Swiss pension plan		UK pension plan		US and German pension plans		Total	
	2020	2019	2020	2019	2020	2019	2020	2019
Defined benefit obligation at the beginning of the year	13,809	13,774	3,654	3,192	1,820	1,679	19,283	18,645
Current service cost	262	243	0	0	6	6	268	249
Interest expense	40	122	73	92	45	59	159	273
Plan participant contributions	159	149	0	0	0	0	159	149
Remeasurements	677	(61)	449	361	105	185	1,231	485
of which: actuarial (gains) / losses due to changes in demographic assumptions	*(53)*	*(125)*	*(14)*	*(26)*	*(34)*	*3*	*(101)*	*(148)*
of which: actuarial (gains) / losses due to changes in financial assumptions	*565*	*1,006*	*505*	*421*	*134*	*179*	*1,204*	*1,605*
of which: experience (gains) / losses [1,2]	*165*	*(942)*	*(42)*	*(34)*	*5*	*4*	*127*	*(972)*
Past service cost related to plan amendments	0	0	3	0	0	0	3	0
Benefit payments	(641)	(624)	(148)	(135)	(108)	(102)	(898)	(860)
Other movements	(4)	0	0	0	0	0	(4)	0
Foreign currency translation	1,317	206	132	144	37	(8)	1,486	342
Defined benefit obligation at the end of the year	15,619	13,809	4,162	3,654	1,905	1,820	21,686	19,283
of which: amounts owed to active members	*8,290*	*7,073*	*159*	*164*	*245*	*235*	*8,694*	*7,472*
of which: amounts owed to deferred members	*0*	*0*	*1,879*	*1,559*	*743*	*675*	*2,622*	*2,233*
of which: amounts owed to retirees	*7,329*	*6,735*	*2,124*	*1,931*	*917*	*911*	*10,370*	*9,577*
Fair value of plan assets at the beginning of the year	15,908	15,772	3,658	3,032	1,299	1,168	20,864	19,972
Return on plan assets excluding interest income[2]	962	(30)	388	284	118	150	1,469	403
Interest income	48	142	73	89	38	47	159	278
Employer contributions	436	271	46	242	17	38	499	550
Plan participant contributions	159	149	0	0	0	0	159	149
Benefit payments	(641)	(624)	(148)	(135)	(108)	(102)	(898)	(860)
Administration expenses, taxes and premiums paid	(8)	(7)	0	0	(4)	(2)	(11)	(9)
Foreign currency translation	1,495	235	132	146	0	0	1,626	381
Fair value of plan assets at the end of the year	18,358	15,908	4,149	3,658	1,360	1,299	23,867	20,864
Asset ceiling effect at the beginning of the year	2,099	1,998	0	0	0	0	2,099	1,998
Interest expense on asset ceiling effect	7	18	0	0	0	0	7	18
Asset ceiling effect excluding interest expense and foreign currency translation on asset ceiling effect	457	46	0	0	0	0	457	46
Foreign currency translation	176	36	0	0	0	0	176	36
Asset ceiling effect at the end of the year	2,739	2,099	0	0	0	0	2,739	2,099
Net defined benefit asset / (liability)	0	0	(13)	4	(545)	(521)	(558)	(518)
Movement in the net asset / (liability) recognized on the balance sheet								
Net asset / (liability) recognized on the balance sheet at the beginning of the year	0	0	4	(160)	(521)	(511)	(518)	(671)
Net periodic expenses recognized in net profit	(269)	(248)	(3)	(3)	(18)	(21)	(289)	(271)
Gains / (losses) recognized in other comprehensive income	(172)	(15)	(61)	(78)	14	(35)	(219)	(128)
Employer contributions	436	271	46	242	17	38	499	550
Other movements	4	0	0	0	0	0	4	0
Foreign currency translation	1	(8)	0	2	(37)	8	(35)	2
Net asset / (liability) recognized on the balance sheet at the end of the year	0	0	(13)	4	(545)	(521)	(558)	(518)
Funded and unfunded plans								
Defined benefit obligation from funded plans	15,619	13,809	4,162	3,654	1,319	1,319	21,100	18,782
Defined benefit obligation from unfunded plans	0	0	0	0	586	501	586	501
Plan assets	18,358	15,908	4,149	3,658	1,360	1,299	23,867	20,864
Surplus / (deficit)	2,739	2,099	(13)	4	(545)	(521)	2,181	1,582
Asset ceiling effect	2,739	2,099	0	0	0	0	2,739	2,099
Net defined benefit asset / (liability)	0	0	(13)	4	(545)	(521)	(558)	(518)

1 Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. 2 Includes the effect from employees transferring between UBS AG and UBS Business Solutions during the period.

Note 26 Post-employment benefit plans (continued)

Analysis of amounts recognized in net profit

USD million	Swiss pension plan		UK pension plan		US and German pension plans		Total	
For the year ended	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19
Current service cost	262	243	0	0	6	6	268	249
Interest expense related to defined benefit obligation	40	122	73	92	45	59	159	273
Interest income related to plan assets	(48)	(142)	(73)	(89)	(38)	(47)	(159)	(278)
Interest expense on asset ceiling effect	7	18	0	0	0	0	7	18
Administration expenses, taxes and premiums paid	8	7	0	0	4	2	11	9
Past service cost related to plan amendments	0	0	3	0	0	0	3	0
Net periodic expenses recognized in net profit	269	248	3	3	18	21	289	271

Analysis of amounts recognized in other comprehensive income (OCI)

USD million	Swiss pension plan		UK pension plan		US and German pension plans		Total	
For the year ended	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19
Remeasurement of defined benefit obligation	(677)	61	(449)	(361)	(105)	(185)	(1,231)	(485)
of which: change in discount rate assumption	*(447)*	*(1,156)*	*(504)*	*(552)*	*(141)*	*(166)*	*(1,092)*	*(1,874)*
of which: change in rate of salary increase assumption	*(132)*	*2*	*0*	*0*	*0*	*0*	*(132)*	*2*
of which: change in rate of pension increase assumption	*0*	*0*	*(1)*	*132*	*1*	*(4)*	*0*	*128*
of which: change in rate of interest credit on retirement savings assumption	*15*	*149*	*0*	*0*	*24*	*18*	*39*	*167*
of which: change in life expectancy	*84*	*0*	*22*	*21*	*50*	*4*	*156*	*25*
of which: change in other actuarial assumptions	*(33)*	*125*	*(8)*	*5*	*(34)*	*(33)*	*(75)*	*97*
of which: experience gains / (losses)[1,2]	*(165)*	*942*	*42*	*34*	*(5)*	*(4)*	*(127)*	*972*
Return on plan assets excluding interest income	962	(30)	388	284	118	150	1,469	403
Asset ceiling effect excluding interest expense and foreign currency translation	(457)	(46)	0	0	0	0	(457)	(46)
Total gains / (losses) recognized in other comprehensive income, before tax	(172)	(15)	(61)	(78)	14	(35)	(219)	(128)

1 Experience (gains) / losses are a component of actuarial remeasurements of the defined benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. 2 Includes the effect from employees transferring between UBS AG and UBS Business Solutions during the period.

The table below provides information about the duration of the DBO and the timing for expected benefit payments.

	Swiss pension plan		UK pension plan		US and German pension plans[1]	
	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19
Duration of the defined benefit obligation (in years)	16.2	15.2	19.0	20.2	10.2	10.1
Maturity analysis of benefits expected to be paid						
USD million						
Benefits expected to be paid within 12 months	710	687	114	93	122	121
Benefits expected to be paid between 1 and 3 years	1,442	1,383	232	209	235	228
Benefits expected to be paid between 3 and 6 years	2,100	2,048	406	384	346	346
Benefits expected to be paid between 6 and 11 years	3,408	3,232	744	748	532	548
Benefits expected to be paid between 11 and 16 years	3,184	2,899	758	807	413	455
Benefits expected to be paid in more than 16 years	11,186	9,136	3,206	3,913	541	721

1 The duration of the defined benefit obligation represents a weighted average across US and German plans.

Note 26 Post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each plan's DBO considers different actuarial assumptions. Changes in these assumptions lead to volatility in the DBO. The actuarial assumptions used for the defined benefit plans are based on the economic conditions prevailing in the jurisdiction in which they are offered. Changes in the defined benefit obligation are most sensitive to changes in the discount rate. The discount rate is based on the yield of high-quality corporate bonds quoted in an active market in the currency of the respective plan. A decrease in the discount curve increases the DBO and an increase in the discount curve decreases the DBO. UBS AG regularly reviews the actuarial assumptions used in calculating the DBO to determine their continuing relevance.

› **Refer to Note 1a item 6 for a description of the accounting policy for defined benefit plans**

The tables below show the significant actuarial assumptions used in calculating the DBO at the end of the year.

Significant actuarial assumptions

	Swiss pension plan		UK pension plan		US and German pension plans[1]	
In %	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19
Discount rate	0.10	0.29	1.42	2.07	1.62	2.58
Rate of salary increase	2.00	1.50	0.00	0.00	2.25	2.37
Rate of pension increase	0.00	0.00	2.89	2.92	1.70	1.80
Rate of interest credit on retirement savings	0.60	0.49	0.00	0.00	1.12	2.57

1 Represents weighted average assumptions across US and German plans.

Mortality tables and life expectancies for major plans

		Life expectancy at age 65 for a male member currently			
		aged 65		aged 45	
Country	Mortality table	31.12.20	31.12.19	31.12.20	31.12.19
Switzerland	BVG 2020 G with CMI 2019 projections[1]	21.7	21.6	23.2	23.1
UK	S3PA with CMI 2019 projections[2]	23.4	23.3	24.6	24.5
USA	Pri-2012 with MP-2020 projection scale[3]	21.8	22.8	23.2	24.3
Germany	Dr. K. Heubeck 2018 G	20.8	20.7	23.6	23.5

		Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
Country	Mortality table	31.12.20	31.12.19	31.12.20	31.12.19
Switzerland	BVG 2020 G with CMI 2019 projections[1]	23.4	23.6	24.9	25.1
UK	S3PA with CMI 2019 projections[2]	24.9	25.1	26.3	26.4
USA	Pri-2012 with MP-2020 projection scale[3]	23.2	24.4	24.5	25.9
Germany	Dr. K. Heubeck 2018 G	24.3	24.2	26.5	26.4

1 In 2019, BVG 2015 G with CMI 2016 projections was used. 2 In 2019, S2PA with CMI 2018 projections was used. 3 In 2019, RP-2014 WCHA with MP-2019 projection scale was used.

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Note 26 Post-employment benefit plans (continued)

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption, showing how the DBO would have been affected by changes in the relevant actuarial assumption that were reasonably possible at the balance sheet date. Unforeseen circumstances may arise, which could result in variations that are outside the range of alternatives deemed reasonably possible. Caution should be used in extrapolating the sensitivities below on the DBO as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions[1]

Increase / (decrease) in defined benefit obligation	Swiss pension plan		UK pension plan		US and German pension plans	
USD million	31.12.20	31.12.19	31.12.20	31.12.19	31.12.20	31.12.19
Discount rate						
Increase by 50 basis points	(1,030)	(853)	(370)	(346)	(91)	(86)
Decrease by 50 basis points	1,181	972	423	395	99	93
Rate of salary increase						
Increase by 50 basis points	74	49	–[2]	–[2]	1	1
Decrease by 50 basis points	(71)	(47)	–[2]	–[2]	(1)	(1)
Rate of pension increase						
Increase by 50 basis points	793	673	358	331	8	7
Decrease by 50 basis points	–[3]	–[3]	(316)	(299)	(7)	(7)
Rate of interest credit on retirement savings						
Increase by 50 basis points	142	107	–[4]	–[4]	9	9
Decrease by 50 basis points	(113)[5]	(62)	–[4]	–[4]	(8)	(9)
Life expectancy						
Increase in longevity by one additional year	566	459	182	154	60	51

1 The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded. 2 As the plan is closed for future service, a change in assumption is not applicable. 3 As the assumed rate of pension increase was 0% as of 31 December 2020 and as of 31 December 2019, a downward change in assumption is not applicable. 4 As the UK plan does not provide interest credits on retirement savings, a change in assumption is not applicable. 5 As of 31 December 2020, 17.7% of retirement savings were subject to a legal minimum rate of 1.00%.

Note 26 Post-employment benefit plans (continued)

Fair value of plan assets

The tables below provide information about the composition and fair value of plan assets of the Swiss, the UK and the US pension plans.

Composition and fair value of plan assets

Swiss pension plan

	31.12.20				31.12.19			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
USD million	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	123	0	123	1	90	0	90	1
Real estate / property								
Domestic	0	2,018	2,018	11	0	1,720	1,720	11
Foreign	0	186	186	1	0	90	90	1
Investment funds								
Equity								
Domestic	465	0	465	3	395	0	395	2
Foreign	3,540	1,103	4,642	25	3,433	932	4,365	27
Bonds[1]								
Domestic, AAA to BBB–	2,096	0	2,096	11	1,825	0	1,825	11
Foreign, AAA to BBB–	3,462	0	3,462	19	3,315	0	3,315	21
Foreign, below BBB–	734	0	734	4	563	0	563	4
Other	1,894	2,097	3,991	22	904	2,230	3,134	20
Other investments	373	266	640	3	301	109	411	3
Total fair value of plan assets	12,688	5,670	18,358	100	10,827	5,081	15,908	100

	31.12.20	31.12.19
Total fair value of plan assets	18,358	15,908
of which:[2]		
Bank accounts at UBS AG	*130*	*90*
UBS AG debt instruments	*19*	*4*
UBS Group AG shares	*13*	*12*
Securities lent to UBS AG[3]	*796*	*748*
Property occupied by UBS AG	*54*	*50*
Derivative financial instruments, counterparty UBS AG[3]	*84*	*6*

1 The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in Standard & Poor's rating classification. 2 Bank accounts at UBS AG encompass accounts in the name of the Swiss pension fund. The other positions disclosed in the table encompass both direct investments in UBS AG instruments and UBS Group AG shares and indirect investments, i.e., those made through funds that the pension fund invests in. 3 Securities lent to UBS AG and derivative financial instruments are presented gross of any collateral. Securities lent to UBS AG were fully covered by collateral as of 31 December 2020 and 31 December 2019. Net of collateral, derivative financial instruments amounted to negative USD 9 million as of 31 December 2020 (31 December 2019: positive USD 3 million).

Note 26 Post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

UK pension plan

	31.12.20				31.12.19			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
USD million	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	195	0	195	5	141	0	141	4
Bonds[1]								
Domestic, AAA to BBB–	2,150	0	2,150	52	1,810	0	1,810	49
Foreign, AAA to BBB–	53	0	53	1	0	0	0	0
Investment funds								
Equity								
Domestic	34	3	37	1	33	0	33	1
Foreign	1,077	0	1,077	26	916	0	916	25
Bonds[1]								
Domestic, AAA to BBB–	919	131	1,050	25	610	117	727	20
Domestic, below BBB–	47	0	47	1	22	0	22	1
Foreign, AAA to BBB–	149	0	149	4	310	0	310	8
Foreign, below BBB–	110	0	110	3	108	0	108	3
Real estate								
Domestic	98	16	114	3	103	18	122	3
Foreign	0	37	37	1	0	19	19	1
Other	(86)	0	(86)	(2)	0	0	0	0
Insurance contracts	0	8	8	0	0	7	7	0
Derivatives	(3)	0	(3)	0	3	0	3	0
Asset-backed securities	0	6	6	0	0	6	6	0
Other investments[2]	(803)	9	(794)	(19)	(572)	7	(565)	(15)
Total fair value of plan assets	3,940	209	4,149	100	3,483	175	3,658	100

1 The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in Standard & Poor's rating classification. 2 Mainly relates to repurchase arrangements on UK treasury bonds.

Note 26 Post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

US pension plans

	31.12.20				31.12.19			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
USD million	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	38	0	38	3	27	0	27	2
Bonds[1]								
Domestic, AAA to BBB–	490	0	490	36	475	0	475	37
Domestic, below BBB–	7	0	7	0	2	0	2	0
Foreign, AAA to BBB–	99	0	99	7	99	0	99	8
Foreign, below BBB–	1	0	1	0	3	0	3	0
Investment funds								
Equity								
Domestic	210	0	210	15	208	0	208	16
Foreign	169	0	169	12	161	0	161	12
Bonds[1]								
Domestic, AAA to BBB–	195	0	195	14	176	0	176	14
Domestic, below BBB–	34	0	34	2	28	0	28	2
Foreign, AAA to BBB–	19	0	19	1	17	0	17	1
Foreign, below BBB–	3	0	3	0	3	0	3	0
Real estate								
Domestic	0	14	14	1	0	13	13	1
Other	79	0	79	6	69	0	69	5
Insurance contracts	0	1	1	0	0	18	18	1
Total fair value of plan assets	1,345	15	1,360	100	1,268	31	1,299	100

1 The bond credit ratings are primarily based on Standard & Poor's credit ratings. Ratings AAA to BBB– and below BBB– represent investment grade and non-investment grade ratings, respectively. In cases where credit ratings from other rating agencies were used, these were converted to the equivalent rating in Standard & Poor's rating classification.

Note 26 Post-employment benefit plans (continued)

b) Defined contribution plans

UBS AG sponsors a number of defined contribution plans, with the most significant plans in the US and the UK. UBS AG's obligation is limited to its contributions made in accordance with the plan, which may include direct contributions as well as matching contributions. Employer contributions to defined contribution plans are recognized as an expense, which, for 2020, 2019 and 2018, amounted to USD 291 million, USD 278 million and USD 223 million, respectively.

c) Related-party disclosure

UBS AG is the principal provider of banking services for the pension fund of UBS AG in Switzerland. In this capacity, UBS AG is engaged to execute most of the pension fund's banking activities. These activities can include, but are not limited to, trading, securities lending and borrowing and derivative transactions. The non-Swiss UBS AG pension funds do not have a similar banking relationship with UBS AG.

Also, UBS AG leases certain properties that are owned by the Swiss pension fund. As of 31 December 2020, the minimum commitment toward the Swiss pension fund under the related leases was approximately USD 6 million (31 December 2019: USD 8 million).

› **Refer to the "Composition and fair value of plan assets" table in Note 26a for more information about fair value of investments in UBS AG and UBS Group AG instruments held by the Swiss pension fund**

The following amounts have been received or paid by UBS AG from and to the post-employment benefit plans located in Switzerland, the UK and the US in respect of these banking activities and arrangements.

Related-party disclosure

	For the year ended		
USD million	31.12.20	31.12.19	31.12.18
Received by UBS AG			
Fees	19	19	22
Paid by UBS AG			
Rent	3	2	3
Dividends, capital repayments and interest	10	10	10

The transaction volumes in UBS Group AG shares and UBS AG debt instruments and the balances of UBS Group AG shares held as of 31 December were:

Transaction volumes – UBS Group AG shares and UBS AG debt instruments

	For the year ended	
	31.12.20	31.12.19
Financial instruments bought by pension funds		
UBS Group AG shares (in thousands of shares)	1,677	929
UBS AG debt instruments (par values, USD million)	16	1
Financial instruments sold by pension funds or matured		
UBS Group AG shares (in thousands of shares)	2,556	1,778
UBS AG debt instruments (par values, USD million)	4	5

UBS Group AG shares held by post-employment benefit plans

	31.12.20	31.12.19
Number of shares (in thousands of shares)	14,112	14,991
Fair value (USD million)	199	189

Note 27 Employee benefits: variable compensation

a) Plans offered

UBS has several share-based and other deferred compensation plans that align the interests of Group Executive Board (GEB) members and other employees with the interests of investors.

Share based payment awards are granted in the form of notional shares and, where permitted, carry a dividend equivalent that may be paid in notional shares or cash and that vest on the same terms and conditions as the award. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons.

Deferred compensation awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS. These compensation plans are also designed to meet regulatory requirements and include special provisions for regulated employees.

The most significant deferred compensation plans are described below.

For the majority of variable compensation awards granted under such plans to employees of UBS AG, the grantor entity is UBS Group AG. Expenses associated with these awards are charged by UBS Group AG to UBS AG. For the purpose of this Note, references to shares refer to UBS Group AG shares.

› **Refer to Note 1a item 5 for a description of the accounting policy related to share-based and other deferred compensation plans**

Mandatory deferred compensation plans

Equity Ownership Plan (EOP)

The EOP is a mandatory deferred share-based compensation plan for all employees whose total annual compensation exceeds a specified threshold, other than GEB members, Group Managing Directors (GMDs) and Group or Divisional Vice Chair role holders who are granted share-based awards under the new Long-Term Incentive Plan (LTIP) first granted in 2020. Awards generally vest in equal installments after two and three years following grant, provided that vesting conditions are satisfied. Awards granted to GEB members in 2019 and prior years generally vest three, four and five years after grant.

EOP awards granted to GEB members and GMDs in 2019 and prior years, as well as EOP awards granted to certain other employees will only vest if certain performance measures both for the Group and the applicable business division are met.

In order to align deferred compensation of certain Asset Management employees with the performance of the investment funds they manage, awards are granted to such employees in the form of cash-settled notional investment funds. The amount delivered depends on the value of the underlying investment funds at the time of vesting.

Certain awards, such as replacement awards issued outside the normal performance year cycle, may take the form of deferred cash under the EOP plan rules.

Long-Term Incentive Plan

The LTIP is a mandatory deferred share-based compensation plan for GEB members, GMDs and Group or Divisional Vice Chair role holders.

The final number of notional shares delivered at vesting depends on two equally-weighted performance metrics: reported return on common equity tier 1 capital (RoCET1) and relative total shareholder return (rTSR), which measures the performance of the UBS share against an index consisting of Global Systemically Important Banks as determined by the Financial Stability Board.

The final number of shares as determined at the end of the three-year performance period will vest in three equal installments in each of the three years following the performance period for GEB members, and cliff vest in the first year following the performance period for GMDs and Vice Chair role holders.

Deferred Contingent Capital Plan (DCCP)

The DCCP is a mandatory deferred compensation plan for all employees whose total annual compensation exceeds a specified threshold.

DCCP awards take the form of notional additional tier 1 (AT1) capital instruments, which, at the discretion of UBS, can be settled in either a cash payment or a perpetual, marketable AT1 capital instrument. DCCP awards vest in full after five years, and up to seven years for certain regulated employees, unless there is a trigger event.

Awards are forfeited if a viability event occurs, i.e., if FINMA notifies the firm in writing that the DCCP awards must be written down to prevent an insolvency, bankruptcy or failure of UBS, or if UBS receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. DCCP awards are also written down for GEB members if the Group's CET1 capital ratio falls below 10% and for all other employees if it falls below 7%. As an additional performance condition, GEB members forfeit 20% of their award for each loss-making year during the vesting period.

Interest payments on DCCP awards are paid at the discretion of UBS. Where interest payments are not permitted, such as for certain regulated employees, the DCCP award reflects the fair value of the granted non-interest-bearing award.

Note 27 Employee benefits: variable compensation (continued)

Financial advisor variable compensation

In line with market practice for US wealth management businesses, the compensation for US financial advisors in Global Wealth Management is composed of production payout and deferred compensation awards. Production payout is primarily based on compensable revenue.

Financial advisors may also qualify for deferred compensation awards, which generally vest over a six-year period. The awards are based on strategic performance measures, including production, length of service with the firm and net new business. Production payout rates and deferred compensation awards may be reduced for, among other things, errors, negligence or carelessness, or a failure to comply with the firm's rules, standards, practices and / or policies and / or applicable laws and regulations.

Other compensation plans

Equity Plus Plan

The Equity Plus Plan is a voluntary employee share purchase program that allows eligible employees to purchase UBS shares at market price and receive one additional notional share for every three shares purchased, up to a maximum annual limit. Additional shares vest after a maximum of three years, provided the employee remains employed with UBS and has retained the purchased shares throughout the holding period.

Role-based allowances

Some employees may receive a role-based allowance in addition to their base salary. This allowance reflects the market value of a specific role and is fixed, non-forfeitable compensation. Unlike salary, a role-based allowance is paid only as long as the employee is in a specific role. Role-based allowances consist of a cash portion and, where applicable, a blocked UBS share award. The compensation expense is recognized in the year of grant.

Discontinued deferred compensation plans

PartnerPlus

Through performance year 2016, financial advisor strategic objective awards were partly granted under the PartnerPlus deferred cash plan, which included amounts awarded by UBS, as well as voluntary participant contributions. Company contributions and voluntary contributions were credited with interest in accordance with the terms of the plan, or upon election credited with notional earnings based on the performance of various mutual funds. Company contributions and interest on both company and voluntary contributions ratably vest in 20% installments 6 to 10 years following grant date. Company contributions and interest on notional earnings on both company and voluntary contributions are forfeitable under certain circumstances.

GrowthPlus

GrowthPlus is a compensation plan for selected financial advisors whose revenue production and length of service exceeded defined thresholds from 2010 through 2017. Awards were granted in 2010, 2011, 2015 and 2018. The awards are cash-based and are distributed over seven years, with the exception of 2018 awards, which are distributed over five years.

Note 27 Employee benefits: variable compensation (continued)

b) Effect on the income statement

Effect on the income statement for the financial year and future periods

The table below provides information about compensation expenses related to total variable compensation, including financial advisor variable compensation, that were recognized in the financial year ended 31 December 2020, as well as expenses that were deferred and will be recognized in the income statement for 2021 and later. The majority of expenses deferred to 2021 and later that are related to the 2020 performance year pertain to awards granted in February 2021. The total unamortized compensation expense for unvested share-based awards granted up to 31 December 2020 will be recognized in future periods over a weighted average period of 2.9 years.

During the third quarter of 2020, UBS AG modified the conditions for continued vesting of certain outstanding deferred compensation awards for qualifying employees, resulting in the recognition of USD 303 million in expenses for variable compensation – performance awards. The full year effect was an expense of approximately USD 240 million. Refer to Note 1b for more information.

Variable compensation including financial advisor variable compensation

	Expenses recognized in 2020			Expenses deferred to 2021 and later[1]		
USD million	Related to the 2020 performance year	Related to prior performance years	Total	Related to the 2020 performance year	Related to prior performance years	Total
Non-deferred cash	1,948	(29)	1,920	0	0	0
Deferred compensation awards	329	704	1,034	734	277	1,011
of which: Equity Ownership Plan	*131*	*315*	*446*	*298*	*67*	*365*
of which: Deferred Contingent Capital Plan	*108*	*339*	*448*	*271*	*189*	*459*
of which: Long-Term Incentive Plan	*41*	*11*	*52*	*46*	*9*	*55*
of which: Asset Management EOP	*49*	*39*	*88*	*120*	*12*	*132*
Variable compensation – performance awards	**2,278**	**675**	**2,953**	**734**	**277**	**1,011**
Variable compensation – other[2]	**109**	**92**	**201**	**176**	**189**	**364**
Total variable compensation excluding financial advisor variable compensation	**2,387**	**768**	**3,155**	**909**	**465**	**1,375**
Financial advisor variable compensation	3,356	233	3,589	350	602	952
of which: non-deferred cash	*3,154*	*0*	*3,154*	*0*	*0*	*0*
of which: deferred share-based awards	*69*	*50*	*119*	*79*	*135*	*214*
of which: deferred cash-based awards	*133*	*183*	*316*	*271*	*467*	*738*
Compensation commitments with recruited financial advisors[3]	22	480	502	473	1,682	2,155
Total FA variable compensation	**3,378**	**713**	**4,091**	**822**	**2,284**	**3,106**
Total variable compensation including FA variable compensation	**5,765**	**1,481**	**7,246[4]**	**1,732**	**2,749**	**4,481**

1 Estimate as of 31 December 2020. Actual amounts to be expensed in future periods may vary, e.g., due to forfeiture of awards. 2 Comprised of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 3 Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. 4 Includes USD 666 million in expenses related to share-based compensation (performance awards: USD 498 million; other variable compensation: USD 49 million; financial advisor compensation: USD 119 million). A further USD 88 million in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 4 million related to role-based allowances; social security: USD 51 million; other personnel expenses: USD 34 million related to the Equity Plus Plan).

Note 27 Employee benefits: variable compensation (continued)

Variable compensation including financial advisor variable compensation (continued)

	Expenses recognized in 2019			Expenses deferred to 2020 and later[1]		
USD million	Related to the 2019 performance year	Related to prior performance years	Total	Related to the 2019 performance year	Related to prior performance years	Total
Non-deferred cash	1,706	(24)	1,682	0	0	0
Deferred compensation awards	287	576	863	413	592	1,005
of which: Equity Ownership Plan	*115*	*294*	*410*	*198*	*213*	*412*
of which: Deferred Contingent Capital Plan	*109*	*256*	*365*	*166*	*356*	*521*
of which: Long-Term Incentive Plan	*38*	*0*	*38*	*23*	*0*	*23*
of which: Asset Management EOP	*25*	*26*	*51*	*26*	*23*	*49*
Variable compensation – performance awards	**1,993**	**553**	**2,545**	**413**	**592**	**1,005**
Variable compensation – other[2]	**140**	**85**	**225**	**115**	**228**	**343**
Total variable compensation excluding financial advisor variable compensation	**2,133**	**638**	**2,770**	**528**	**820**	**1,348**
Financial advisor variable compensation	3,233	268	3,501	197	710	907
of which: non-deferred cash	*3,064*	*0*	*3,064*	*0*	*0*	*0*
of which: deferred share-based awards	*57*	*48*	*106*	*54*	*130*	*183*
of which: deferred cash-based awards	*112*	*219*	*331*	*144*	*580*	*724*
Compensation commitments with recruited financial advisors[3]	32	510	542	350	1,617	1,967
Total FA variable compensation	**3,265**	**778**	**4,043**	**548**	**2,327**	**2,874**
Total variable compensation including FA variable compensation	**5,398**	**1,416**	**6,814[4]**	**1,076**	**3,146**	**4,222**

1 Estimate as of 31 December 2019. Actual amounts expensed may vary, e.g., due to forfeiture of awards. 2 Comprised of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 3 Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. 4 Includes USD 595 million in expenses related to share-based compensation (performance awards: USD 448 million; other variable compensation: USD 42 million; financial advisor compensation: USD 106 million). A further USD 54 million in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 10 million related to role-based allowances; social security: USD 23 million; other personnel expenses: USD 22 million related to the Equity Plus Plan).

Variable compensation including financial advisor variable compensation (continued)

	Expenses recognized in 2018			Expenses deferred to 2019 and later[1]		
USD million	Related to the 2018 performance year	Related to prior performance years	Total	Related to the 2018 performance year	Related to prior performance years	Total
Non-deferred cash	1,896	(26)	1,870	0	0	0
Deferred compensation awards	360	564	924	570	638	1,208
of which: Equity Ownership Plan	*208*	*299*	*507*	*316*	*238*	*554*
of which: Deferred Contingent Capital Plan	*126*	*235*	*361*	*232*	*373*	*605*
of which: Asset Management EOP	*25*	*28*	*53*	*22*	*26*	*48*
of which: other performance awards	*0*	*2*	*2*	*0*	*1*	*1*
Variable compensation – performance awards	**2,256**	**538**	**2,794**	**570**	**638**	**1,208**
Variable compensation – other[2]	**144**	**75**	**220**	**178**	**264**	**442**
Total variable compensation excluding financial advisor variable compensation	**2,400**	**613**	**3,013**	**748**	**902**	**1,650**
Financial advisor variable compensation	3,233	237	3,470	128	639	767
of which: non-deferred cash	*3,089*	*0*	*3,089*	*0*	*0*	*0*
of which: deferred share-based awards	*51*	*44*	*95*	*52*	*131*	*183*
of which: deferred cash-based awards	*93*	*193*	*286*	*76*	*507*	*584*
Compensation commitments with recruited financial advisors[3]	33	551	584	357	1,883	2,240
Total FA variable compensation	**3,266**	**789**	**4,054**	**484**	**2,522**	**3,006**
Total variable compensation including FA variable compensation	**5,666**	**1,402**	**7,068[4]**	**1,233**	**3,424**	**4,656**

1 Estimate as of 31 December 2018. Actual amounts expensed may vary, e.g., due to forfeiture of awards. 2 Comprised of replacement payments, forfeiture credits, severance payments, retention plan payments and interest expense related to the Deferred Contingent Capital Plan. 3 Reflects expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. Amounts reflected as deferred expenses represent the maximum deferred exposure as of the balance sheet date. 4 Includes USD 612 million in expenses related to share-based compensation (performance awards: USD 507 million; other variable compensation: USD 10 million; financial advisor compensation: USD 95 million). A further USD 44 million in expenses related to share-based compensation was recognized within other expense categories included in Note 6 (salaries: USD 15 million related to role-based allowances; social security: USD 7 million; other personnel expenses: USD 22 million related to the Equity Plus Plan).

c) Outstanding share-based compensation awards

Share and performance share awards

Movements in outstanding share-based awards under the EOP during 2020 and 2019 are provided in the table below. The awards presented are granted by UBS AG, but are based on UBS Group AG shares.

Movements in outstanding share-based compensation awards

	Number of shares 2020	Weighted average grant date fair value (USD)	Number of shares 2019	Weighted average grant date fair value (USD)
Outstanding, at the beginning of the year	90,443	14	201,793	15
Awarded during the year	19,229	11	29,092	11
Distributed during the year	(55,114)	14	(140,441)	14
Forfeited during the year	0	0	0	0
Outstanding, at the end of the year	54,557	13	90,443	14
of which: shares vested for accounting purposes	*53,216*		*56,492*	

The total carrying amount of the liability related to cash-settled share-based awards as of 31 December 2020 and 31 December 2019 was USD 1 million.

d) Valuation

UBS share awards

UBS measures compensation expense based on the average market price of the UBS share on the grant date as quoted on the SIX Swiss Exchange, taking into consideration post-vesting sale and hedge restrictions, non-vesting conditions and market conditions, where applicable. The fair value of the share awards subject to post-vesting sale and hedge restrictions is discounted on the basis of the duration of the post-vesting restriction and is referenced to the cost of purchasing an at-the-money European put option for the term of the transfer restriction. The weighted average discount for share and performance share awards granted during 2020 was approximately 23.8% (2019: 22.6%) of the market price of the UBS share. The grant date fair value of notional shares without dividend entitlements also includes a deduction for the present value of future expected dividends to be paid between the grant date and distribution.

Note 28 Interests in subsidiaries and other entities

a) Interests in subsidiaries

UBS AG defines its significant subsidiaries as those entities that, either individually or in aggregate, contribute significantly to UBS AG's financial position or results of operations, based on a number of criteria, including the subsidiaries' equity and their contribution to UBS AG's total assets and profit or loss before tax, in accordance with the requirements set by IFRS 12, Swiss regulations and the rules of the US Securities and Exchange Commission (SEC).

Individually significant subsidiaries

The table below lists UBS AG's individually significant subsidiaries as of 31 December 2020. Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares that are held entirely by UBS AG, and the proportion of ownership interest held is equal to the voting rights held by UBS AG.

The country where the respective registered office is located is also the principal place of business. UBS AG operates through a global network of branches and a significant proportion of its business activity is conducted outside Switzerland, including in the UK, the US, Singapore, Hong Kong and other countries. UBS Europe SE has branches and offices in a number of EU Member States, including Germany, Italy, Luxembourg, Spain and Austria. Share capital is provided in the currency of the legally registered office.

Individually significant subsidiaries of UBS AG as of 31 December 2020[1]

Company	Registered office	Primary business	Share capital in million		Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Group Functions	USD	3,150.0[2]	100.0
UBS Americas Inc.	Wilmington, Delaware, USA	Group Functions	USD	0.0	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF	43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Global Wealth Management	USD	0.0	100.0
UBS Europe SE	Frankfurt, Germany	Global Wealth Management	EUR	446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Global Wealth Management	USD	0.0	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD	1,283.1[3]	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF	10.0	100.0

1 Includes direct and indirect subsidiaries of UBS AG. 2 Consists of common share capital of USD 1,000 and non-voting preferred share capital of USD 3,150,000,000. 3 Consists of common share capital of USD 100,000 and non-voting preferred share capital of USD 1,283,000,000.

Note 28 Interests in subsidiaries and other entities (continued)

Other subsidiaries

The table below lists other direct and indirect subsidiaries of UBS AG that are not individually significant but that contribute to UBS AG's total assets and aggregated profit before tax thresholds and are thereby disclosed in accordance with the requirements set by the SEC.

Other subsidiaries of UBS AG as of 31 December 2020

Company	Registered office	Primary business	Share capital in million		Equity interest accumulated in %
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD	0.0	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD	254.0	100.0
UBS Asset Management Life Ltd	London, United Kingdom	Asset Management	GBP	15.0	100.0
UBS Asset Management Switzerland AG	Zurich, Switzerland	Asset Management	CHF	0.5	100.0
UBS Asset Management (UK) Ltd	London, United Kingdom	Asset Management	GBP	125.0	100.0
UBS Business Solutions US LLC	Wilmington, Delaware, USA	Group Functions	USD	0.0	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Global Wealth Management	USD	0.0	100.0
UBS (France) S.A.	Paris, France	Global Wealth Management	EUR	133.0	100.0
UBS Fund Management (Luxembourg) S.A.	Luxembourg, Luxembourg	Asset Management	EUR	13.0	100.0
UBS Fund Management (Switzerland) AG	Basel, Switzerland	Asset Management	CHF	1.0	100.0
UBS (Monaco) S.A.	Monte Carlo, Monaco	Global Wealth Management	EUR	49.2	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD	9.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD	0.3[1]	100.0
UBS Securities Hong Kong Limited	Hong Kong, Hong Kong	Investment Bank	HKD	3,154.2	100.0
UBS Securities Japan Co., Ltd.	Tokyo, Japan	Investment Bank	JPY	32,100.0	100.0
UBS Securities Pte. Ltd.	Singapore, Singapore	Investment Bank	SGD	420.4	100.0

1 Includes a nominal amount relating to redeemable preference shares.

Consolidated structured entities

UBS AG consolidates a structured entity (an SE) if it has power over the relevant activities of the entity, exposure to variable returns and the ability to use its power to affect its returns. Consolidated SEs include certain investment funds, securitization vehicles and client investment vehicles. UBS AG has no individually significant subsidiaries that are SEs.

In 2020 and 2019, UBS AG did not enter into any contractual obligation that could require UBS AG to provide financial support to consolidated SEs. In addition, UBS AG did not provide support, financial or otherwise, to a consolidated SE when UBS AG was not contractually obligated to do so, nor does UBS AG have any intention to do so in the future. Furthermore, UBS AG did not provide support, financial or otherwise, to a previously unconsolidated SE that resulted in UBS AG controlling the SE during the reporting period.

Note 28 Interests in subsidiaries and other entities (continued)

b) Interests in associates and joint ventures

As of 31 December 2020 and 2019, no associate or joint venture was individually material to UBS AG. In addition, there were no significant restrictions on the ability of associates or joint ventures to transfer funds to UBS AG or its subsidiaries in the form of cash dividends or to repay loans or advances made. There were no quoted market prices for any associates or joint ventures of UBS AG.

In the third quarter of 2020, UBS AG completed the sale of a 51.2% stake in Fondcenter AG to Clearstream and deconsolidated the entity in accordance with IFRS 10, *Consolidated Financial Statements*. The retained minority shareholding of 48.8% is accounted for as an investment in an associate with a carrying amount of USD 399 million as of 31 December 2020.

› **Refer to Note 29 for more information**

Investments in associates and joint ventures

USD million	2020	2019
Carrying amount at the beginning of the year	1,051	1,099
Additions[1]	388	0
Disposals	0	0
Share of comprehensive income	83	25
of which: share of net profit[2]	*84*	*46*
of which: share of other comprehensive income[3]	*(1)*	*(21)*
Share of changes in retained earnings	(40)	0
Dividends received	(33)	(83)
Impairment	0	(1)
Foreign currency translation	108	11
Carrying amount at the end of the year	1,557	1,051
of which: associates	*1,513*	*1,010*
of which: SIX Group AG, Zurich[4]	*965*	*887*
of which: Clearstream Fund Centre AG, Zurich[1]	*399*	
of which: other associates	*150*	*123*
of which: joint ventures	*44*	*41*

1 On 30 September 2020, UBS AG completed the sale of a 51.2% stake in Fondcenter AG to Clearstream and deconsolidated the entity in accordance with IFRS 10, Consolidated Financial Statements. The retained minority shareholding of 48.8% is accounted for as an associate and increased the investments in associates by USD 385 million upon completion of the transaction. Refer to Note 29 for more information. 2 For 2020, consists of USD 64 million from associates and USD 19 million from joint ventures. For 2019, consists of USD 28 million from associates and USD 18 million from joint ventures. 3 For 2020, consists of negative USD 1 million from associates. For 2019, consists of negative USD 22 million from associates and USD 1 million from joint ventures. 4 In 2020, UBS AG's equity interest amounts to 17.31%. UBS AG is represented on the Board of Directors.

Note 28 Interests in subsidiaries and other entities (continued)

c) Interests in unconsolidated structured entities

UBS AG is considered to sponsor another entity if, in addition to ongoing involvement with the entity, it had a key role in establishing that entity or in bringing together relevant counterparties for the transaction facilitated by the entity. During 2020, UBS AG sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles and certain investment funds, that UBS AG did not consolidate as of 31 December 2020 because it did not control these entities.

The table below presents UBS AG's interests in and maximum exposure to loss from unconsolidated SEs as well as the total assets held by the SEs in which UBS AG had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying amount of UBS AG's interest as of year-end has been disclosed.

Interests in unconsolidated structured entities

	31.12.20				
USD million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total	Maximum exposure to loss[1]
Financial assets at fair value held for trading	375	131	7,595	8,101	8,101
Derivative financial instruments	6	49	158	213	211
Loans and advances to customers			179	179	179
Financial assets at fair value not held for trading	35	1[2]	73	109	109
Financial assets measured at fair value through other comprehensive income		6,624		6,624	6,624
Other financial assets measured at amortized cost		0[2]		0	250
Total assets	416[3]	6,805	8,005	15,227	
Derivative financial instruments	3[4]	11	376	390	0
Total liabilities	3	11	376	390	
Assets held by the unconsolidated structured entities in which UBS had an interest (USD billion)	39[5]	136[6]	484[7]		

	31.12.19				
USD million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total	Maximum exposure to loss[1]
Financial assets at fair value held for trading	462	130	5,874	6,466	6,466
Derivative financial instruments	9	9	36	55	53
Loans and advances to customers			174	174	174
Financial assets at fair value not held for trading	81	8[2]	62	151	902
Financial assets measured at fair value through other comprehensive income		3,955		3,955	3,955
Other financial assets measured at amortized cost	335	16[2]		351	1,372
Total assets	888[3]	4,118	6,147	11,152	
Derivative financial instruments	2[4]	225	324	552	1
Total liabilities	2	225	324	552	
Assets held by the unconsolidated structured entities in which UBS had an interest (USD billion)	55[5]	73[6]	413[7]		

1 For the purpose of this disclosure, maximum exposure to loss amounts do not consider the risk-reducing effects of collateral or other credit enhancements. 2 Represents the carrying amount of loan commitments. The maximum exposure to loss for these instruments is equal to the notional amount. 3 As of 31 December 2020, USD 0.2 billion of the USD 0.4 billion (31 December 2019: USD 0.6 billion of the USD 0.9 billion) was held in Group Functions – Non-core and Legacy Portfolio. 4 Comprised of credit default swap liabilities and other swap liabilities. The maximum exposure to loss for credit default swap liabilities is equal to the sum of the negative carrying amount and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. 5 Represents the principal amount outstanding. 6 Represents the market value of total assets. 7 Represents the net asset value of the investment funds sponsored by UBS and the carrying amount of UBS's interests in the investment funds not sponsored by UBS.

Note 28 Interests in subsidiaries and other entities (continued)

UBS AG retains or purchases interests in unconsolidated SEs in the form of direct investments, financing, guarantees, letters of credit, derivatives and through management contracts.

UBS AG's maximum exposure to loss is generally equal to the carrying amount of UBS AG's interest in the SE, with the exception of guarantees, letters of credit and credit derivatives, for which the contract's notional amount, adjusted for losses already incurred, represents the maximum loss that UBS AG is exposed to. In addition, the current fair value of derivative swap instruments with a positive replacement value only, such as total return swaps, is presented as the maximum exposure to loss. Risk exposure for these swap instruments could change over time with market movements.

The maximum exposure to loss disclosed in the table on the previous page does not reflect UBS AG's risk management activities, including effects from financial instruments that may be used to economically hedge the risks inherent in the unconsolidated SE or the risk-reducing effects of collateral or other credit enhancements.

In 2020 and 2019, UBS AG did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor does UBS AG have any intention to do so in the future.

In 2020 and 2019, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in *Other net income from financial instruments measured at fair value through profit or loss*, which have generally been hedged with other financial instruments, as well as fee and commission income received from UBS-sponsored funds.

Interests in securitization vehicles

As of 31 December 2020 and 31 December 2019, UBS AG held interests, both retained and acquired, in various securitization vehicles, half of which are held within Group Functions – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities.

The numbers outlined in the table on the previous page may differ from the securitization positions presented in the 31 December 2020 Pillar 3 report under "Pillar 3 disclosures" at *ubs.com/investors,* for the following reasons: (i) exclusion of synthetic securitizations transacted with entities that are not SEs and transactions in which UBS AG did not have an interest because it did not absorb any risk; (ii) a different measurement basis in certain cases (e.g., IFRS carrying amount within the previous table compared with net exposure amount at default for Pillar 3 disclosures); and (iii) different classification of vehicles viewed as sponsored by UBS AG versus sponsored by third parties.

› **Refer to the 31 December 2020 Pillar 3 report under "Pillar 3 disclosures" at *ubs.com/investors* for more information**

Interests in client vehicles

Client vehicles are established predominantly for clients to invest in specific assets or risk exposures. As of 31 December 2020 and 31 December 2019, UBS AG retained interests in client vehicles sponsored by UBS and third parties that relate to financing and derivative activities, and to hedge structured product offerings. Included within these investments are securities guaranteed by US government agencies.

Interests in investment funds

Investment funds have a collective investment objective, and are managed by an investment manager. UBS AG holds interests in a number of investment funds, primarily resulting from seed investments or in order to hedge structured product offerings. In addition to the interests disclosed in the table on the previous page, UBS AG manages the assets of various pooled investment funds and receives fees that are based, in whole or part, on the net asset value of the fund and / or the performance of the fund. The specific fee structure is determined on the basis of various market factors and considers the nature of the fund and the jurisdiction of incorporation, as well as fee schedules negotiated with clients. These fee contracts represent an interest in the fund as they align UBS AG's exposure with investors, providing a variable return that is based on the performance of the entity. Depending on the structure of the fund, these fees may be collected directly from the fund assets and / or from the investors. Any amounts due are collected on a regular basis and are generally backed by the assets of the fund. UBS AG did not have any material exposure to loss from these interests as of 31 December 2020 or as of 31 December 2019. The total net asset value of the funds sponsored by UBS are included in the table on the previous page.

Sponsored unconsolidated structured entities in which UBS did not have an interest

For several sponsored SEs, no interest was held by UBS AG at year-end. However, during the respective reporting period UBS AG transferred assets, provided services and held instruments that did not qualify as an interest in these sponsored SEs, and accordingly earned income or incurred expenses from these entities. The table below presents the income earned and expenses incurred directly from these entities during the year, as well as corresponding asset information. The table does not include income earned and expenses incurred from risk management activities, including income and expenses from financial instruments used to economically hedge instruments transacted with the unconsolidated SEs.

The majority of the fee income arose from investment funds that are sponsored and administrated by UBS AG, but managed by third parties. As UBS AG does not provide any investment management services, UBS AG was not exposed to risk from the performance of these entities and was therefore deemed not to have an interest in them. In certain structures, the fees receivable may be collected directly from the investors and have therefore not been included in the table below.

UBS AG also recorded other net income from financial instruments measured at fair value through profit or loss from mark-to-market movements arising primarily from derivatives, such as interest rate and currency swaps, as well as credit derivatives, through which UBS AG purchases protection, and financial liabilities designated at fair value, which do not qualify as interests because UBS AG does not absorb variability from the performance of the entity. Total income reported does not reflect economic hedges or other mitigating effects from UBS AG's risk management activities.

During 2020, UBS AG and third parties did not transfer any assets into sponsored securitization vehicles created in the year (2019: USD 1 billion and USD 1 billion, respectively). UBS AG and third parties transferred assets, alongside deposits and debt issuances, of USD 0 billion and USD 9 billion, respectively, into sponsored client vehicles created in the year (2019: USD 0 billion and USD 1 billion, respectively). For sponsored investment funds, transfers arose during the period as investors invested and redeemed positions, thereby changing the overall size of the funds, which, when combined with market movements, resulted in a total closing net asset value of USD 37 billion (31 December 2019: USD 42 billion).

Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end

	As of or for the year ended			
	31.12.20			
USD million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	1	12	2	15
Net fee and commission income		1	58	60
Other net income from financial instruments measured at fair value through profit or loss	0	17	(15)	2
Total income	1	30	45	76
Asset information (USD billion)	0[1]	9[2]	37[3]	

	As of or for the year ended			
	31.12.19			
USD million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	(1)	0	(1)	(2)
Net fee and commission income		13	50	63
Other net income from financial instruments measured at fair value through profit or loss	19	(18)	9	11
Total income	19	(5)	58	72
Asset information (USD billion)	2[1]	1[2]	42[3]	

1 Represents the amount of assets transferred to the respective securitization vehicles. 2 Represents the amount of assets transferred to the respective client vehicles. 3 Represents the total net asset value of the respective investment funds.

Note 29 Changes in organization and acquisitions and disposals of subsidiaries and businesses

Disposals of subsidiaries and businesses

Sale of a majority stake in Fondcenter AG

In the third quarter of 2020, UBS AG completed the sale of a 51.2% stake in Fondcenter AG to Clearstream, Deutsche Börse Group's post-trade services provider, and deconsolidated the entity in accordance with IFRS 10, *Consolidated Financial Statements*. The sale resulted in a post-tax gain of USD 631 million, which was recognized in *Other income*. Fondcenter AG has been combined with Clearstream's Fund Desk business to form Clearstream Fund Centre. UBS AG retains a 48.8% shareholding in the entity and accounts for this minority interest as an investment in an associate with a carrying amount of USD 399 million as of 31 December 2020.

Banking partnership with Banco do Brasil

In the third quarter of 2020, UBS AG completed the transaction with Banco do Brasil, establishing a strategic investment banking partnership in Brazil and selected countries in South America. The partnership was established by UBS AG issuing a 49.99% stake in UBS Brasil Serviços in exchange for exclusive access to Banco do Brasil's corporate clients. This resulted in UBS AG recognizing an intangible asset of USD 147 million. UBS AG retains a controlling interest of 50.01% in UBS Brasil Serviços and continues to consolidate the entity. Upon completion, UBS AG's equity attributable to non-controlling interests increased by USD 115 million, with no material effect on UBS AG's equity attributable to shareholders.

Strategic partnership with Sumitomo Mitsui Trust Holdings

In 2019, UBS AG entered into a strategic wealth management partnership in Japan with Sumitomo Mitsui Trust Holdings, Inc. (SuMi Trust Holdings). In January 2020, the first phase was launched, with operations commencing in the newly established joint venture, UBS SuMi TRUST Wealth Advisory, which is owned equally by UBS Securities Japan and SuMi Trust Holdings and is accounted for as an investment in a joint venture by UBS AG. UBS AG and SuMi Trust Holdings have also started offering each other's products and services to their respective current clients.

The second phase of the partnership is expected to launch in the second half of 2021 with the establishment of a new entity which will be 51% owned and controlled by UBS AG, requiring UBS AG to consolidate this entity. UBS AG does not expect a material effect on shareholders' equity upon closing.

Sale of wealth management business in Austria in 2021

In December 2020, UBS AG signed an agreement to sell its domestic wealth management business in Austria to LGT. The agreement includes the transition of employees, client relationships, products and services of the wealth management business of UBS Austria. The transaction is subject to customary closing conditions and is expected to close in the third quarter of 2021. UBS AG expects to record a pre-tax gain of approximately USD 0.1 billion upon closing of the transaction.

Note 30 Finance lease receivables

UBS AG acts as a lessor and leases a variety of assets to third parties under finance leases, such as industrial equipment and aircraft. At the end of the respective lease term, assets may be sold to third parties or further leased. Lessees may participate in any sales proceeds achieved. Lease payments cover the cost of the assets (net of their residual value), as well as financing costs. As of 31 December 2020, unguaranteed residual values of USD 185 million (31 December 2019: USD 246 million) had been accrued.

The ECL stage 3 allowance for uncollectible minimum lease payments receivable was USD 7 million (31 December 2019: USD 6 million). No contingent rents were received in 2020. Amounts in the table below are disclosed on a gross basis. The finance lease receivables in Note 14a of USD 1,447 million are presented net of expected credit loss allowances.

Lease receivables

USD million	31.12.20		
	Total minimum lease payments	Unearned finance income	Present value
2021	450	25	426
2022–2025	856	31	825
Thereafter	215	4	210
Total	**1,521**	**60**	**1,461**

USD million	31.12.19		
	Total minimum lease payments	Unearned finance income	Present value
2020	448	31	417
2021–2024	874	52	822
Thereafter	221	6	215
Total	**1,544**	**89**	**1,455**

Note 31 Related parties

UBS AG defines related parties as associates (entities that are significantly influenced by UBS), joint ventures (entities in which UBS shares control with another party), post-employment benefit plans for UBS AG employees, key management personnel, close family members of key management personnel and entities that are, directly or indirectly, controlled or jointly controlled by key management personnel or their close family members. Key management personnel is defined as members of the Board of Directors (BoD) and Executive Board (EB).

a) Remuneration of key management personnel

The Chairman of the BoD has a specific management employment contract and receives pension benefits upon retirement. Total remuneration of the Chairman of the BoD and all EB members is included in the table below.

Remuneration of key management personnel

USD million, except where indicated	31.12.20	31.12.19	31.12.18
Base salaries and other cash payments[1]	31	30	25
Incentive awards – cash[2]	17	13	14
Annual incentive award under DCCP	26	20	21
Employer's contributions to retirement benefit plans	2	2	3
Benefits in kind, fringe benefits (at market value)	1	1	2
Equity-based compensation[3]	45	34	38
Total	122	101	102
Total (CHF million)[4]	115	101	100

1 May include role-based allowances in line with market practice and regulatory requirements. 2 The cash portion may also include blocked shares in line with regulatory requirements. 3 Compensation expense is based on the share price on grant date taking into account performance conditions. Refer to Note 27 for more information. For EB members, equity-based compensation for 2020 and 2019 was entirely composed of LTIP awards and equity-based compensation for 2018 was entirely composed of EOP awards. For the Chairman of the BoD, the equity-based compensation for 2020, 2019 and 2018 was entirely composed of UBS shares. 4 Swiss franc amounts disclosed represent the respective US dollar amounts translated at the applicable performance award currency exchange rates (2020: USD / CHF 0.94; 2019: USD / CHF 0.99; 2018: USD / CHF 0.98)

The independent members of the BoD do not have employment or service contracts with UBS AG, and thus are not entitled to benefits upon termination of their service on the BoD. Payments to these individuals for their services as external board members amounted to USD 7.0 million (CHF 6.6 million) in 2020, USD 7.3 million (CHF 7.3 million) in 2019 and USD 7.6 million (CHF 7.4 million) in 2018.

b) Equity holdings of key management personnel

Equity holdings of key management personnel[1]

	31.12.20	31.12.19
Number of shares held by members of the BoD, EB and parties closely linked to them[2]	4,956,640	6,609,848

1 No options were held in 2020 and 2019 by non-independent members of the BoD and any GEB member or any of its related parties. 2 Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, no shares were held by close family members of key management personnel on 31 December 2020 and 31 December 2019. No shares were held by entities that are directly or indirectly controlled or jointly controlled by key management personnel or their close family members on 31 December 2020 and 31 December 2019. As of 31 December 2020, no member of the BoD or EB was the beneficial owner of more than 1% of UBS Group AG's shares.

Note 31 Related parties (continued)

c) Loans, advances and mortgages to key management personnel

The non-independent members of the BoD and EB members are granted loans, fixed advances and mortgages in the ordinary course of business on substantially the same terms and conditions that are available to other employees, including interest rates and collateral, and neither involve more than the normal risk of collectability nor contain any other unfavorable features for the firm. Independent BoD members are granted loans and mortgages in the ordinary course of business at general market conditions.

Movements in the loan, advances and mortgage balances are as follows.

Loans, advances and mortgages to key management personnel[1]

USD million, except where indicated	2020	2019
Balance at the beginning of the year	23	28
Additions	13	6
Reductions	(5)	(11)
Balance at the end of the year[2]	31	23
Balance at the end of the year (CHF million)[2, 3]	28	22

1 All loans are secured loans. 2 There were no unused uncommitted credit facilities as of 31 December 2020 and 31 December 2019. 3 Swiss franc amounts disclosed represent the respective US dollar amounts translated at the relevant year-end closing exchange rate.

d) Other related-party transactions with entities controlled by key management personnel

In 2020 and 2019, UBS AG did not enter into transactions with entities that are directly or indirectly controlled or jointly controlled by UBS AG's key management personnel or their close family members and as of 31 December 2020, 31 December 2019 and 31 December 2018, there were no outstanding balances related to such transactions. Furthermore, in 2020 and 2019, entities controlled by key management personnel did not sell any goods or provide any services to UBS AG, and therefore did not receive any fees from UBS AG. UBS AG also did not provide services to such entities in 2020 and 2019, and therefore also received no fees.

Note 31 Related parties (continued)

e) Transactions with associates and joint ventures

Loans to and outstanding receivables from associates and joint ventures

USD million	2020	2019
Carrying amount at the beginning of the year	982	829
Additions	527	145
Reductions	(1,001)	(5)
Foreign currency translation	123	13
Carrying amount at the end of the year	630	982
of which: unsecured loans and receivables	*621*	*971*

Other transactions with associates and joint ventures

	As of or for the year ended	
USD million	31.12.20	31.12.19
Payments to associates and joint ventures for goods and services received	139	124
Fees received for services provided to associates and joint ventures	128	1
Liabilities to associates and joint ventures	91	101
Commitments and contingent liabilities to associates and joint ventures	9	1,598

› **Refer to Note 28 for an overview of investments in associates and joint ventures**

f) Receivables and payables from / to UBS Group AG and other subsidiaries of UBS Group AG

USD million	31.12.20	31.12.19
Receivables		
Loans and advances to customers	1,470	1,255
Financial assets at fair value held for trading	76	180
Other financial assets measured at amortized cost	38	60
Payables		
Customer deposits	3,324	2,314
Funding from UBS Group AG and its subsidiaries	53,979	47,866
Other financial liabilities measured at amortized cost	1,820	1,829
Other financial liabilities designated at fair value[1]	1,375	217

1 Represents funding recognized from UBS Group AG and its subsidiaries that is designated at fair value. Refer to Note 19b for more information.

Note 32 Invested assets and net new money

Invested assets

Invested assets consist of all client assets managed by or deposited with UBS AG for investment purposes. Invested assets include managed fund assets, managed institutional assets, discretionary and advisory wealth management portfolios, fiduciary deposits, time deposits, savings accounts and wealth management securities or brokerage accounts. All assets held for purely transactional purposes and custody-only assets, including corporate client assets held for cash management and transactional purposes, are excluded from invested assets as UBS AG only administers the assets and does not offer advice on how the assets should be invested. Also excluded are non-bankable assets (e.g., art collections) and deposits from third-party banks for funding or trading purposes.

Discretionary assets are defined as client assets that UBS AG decides how to invest. Other invested assets are those where the client ultimately decides how the assets are invested. When a single product is created in one business division and sold in another, it is counted in both the business division that manages the investment and the one that distributes it. This results in double counting within UBS AG total invested assets, as both business divisions are independently providing a service to their respective clients, and both add value and generate revenue.

Net new money

Net new money in a reporting period is the amount of invested assets that are entrusted to UBS AG by new and existing clients, less those withdrawn by existing clients and clients who terminated their relationship with UBS AG.

Net new money is calculated using the direct method, under which inflows and outflows to / from invested assets are determined at the client level based on transactions. Interest and dividend income from invested assets are not counted as net new money inflows. Market and currency movements as well as fees, commissions and interest on loans charged are excluded from net new money, as are the effects resulting from any acquisition or divestment of a UBS AG subsidiary or business. Reclassifications between invested assets and custody-only assets as a result of a change in the service level delivered are generally treated as net new money flows. However, where the change in service level directly results from an externally imposed regulation or from a strategic decision by UBS AG to exit a market or specific service offering, the one-time net effect is reported as *Other effects*.

The Investment Bank does not track invested assets and net new money. However, when a client is transferred from the Investment Bank to another business division, this may produce net new money even though client assets were already with UBS AG.

Invested assets and net new money

	As of or for the year ended	
USD billion	31.12.20	31.12.19
Fund assets managed by UBS	397	358
Discretionary assets	1,459	1,209
Other invested assets	2,331	2,040
Total invested assets[1]	4,187	3,607
of which: double counts	*311*	*248*
Net new money[1]	127	51

1 Includes double counts.

Development of invested assets

USD billion	2020	2019
Total invested assets at the beginning of the year[1]	3,607	3,101
Net new money	127	51
Market movements[2]	359	444
Foreign currency translation	96	6
Other effects	(1)	5
of which: acquisitions / (divestments)	*0*	*(1)*
Total invested assets at the end of the year[1]	4,187	3,607

1 Includes double counts. 2 Includes interest and dividend income.

Note 33 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of UBS AG's operations with a functional currency other than the US dollar into US dollars.

	Closing exchange rate		Average rate[1]		
	As of		For the year ended		
	31.12.20	31.12.19	31.12.20	31.12.19	31.12.18
1 CHF	1.13	1.03	1.07	1.01	1.02
1 EUR	1.22	1.12	1.15	1.12	1.18
1 GBP	1.37	1.32	1.29	1.28	1.33
100 JPY	0.97	0.92	0.94	0.92	0.91

1 Monthly income statement items of operations with a functional currency other than the US dollar are translated with month-end rates into US dollars. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all operations of UBS AG with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for UBS AG.

Note 34 Events after the reporting period

Events subsequent to the publication of the unaudited fourth quarter 2020 report

The 2020 results and the balance sheet as of 31 December 2020 differ from those presented in the unaudited fourth quarter 2020 report published on 26 January 2021 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2020 operating profit before tax and 2020 net profit attributable to shareholders each by USD 72 million.

› **Refer to Note 18 for more information about provisions for litigation, regulatory and similar matters**

Note 35 Main differences between IFRS and Swiss GAAP

The consolidated financial statements of UBS AG are prepared in accordance with International Financial Reporting Standards (IFRS). The Swiss Financial Market Supervisory Authority (FINMA) requires financial groups that present their financial statements under IFRS to provide a narrative explanation of the main differences between IFRS and Swiss GAAP (the FINMA Accounting Ordinance, FINMA Circular 2020/1 "Accounting – banks" and the Banking Ordinance). Included in this Note are the significant differences in the recognition and measurement between IFRS and the provisions of the Banking Ordinance and the guidelines of FINMA governing true and fair view financial statement reporting pursuant to Art. 25 through Art. 42 of the Banking Ordinance.

1. Consolidation

Under IFRS, all entities that are controlled by the holding entity are consolidated.

Under Swiss GAAP, controlled entities that are deemed immaterial to the UBS AG or that are held temporarily only are exempt from consolidation, but instead are recorded as participations accounted for under the equity method of accounting or as financial investments measured at the lower of cost or market value.

2. Classification and measurement of financial assets

Under IFRS, debt instruments are measured at amortized cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL), depending on the nature of the business model within which the asset is held and the characteristics of the contractual cash flows of the asset. Equity instruments are accounted for at FVTPL by UBS AG.

Under Swiss GAAP, trading assets and derivatives are measured at FVTPL in line with IFRS. However, non-trading debt instruments are generally measured at amortized cost, even when the assets are managed on a fair value basis. In addition, the measurement of financial assets in the form of securities depends on the nature of the asset: debt instruments that are not held to maturity, i.e., instruments which are available for sale, as well as equity instruments with no permanent holding intent, are classified as *Financial investments* and measured at the lower of (amortized) cost or market value. Market value adjustments up to the original cost amount and realized gains or losses upon disposal of the investment are recorded in the income statement as *Other income from ordinary activities*. Equity instruments with a permanent holding intent are classified as participations in *Non-consolidated investments in subsidiaries and other participations* and are measured at cost less impairment.

Impairment losses are recorded in the income statement as *Impairment of investments in non-consolidated subsidiaries and other participations.* Reversals of impairments up to the original cost amount as well as realized gains or losses upon disposal of the investment are recorded as *Extraordinary income / Extraordinary expenses* in the income statement.

3. Fair value option applied to financial liabilities

Under IFRS, UBS AG applies the fair value option to certain financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at FVTPL. The amount of change in the fair value that is attributable to changes in UBS AG's own credit is presented in *Other comprehensive income* directly within *Retained earnings*. The fair value option is applied primarily to issued structured debt instruments, certain non-structured debt instruments, certain payables under repurchase agreements and cash collateral on securities lending agreements, amounts due under unit-linked investment contracts, and brokerage payables.

Under Swiss GAAP, the fair value option can only be applied to structured debt instruments that consist of a debt host contract and one or more embedded derivatives that do not relate to own equity. Furthermore, unrealized changes in fair value attributable to changes in UBS AG's own credit are not recognized, whereas realized own credit is recognized in *Net trading income*.

Note 35 Main differences between IFRS and Swiss GAAP (continued)

4. Allowances and provisions for credit losses

Swiss GAAP permits the use of IFRS for the accounting for allowances and provisions for credit losses based on an expected credit loss (ECL) model. UBS AG has chosen to apply the IFRS 9 ECL approach to the substantial majority of exposures in scope of the Swiss GAAP ECL requirements, including all exposures in scope of ECL under both Swiss GAAP and IFRS.

In addition, for a small population of exposures in scope of the Swiss GAAP ECL requirements, which are not subject to ECL under IFRS due to classification and measurements differences, UBS AG applies an alternative approach. Where the Pillar 1 internal ratings-based (IRB) models are applied for measurement of credit risk, ECL for such exposures is determined by the regulatory expected loss (EL), with an add-on for scaling up to the residual maturity of exposures maturing beyond the next 12 months. For detailed information on regulatory EL, refer to the "Risk management and control" section of this report. For exposures for which the Pillar 1 standardized approach (SA) is applied for the measurement of credit risk, ECL is determined using a portfolio approach that derives conservative probability of default (PD) and loss given default (LGD) for the entire portfolio.

5. Hedge accounting

Under IFRS, when cash flow hedge accounting is applied, the fair value gain or loss on the effective portion of the derivative designated as a cash flow hedge is recognized in equity. When fair value hedge accounting is applied, the fair value gains or losses of the derivative and the hedged item are recognized in the income statement.

Under Swiss GAAP, the effective portion of the fair value change of the derivative instrument designated as a cash flow or as a fair value hedge is deferred on the balance sheet as *Other assets* or *Other liabilities*. The carrying amount of the hedged item designated in fair value hedges is not adjusted for fair value changes attributable to the hedged risk.

6. Goodwill and intangible assets

Under IFRS, goodwill acquired in a business combination is not amortized but tested annually for impairment. Intangible assets with an indefinite useful life are also not amortized but tested annually for impairment.

Under Swiss GAAP, goodwill and intangible assets with indefinite useful lives are amortized over a period not exceeding five years, unless a longer useful life, which may not exceed 10 years, can be justified. In addition, these assets are tested annually for impairment.

7. Post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for post-employment benefit plans, with the election made on a plan-by-plan basis.

UBS AG has elected to apply IFRS (IAS 19) for the non-Swiss defined benefit plans and Swiss GAAP (FER 16) for the Swiss pension plan in its standalone financial statements. The requirements of Swiss GAAP are better aligned with the specific nature of Swiss pension plans, which are hybrid in that they combine elements of defined contribution and defined benefit plans, but are treated as defined benefit plans under IFRS. Key differences between Swiss GAAP and IFRS include the treatment of dynamic elements, such as future salary increases and future interest credits on retirement savings, which are not considered under the static method used in accordance with Swiss GAAP. Also, the discount rate used to determine the defined benefit obligation in accordance with IFRS is based on the yield of high-quality corporate bonds of the market in the respective pension plan country. The discount rate used in accordance with Swiss GAAP (i.e., the technical interest rate) is determined by the Pension Foundation Board based on the expected returns of the Board's investment strategy.

For defined benefit plans, IFRS requires the full defined benefit obligation net of the plan assets to be recorded on the balance sheet, with changes resulting from remeasurements recognized directly in equity. However, for non-Swiss defined benefit plans for which IFRS accounting is elected, changes due to remeasurements are recognized in the income statement of UBS AG standalone under Swiss GAAP.

Swiss GAAP requires that employer contributions to the pension fund are recognized as personnel expenses in the income statement. Furthermore, Swiss GAAP requires an assessment as to whether, based on the financial statements of the pension fund prepared in accordance with Swiss accounting standards (FER 26), an economic benefit to, or obligation of, the employer arises from the pension fund which is recognized in the balance sheet when conditions are met. Conditions for recording a pension asset or liability would be met if, for example, an employer contribution reserve is available or the employer is required to contribute to the reduction of a pension deficit (on an FER 26 basis).

8. Leasing

Under IFRS, a single lease accounting model applies that requires UBS AG to record a right-of-use (RoU) asset and a corresponding lease liability on the balance sheet when UBS AG is a lessee in a lease arrangement. The RoU asset and the lease liability are recognized when UBS AG acquires control of the physical use of the asset. The lease liability is measured based on the present value of the lease payments over the lease term, discounted using UBS AG's unsecured borrowing rate. The RoU asset is recorded at an amount equal to the lease liability but is adjusted for rent prepayments, initial direct costs, any costs to refurbish the leased asset and/or lease incentives received. The RoU asset is depreciated over the shorter of the lease term or the useful life of the underlying asset.

Under Swiss GAAP, leases that transfer substantially all the risks and rewards, but not necessarily legal title in the underlying assets, are classified as finance leases. All other leases are classified as operating leases. Whereas finance leases are recognized on the balance sheet and measured in line with IFRS, operating lease payments are recognized as *General and administrative expenses* on a straight-line basis over the lease term, which commences with control of the physical use of the asset. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

9. Netting of derivative assets and liabilities

Under IFRS, derivative assets, derivative liabilities and related cash collateral that are not settled to market are reported on a gross basis unless the restrictive IFRS netting requirements are met: i) existence of master netting agreements and related collateral arrangements that are unconditional and legally enforceable, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG and its counterparties; and ii) UBS AG's intention to either settle on a net basis or to realize the asset and settle the liability simultaneously.

Under Swiss GAAP, derivative assets, derivative liabilities and related cash collateral that are not settled to market are generally reported on a net basis, provided the master netting and the related collateral agreements are legally enforceable in the event of default, bankruptcy or insolvency of UBS AG's counterparties.

10. Negative interest

Under IFRS, negative interest income arising on a financial asset does not meet the definition of interest income and, therefore, negative interest on financial assets and negative interest on financial liabilities are presented within interest expense and interest income, respectively.

Under Swiss GAAP, negative interest on financial assets is presented within interest income and negative interest on financial liabilities is presented within interest expense.

11. Extraordinary income and expense

Certain non-recurring and non-operating income and expense items, such as realized gains or losses from the disposal of participations, fixed and intangible assets, as well as reversals of impairments of participations and fixed assets, are classified as extraordinary items under Swiss GAAP. This distinction is not available under IFRS. ▲

Note 36 Supplemental guarantor information required under SEC regulations

Joint liability of UBS Switzerland AG

In 2015, the Personal & Corporate Banking and Wealth Management businesses booked in Switzerland were transferred from UBS AG to UBS Switzerland AG through an asset transfer in accordance with the Swiss Merger Act. Under the terms of the asset transfer agreement, UBS Switzerland AG assumed joint liability for contractual obligations of UBS AG existing on the asset transfer date, including the full and unconditional guarantee of certain registered debt securities issued by UBS AG. To reflect this joint liability, UBS Switzerland AG is presented in a separate column as a subsidiary co-guarantor.

The joint liability of UBS Switzerland AG for contractual obligations of UBS AG decreased in 2020 by USD 7.3 billion to USD 10.1 billion as of 31 December 2020, mainly driven by contractual maturities and, to a lesser extent, early extinguishments of UBS AG liabilities which existed at the date of the asset transfer in the second quarter of 2015.

Supplemental guarantor consolidated income statement

USD million For the year ended 31 December 2020	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Operating income					
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	3,386	3,636	2,612	(818)	8,816
Interest expense from financial instruments measured at amortized cost	(3,694)	(513)	(1,261)	1,134	(4,333)
Net interest income from financial instruments measured at fair value through profit or loss	1,103	164	311	(273)	1,305
Net interest income	794	3,288	1,662	43	5,788
Other net income from financial instruments measured at fair value through profit or loss	4,857	911	1,044	118	6,930
Credit loss (expense) / release	(352)	(286)	(56)	0	(695)
Fee and commission income	3,731	4,585	13,651	(984)	20,982
Fee and commission expense	(644)	(829)	(1,263)	961	(1,775)
Net fee and commission income	3,087	3,756	12,388	(23)	19,207
Other income	4,671	233	2,585	(5,941)	1,549
Total operating income	13,057	7,902	17,623	(5,803)	32,780
Operating expenses					
Personnel expenses	3,458	2,017	9,211	0	14,686
General and administrative expenses	3,507	3,313	4,147	(2,481)	8,486
Depreciation and impairment of property, equipment and software	1,008	261	698	(116)	1,851
Amortization and impairment of goodwill and intangible assets	5	0	52	1	57
Total operating expenses	7,978	5,591	14,108	(2,596)	25,081
Operating profit / (loss) before tax	5,079	2,311	3,515	(3,207)	7,699
Tax expense / (benefit)	238	444	912	(107)	1,488
Net profit / (loss)	4,840	1,868	2,603	(3,100)	6,211
Net profit / (loss) attributable to non-controlling interests	0	0	15	0	15
Net profit / (loss) attributable to shareholders	4,840	1,868	2,588	(3,100)	6,196

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

USD million For the year ended 31 December 2020	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	4,840	1,868	2,588	(3,100)	6,196
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	81	1,228	690	(969)	1,030
Financial assets measured at fair value through other comprehensive income, net of tax	0	0	137	0	136
Cash flow hedges, net of tax	902	26	101	(18)	1,011
Cost of hedging, net of tax	(13)				(13)
Total other comprehensive income that may be reclassified to the income statement, net of tax	971	1,254	928	(988)	2,165
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	(67)	(107)	40	0	(134)
Own credit on financial liabilities designated at fair value, net of tax	(293)				(293)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(360)	(107)	40	0	(427)
Total other comprehensive income	611	1,147	968	(988)	1,738
Total comprehensive income attributable to shareholders	5,451	3,015	3,556	(4,088)	7,934
Total comprehensive income attributable to non-controlling interests			36		36
Total comprehensive income	5,451	3,015	3,592	(4,088)	7,970

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

USD million As of 31 December 2020	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Assets					
Cash and balances at central banks	34,426	91,638	32,167		158,231
Loans and advances to banks	40,171	6,385	19,465	(50,678)	15,344
Receivables from securities financing transactions	56,568	4,026	43,350	(29,735)	74,210
Cash collateral receivables on derivative instruments	32,771	1,543	10,093	(11,671)	32,737
Loans and advances to customers	99,952	228,279	73,513	(20,767)	380,977
Other financial assets measured at amortized cost	8,411	8,084	13,368	(2,644)	27,219
Total financial assets measured at amortized cost	272,299	339,956	191,957	(115,495)	688,717
Financial assets at fair value held for trading	110,812	55	16,260	(1,634)	125,492
of which: assets pledged as collateral that may be sold or repledged by counterparties	*54,468*	*1*	*6,247*	*(13,617)*	*47,098*
Derivative financial instruments	154,313	6,342	44,005	(45,041)	159,618
Brokerage receivables	16,898		7,763	(2)	24,659
Financial assets at fair value not held for trading	46,198	13,068	36,444	(15,672)	80,038
Total financial assets measured at fair value through profit or loss	328,221	19,464	104,473	(62,350)	389,808
Financial assets measured at fair value through other comprehensive income	187		8,072		8,258
Investments in subsidiaries and associates	53,606	38	439	(52,526)	1,557
Property, equipment and software	6,999	1,335	3,975	(350)	11,958
Goodwill and intangible assets	217		6,234	28	6,480
Deferred tax assets	840	1	8,334	(1)	9,174
Other non-financial assets	6,641	2,063	854	(183)	9,374
Total assets	669,010	362,857	324,337	(230,878)	1,125,327
Liabilities					
Amounts due to banks	41,414	34,096	43,066	(107,527)	11,050
Payables from securities financing transactions	17,247	566	18,407	(29,899)	6,321
Cash collateral payables on derivative instruments	35,875	561	12,495	(11,618)	37,313
Customer deposits	98,441	293,371	112,372	23,745	527,929
Funding from UBS Group AG and its subsidiaries[3]	53,979				53,979
Debt issued measured at amortized cost	75,658	9,687	3	3	85,351
Other financial liabilities measured at amortized cost	5,285	2,567	5,745	(3,175)	10,421
Total financial liabilities measured at amortized cost	327,898	340,848	192,088	(128,470)	732,364
Financial liabilities at fair value held for trading	28,800	335	5,989	(1,529)	33,595
Derivative financial instruments	156,192	5,593	44,359	(45,043)	161,102
Brokerage payables designated at fair value	25,045		13,704	(7)	38,742
Debt issued designated at fair value	58,986		935	(54)	59,868
Other financial liabilities designated at fair value	11,255		23,445	(2,927)	31,773
Total financial liabilities measured at fair value through profit or loss	280,279	5,927	88,433	(49,559)	325,080
Provisions	1,293	301	1,197		2,791
Other non-financial liabilities	2,173	987	3,907	(49)	7,018
Total liabilities	611,643	348,063	285,625	(178,078)	1,067,254
Equity attributable to shareholders	57,367	14,794	38,393	(52,800)	57,754
Equity attributable to non-controlling interests			319		319
Total equity	57,367	14,794	38,712	(52,800)	58,073
Total liabilities and equity	669,010	362,857	324,337	(230,878)	1,125,327

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries. 3 Represents funding from UBS Group AG to UBS AG.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

USD million For the year ended 31 December 2020	UBS AG[1]	UBS Switzerland AG[1]	Other subsidiaries[1]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(14,883)	24,661	26,804	36,581
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets	0	(3)	(43)	(46)
Disposal of subsidiaries, associates and intangible assets[2]	14	0	660	674
Purchase of property, equipment and software	(714)	(162)	(697)	(1,573)
Disposal of property, equipment and software	361	0	3	364
Purchase of financial assets measured at fair value through other comprehensive income	(77)	0	(6,213)	(6,290)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	79	0	4,451	4,530
Net (purchase) / redemption of debt securities measured at amortized cost	(3,021)	132	(1,277)	(4,166)
Net cash flow from / (used in) investing activities	(3,357)	(33)	(3,117)	(6,506)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	23,828	17	0	23,845
Distributions paid on UBS AG shares	(3,848)	0	0	(3,848)
Repayment of lease liabilities	(290)	0	(257)	(547)
Issuance of long-term debt, including debt issued designated at fair value	70,987	1,057	229	72,273
Repayment of long-term debt, including debt issued designated at fair value	(82,930)	(776)	(118)	(83,825)
Funding from UBS Group AG and its subsidiaries[3]	4,606	0	0	4,606
Net changes in non-controlling interests	0	0	(6)	(6)
Net activity related to group internal capital transactions and dividends	2,984	(1,307)	(1,677)	0
Net cash flow from / (used in) financing activities	15,336	(1,009)	(1,829)	12,498
Total cash flow				
Cash and cash equivalents at the beginning of the year	39,598	62,551	17,655	119,804
Net cash flow from / (used in) operating, investing and financing activities	(2,905)	23,619	21,859	42,573
Effects of exchange rate differences on cash and cash equivalents	2,706	7,171	1,175	11,053
Cash and cash equivalents at the end of the year[4]	39,400	93,342	40,689	173,430
of which: cash and balances at central banks	*34,283*	*91,638*	*32,167*	*158,088*
of which: loans and advances to banks	*4,085*	*1,695*	*8,148*	*13,928*
of which: money market paper[5]	*1,032*	*9*	*374*	*1,415*

1 Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 2 Includes cash proceeds from the sale of the majority stake in Fondcenter AG of USD 426 million. Also includes dividends received from associates. 3 Represents funding from UBS Group AG to UBS AG. 4 Comprises balances with an original maturity of three months or less. USD 3,828 million of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Financial assets at fair value held for trading, Financial assets measured at fair value through other comprehensive income, Financial assets at fair value not held for trading and Other financial assets measured at amortized cost.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

USD million For the year ended 31 December 2019	UBS AG (standalone)[1,2]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[3]	Elimination entries	UBS AG (consolidated)
Operating income					
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	4,864	4,048	3,719	(1,928)	10,703
Interest expense from financial instruments measured at amortized cost	(6,547)	(737)	(2,317)	2,298	(7,303)
Net interest income from financial instruments measured at fair value through profit or loss	1,177	(228)	394	(327)	1,015
Net interest income	(506)	3,083	1,796	42	4,415
Other net income from financial instruments measured at fair value through profit or loss	5,116	924	1,114	(322)	6,833
Credit loss (expense) / release	(51)	7	(33)	0	(78)
Fee and commission income	3,285	4,342	12,527	(997)	19,156
Fee and commission expense	(674)	(819)	(1,188)	986	(1,696)
Net fee and commission income	2,610[4]	3,523[4]	11,338	(11)	17,460
Other income	4,899	259	1,960	(6,442)	677
Total operating income	12,069	7,796	16,176	(6,733)	29,307
Operating expenses					
Personnel expenses	3,251	1,936	8,614	0	13,801
General and administrative expenses	3,467	3,181	4,565	(2,627)	8,586
Depreciation and impairment of property, equipment and software	861	221	602	(108)	1,576
Amortization and impairment of goodwill and intangible assets	94	0	170	(88)	175
Total operating expenses	7,672	5,338	13,951	(2,823)	24,138
Operating profit / (loss) before tax	4,396	2,458	2,225	(3,911)	5,169
Tax expense / (benefit)	175	514	530	(21)	1,198
Net profit / (loss)	4,221	1,944	1,695	(3,890)	3,971
Net profit / (loss) attributable to non-controlling interests	0	0	6	0	6
Net profit / (loss) attributable to shareholders	4,221	1,944	1,689	(3,889)	3,965

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Effective from the second quarter of 2020, UBS AG accounts for its investments in associates under the equity method of accounting and no longer at cost less impairment. The new measurement policy will result in more relevant information regarding the value of UBS AG's investments in associates. The change was applied retrospectively to all prior periods presented, resulting in a decrease in Net profit attributable to shareholders for the year ended 31 December 2019 of USD 61 million, almost entirely reflected within Other income. 3 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries. 4 Includes the effects of the transfer in 2019 of beneficial ownership of a portion of Global Wealth Management international business booked in Switzerland from UBS Switzerland AG to UBS AG. Refer to "Note 25 Changes in organization and other events affecting comparability" in the "UBS AG standalone financial statements" section of the UBS AG Standalone financial statements and regulatory information for the year ended 31 December 2019.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

USD million For the year ended 31 December 2019	UBS AG (standalone)[1,2]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[3]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	4,221	1,944	1,689	(3,889)	3,965
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	5	150	39	(102)	92
Financial assets measured at fair value through other comprehensive income, net of tax	0	0	117	0	117
Cash flow hedges, net of tax	870	140	147	(15)	1,143
Total other comprehensive income that may be reclassified to the income statement, net of tax	875	290	303	(117)	1,351
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	(89)	(6)	(75)	0	(170)
Own credit on financial liabilities designated at fair value, net of tax	(392)				(392)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(481)	(6)	(75)	0	(562)
Total other comprehensive income	394	284	228	(117)	789
Total comprehensive income attributable to shareholders	4,616	2,228	1,917	(4,007)	4,754
Total comprehensive income attributable to non-controlling interests			2		2
Total comprehensive income	4,616	2,228	1,919	(4,007)	4,756

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Effective from the second quarter of 2020, UBS AG accounts for its investments in associates under the equity method of accounting and no longer at cost less impairment. The new measurement policy will result in more relevant information regarding the value of UBS AG's investments in associates. The change was applied retrospectively to all prior periods presented, resulting in a decrease in Total comprehensive income attributable to shareholders for the year ended 31 December 2019 of USD 56 million, reflecting a decrease of USD 61 million in Net profit attributable to shareholders and a USD 6 million increase in Total other comprehensive income attributable to shareholders. 3 The "Other subsidiaries" column includes consolidated information for the significant sub-groups UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG, as well as standalone information for other subsidiaries.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

USD million As of 31 December 2019	UBS AG (standalone)[1,2]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[3]	Elimination entries	UBS AG (consolidated)
Assets					
Cash and balances at central banks	36,386	60,926	9,756		107,068
Loans and advances to banks	32,888	7,992	17,430	(45,931)	12,379
Receivables from securities financing transactions	56,946	12,536	42,534	(27,771)	84,245
Cash collateral receivables on derivative instruments	22,830	990	8,508	(9,038)	23,289
Loans and advances to customers	88,386	193,543	63,676	(17,612)	327,992
Other financial assets measured at amortized cost	5,723	8,168	11,448	(2,327)	23,012
Total financial assets measured at amortized cost	243,159	284,154	153,351	(102,679)	577,985
Financial assets at fair value held for trading	113,802	53	15,320	(1,479)	127,695
of which: assets pledged as collateral that may be sold or repledged by counterparties	*58,599*	*0*	*5,386*	*(22,701)*	*41,285*
Derivative financial instruments	118,708	4,251	29,782	(30,899)	121,843
Brokerage receivables	11,453		6,556	(1)	18,007
Financial assets at fair value not held for trading	49,525	6,701	41,908	(14,498)	83,636
Total financial assets measured at fair value through profit or loss	293,488	11,004	93,565	(46,877)	351,181
Financial assets measured at fair value through other comprehensive income	176		6,169		6,345
Investments in subsidiaries and associates	52,140	28	39	(51,156)	1,051
Property, equipment and software	7,318	1,144	3,749	(385)	11,826
Goodwill and intangible assets	222		6,212	35	6,469
Deferred tax assets[4]	618	0	8,906		9,524
Other non-financial assets	5,060	1,770	857	(140)	7,547
Total assets	602,181	298,101	272,848	(201,202)	971,927
Liabilities					
Amounts due to banks	55,738	28,240	35,773	(113,181)	6,570
Payables from securities financing transactions	21,326	565	13,583	(27,696)	7,778
Cash collateral payables on derivative instruments	30,571	98	9,773	(9,027)	31,416
Customer deposits	85,954	239,226	86,550	38,861	450,591
Funding from UBS Group AG and its subsidiaries[5]	47,866				47,866
Debt issued measured at amortized cost	54,317	8,583	5	(70)	62,835
Other financial liabilities measured at amortized cost	5,347	2,666	5,204	(2,844)	10,373
Total financial liabilities measured at amortized cost	301,119	279,379	150,888	(113,956)	617,429
Financial liabilities at fair value held for trading	25,292	383	6,233	(1,317)	30,591
Derivative financial instruments	117,597	4,046	30,089	(30,852)	120,880
Brokerage payables designated at fair value	25,358		11,877	(3)	37,233
Debt issued designated at fair value	65,677		952	(38)	66,592
Other financial liabilities designated at fair value	8,571		31,031	(3,445)	36,157
Total financial liabilities measured at fair value through profit or loss	242,495	4,429	80,184	(35,655)	291,452
Provisions	1,101	196	1,641		2,938
Other non-financial liabilities[4]	1,657	931	3,602	21	6,211
Total liabilities	546,372	284,936	236,314	(149,591)	918,031
Equity attributable to shareholders	55,808	13,165	36,359	(51,611)	53,722
Equity attributable to non-controlling interests			174		174
Total equity	55,808	13,165	36,534	(51,611)	53,896
Total liabilities and equity	602,181	298,101	272,848	(201,202)	971,927

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Effective from the second quarter of 2020, UBS AG accounts for its investments in associates under the equity method of accounting and no longer at cost less impairment. The new measurement policy will result in more relevant information regarding the value of UBS AG's investments in associates. The change was applied retrospectively to all prior periods presented, resulting in an increase in Investments in subsidiaries and associates as of 31 December 2019 of USD 929 million and an increase in Equity attributable to shareholders as of 31 December 2019 of USD 914 million. 3 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries. 4 Comparative-period information has been restated. Refer to Note 1b for more information. 5 Represents funding from UBS Group AG to UBS AG.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

USD million For the year ended 31 December 2019	UBS AG[1]	UBS Switzerland AG[1]	Other subsidiaries[1]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	17,531	8,882	(7,608)	18,805
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets	(6)	0	(20)	(26)
Disposal of subsidiaries, associates and intangible assets[2]	100	0	14	114
Purchase of property, equipment and software	(628)	(173)	(600)	(1,401)
Disposal of property, equipment and software	10	0	1	11
Purchase of financial assets measured at fair value through other comprehensive income	(10)	0	(3,414)	(3,424)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	10	0	3,904	3,913
Net (purchase) / redemption of debt securities measured at amortized cost	(1,045)	437	45	(562)
Net cash flow from / (used in) investing activities	(1,569)	264	(70)	(1,374)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	(17,150)	0	0	(17,149)
Distributions paid on UBS AG shares	(3,250)	0	0	(3,250)
Repayment of lease liabilities	(262)	0	(234)	(496)
Issuance of long-term debt, including debt issued designated at fair value	58,437	621	142	59,199
Repayment of long-term debt, including debt issued designated at fair value	(67,113)	(752)	(1,017)	(68,883)
Funding from UBS Group AG and its subsidiaries[3]	5,848	0	0	5,848
Net changes in non-controlling interests	0	0	(8)	(8)
Net activity related to group internal capital transactions and dividends	3,569	(2,055)	(1,514)	0
Net cash flow from / (used in) financing activities	(19,922)	(2,186)	(2,630)	(24,738)

Total cash flow

Cash and cash equivalents at the beginning of the year	42,895	54,757	28,201	125,853
Net cash flow from / (used in) operating, investing and financing activities	(3,960)	6,961	(10,308)	(7,307)
Effects of exchange rate differences on cash and cash equivalents	664	833	(239)	1,258
Cash and cash equivalents at the end of the year[4]	39,598	62,551	17,655	119,804
of which: cash and balances at central banks	*36,275*	*60,926*	*9,756*	*106,957*
of which: loans and advances to banks	*2,697*	*1,127*	*7,493*	*11,317*
of which: money market paper[5]	*626*	*498*	*406*	*1,530*

1 Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 2 Includes dividends received from associates. 3 Represents funding from UBS Group AG to UBS AG. 4 Comprises balances with an original maturity of three months or less. USD 3,192 million of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Financial assets at fair value held for trading, Financial assets measured at fair value through other comprehensive income, Financial assets at fair value not held for trading and Other financial assets measured at amortized cost.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

USD million For the year ended 31 December 2018	UBS AG (standalone)[1,2]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[3]	Elimination entries	UBS AG (consolidated)
Operating income					
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	4,532	4,230	3,634	(2,275)	10,121
Interest expense from financial instruments measured at amortized cost	(6,109)	(598)	(2,192)	2,405	(6,494)
Net interest income from financial instruments measured at fair value through profit or loss	1,079	(270)	625	(91)	1,344
Net interest income	(497)	3,363	2,068	38	4,971
Other net income from financial instruments measured at fair value through profit or loss	5,204	889	970	(110)	6,953
Credit loss (expense) / release	(37)	(52)	(9)	(19)	(117)
Fee and commission income	2,655	4,474	13,159	(656)	19,632
Fee and commission expense	(851)	(391)	(1,108)	648	(1,703)
Net fee and commission income	1,804	4,083	12,050	(8)	17,930
Other income	5,248	198	2,110	(6,651)	905
Total operating income	11,722	8,480	17,189	(6,749)	30,642
Operating expenses					
Personnel expenses	3,592	1,890	8,510	0	13,992
General and administrative expenses	4,691	3,471	5,403	(3,490)	10,075
Depreciation and impairment of property, equipment and software	715	21	316	0	1,052
Amortization and impairment of goodwill and intangible assets	3	0	62	0	65
Total operating expenses	9,001	5,382	14,291	(3,490)	25,184
Operating profit / (loss) before tax	2,721	3,098	2,898	(3,259)	5,458
Tax expense / (benefit)	29	670	577	68	1,345
Net profit / (loss)	2,691	2,428	2,321	(3,327)	4,113
Net profit / (loss) attributable to non-controlling interests	0	0	7	0	7
Net profit / (loss) attributable to shareholders	2,691	2,428	2,314	(3,327)	4,107

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Effective from the second quarter of 2020, UBS AG accounts for its investments in associates under the equity method of accounting and no longer at cost less impairment. The new measurement policy will result in more relevant information regarding the value of UBS AG's investments in associates. The change was applied retrospectively to all prior periods presented, resulting in an increase in Net profit attributable to shareholders for the year ended 31 December 2018 of USD 521 million, almost entirely reflected within Other income. 3 The "Other subsidiaries" column includes consolidated information for the UBS Americas Holding LLC, UBS Europe SE and UBS Asset Management AG significant sub-groups, as well as standalone information for other subsidiaries.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

USD million For the year ended 31 December 2018	UBS AG (standalone)[1,2]	UBS Switzerland AG (standalone)[1]	Other subsidiaries[3]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders					
Net profit / (loss)	2,691	2,428	2,314	(3,327)	4,107
Other comprehensive income					
Other comprehensive income that may be reclassified to the income statement					
Foreign currency translation, net of tax	(452)	(109)	215	(169)	(515)
Financial assets measured at fair value through other comprehensive income, net of tax	0	0	(45)	0	(45)
Cash flow hedges, net of tax	(277)	2	19	(13)	(269)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(729)	(107)	189	(182)	(829)
Other comprehensive income that will not be reclassified to the income statement					
Defined benefit plans, net of tax	89	(126)	212	0	175
Own credit on financial liabilities designated at fair value, net of tax	509				509
Total other comprehensive income that will not be reclassified to the income statement, net of tax	598	(126)	212	0	684
Total other comprehensive income	(131)	(233)	401	(182)	(145)
Total comprehensive income attributable to shareholders	2,560	2,195	2,715	(3,509)	3,961
Total comprehensive income attributable to non-controlling interests			5		5
Total comprehensive income	2,560	2,195	2,721	(3,509)	3,967

1 Amounts presented for UBS AG standalone and UBS Switzerland AG standalone represent IFRS standalone information. Refer to the UBS AG standalone and UBS Switzerland AG standalone financial statements under "Complementary financial information" at ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Effective from the second quarter of 2020, UBS AG accounts for its investments in associates under the equity method of accounting and no longer at cost less impairment. The new measurement policy will result in more relevant information regarding the value of UBS AG's investments in associates. The change was applied retrospectively to all prior periods presented, resulting in an increase in Total comprehensive income attributable to shareholders for the year ended 31 December 2018 of USD 438 million, reflecting an increase of USD 521 million in Net profit attributable to shareholders and a USD 83 million decrease in Total other comprehensive income attributable to shareholders. 3 The "Other subsidiaries" column includes consolidated information for the significant sub-groups UBS Americas Holding LLC, UBS Europe SE, UBS Asset Management AG and UBS Limited, as well as standalone information for other subsidiaries.

Note 36 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

USD million For the year ended 31 December 2018[1]	UBS AG[2]	UBS Switzerland AG[2]	Other subsidiaries[2]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(652)	14,887	13,509	27,744
Cash flow from / (used in) investing activities				
Purchase of subsidiaries, associates and intangible assets	(124)	(5)	(158)	(287)
Disposal of subsidiaries, associates and intangible assets[3]	97	0	40	137
Purchase of property, equipment and software	(822)	(170)	(481)	(1,473)
Disposal of property, equipment and software	111	0	3	114
Purchase of financial assets measured at fair value through other comprehensive income	(170)	0	(1,829)	(1,999)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	20	15	1,325	1,361
Net (purchase) / redemption of debt securities measured at amortized cost	(1,000)	2,111	(4,881)	(3,770)
Net cash flow from / (used in) investing activities	(1,888)	1,951	(5,982)	(5,918)
Cash flow from / (used in) financing activities				
Net short-term debt issued / (repaid)	(12,295)	(3)	53	(12,245)
Distributions paid on UBS AG shares	(3,098)	0	0	(3,098)
Issuance of long-term debt, including debt issued designated at fair value	53,294	872	560	54,726
Repayment of long-term debt, including debt issued designated at fair value	(42,759)	(812)	(772)	(44,344)
Funding from UBS Group AG and its subsidiaries[4]	5,956	0	0	5,956
Net changes in non-controlling interests	0	0	(31)	(31)
Net activity related to group internal capital transactions and dividends	3,000	(2,372)	(628)	0
Net cash flow from / (used in) financing activities	4,098	(2,315)	(820)	963

Total cash flow

Cash and cash equivalents at the beginning of the year	41,570	40,961	22,256	104,787
Net cash flow from / (used in) operating, investing and financing activities	1,559	14,523	6,707	22,789
Effects of exchange rate differences on cash and cash equivalents	(234)	(726)	(762)	(1,722)
Cash and cash equivalents at the end of the year[5]	42,895	54,757	28,201	125,853
of which: cash and balances at central banks	*36,248*	*53,490*	*18,530*	*108,268*
of which: loans and advances to banks	*4,849*	*1,249*	*9,354*	*15,452*
of which: money market paper[6]	*1,798*	*18*	*318*	*2,133*

1 Upon adoption of IFRS 9 on 1 January 2018, cash flows from certain financial assets previously classified as available-for-sale assets have been reclassified from investing to operating activities as the assets are accounted for at fair value through profit or loss effective 1 January 2018. Refer to Note 1c of the Annual Report 2018 for more information. 2 Cash flows generally represent a third-party view from a UBS AG consolidated perspective, except for Net activity related to group internal capital transactions and dividends. 3 Includes dividends received from associates. 4 Represents funding from UBS Group Funding (Switzerland) AG to UBS AG. 5 Comprises balances with an original maturity of three months or less. USD 5,245 million of cash and cash equivalents were restricted. 6 Money market paper is included in the balance sheet under Financial assets at fair value held for trading, Financial assets measured at fair value through other comprehensive income, Financial assets at fair value not held for trading and Other financial assets measured at amortized cost.

APPENDIX III

RISK FACTORS RELATING TO THE OPERATING ENVIRONMENT AND STRATEGY OF UBS AG

This section supersedes in its entirety Appendix 2 of the Base Listing Document.

Risk factors

Certain risks, including those described below, may affect our ability to execute our strategy or our business activities, financial condition, results of operations and prospects. We are inherently exposed to multiple risks, many of which may become apparent only with the benefit of hindsight. As a result, risks that we do not consider to be material or of which we are not currently aware could also adversely affect us. Within each category, the risks that we consider to be most material are presented first.

Market, credit and macroeconomic risks

Our results of operations and financial condition may be adversely affected by the COVID-19 pandemic and the response to it

The continued widespread COVID-19 pandemic and the governmental measures taken to contain it have adversely affected, and will likely continue to adversely affect, global economic conditions, resulting in meaningful contraction in the global economy, substantial volatility in the financial markets, increased unemployment, increased credit and counterparty risk, and operational challenges, such as the temporary closures of businesses, sheltering-in-place directives and increased remote work protocols. Governments and central banks around the world have reacted to the economic crisis caused by the pandemic by implementing stimulus and liquidity programs and cutting interest rates. While these programs have had initial success in mitigating the economic consequences of the pandemic, it is unclear whether these or future actions will be successful in countering the economic disruption caused by the pandemic. If the pandemic is prolonged, vaccine distribution is delayed, or available vaccines prove ineffective against evolving strains of the coronavirus, or the actions of governments and central banks are unsuccessful, the adverse impact on the global economy will deepen, our results of operations and financial condition in future quarters may be adversely affected.

COVID-19 and related lockdown measures have significantly impacted major economies across the world. Uncertainties are still at a high level, making predictions difficult. The COVID-19 pandemic has affected all of our businesses, and these effects could be greater in the future if adverse conditions persist or worsen. These effects have included declines in some asset prices, spikes in volatility, lower or negative interest rates, widening of credit spreads and credit deterioration. These effects have resulted in decreases in the valuation of loans and commitments, an increase in the allowance for credit losses and lower valuations of certain classes of trading assets. While these effects were offset by high levels of client activity in 2020 and a rebound in asset prices in some sectors, this level of activity may not persist.

Should these global market conditions continue or worsen, or the pandemic lead to additional market disruptions, we may experience reduced client activity and demand for our products and services, increased utilization of lending commitments, significantly increased client defaults, continued and increasing credit and valuation losses in our loan portfolios, loan commitments and other assets, and impairments of other financial assets. Declines in interest rates have decreased net interest margins and such declines may continue to sharpen. A decline in invested assets would also reduce recurring fee income in our Global Wealth Management and Asset Management businesses. These factors and other consequences of the COVID-19 pandemic may negatively affect our financial condition, including possible constraints on capital and liquidity, as well as a higher cost of capital, and possible changes or downgrades to our credit ratings.

Although we moved a substantial portion of our workforce to work-from-home solutions, including client-facing and trading staff, if significant portions of our workforce, including key personnel, are unable to work effectively because of illness, government actions, or other restrictions in connection with the pandemic, the adverse effects of the pandemic on our businesses could be exacerbated. In addition, with staff working from outside the offices, we face new challenges and operational risks, including maintenance of supervisory and surveillance controls, as well as increased fraud and data security risks. While we have taken measures to manage these risks, such measures have never been tested on the scale or duration that we are currently experiencing, and there is risk that these measures will not be effective in the current unprecedented operating environment.

The extent to which the pandemic, and the related adverse economic conditions, affect our businesses, results of operations and financial condition, as well as our regulatory capital and liquidity ratios, will depend on future developments, including the scope and duration of the pandemic and any recovery period, the adequacy of vaccine distribution plans and execution of those plans, as well as the efficacy of vaccines against potential virus variants, future actions taken by governmental authorities, central banks and other third parties in response to the pandemic, and the effects on our customers, counterparties, employees and third-party service providers.

Performance in the financial services industry is affected by market conditions and the macroeconomic climate

Our businesses are materially affected by market and macroeconomic conditions. Adverse changes in interest rates, credit spreads, securities prices, market volatility and liquidity, foreign exchange rates, commodity prices, and other market fluctuations, as well as changes in investor sentiment, can affect our earnings and ultimately our financial and capital positions.

A market downturn and weak macroeconomic conditions can be precipitated by a number of factors, including geopolitical events, global trade disruption, changes in monetary or fiscal policy, changes in trade policies, natural disasters, pandemics, civil unrest, acts of violence, war or terrorism. Such developments can have unpredictable and destabilizing effects and, because financial markets are global and highly interconnected, even local and regional events can have widespread effects well beyond the countries in which they occur. Any of these developments may adversely affect our business or financial results.

If individual countries impose restrictions on cross-border payments, trade, or other exchange or capital controls, or change their currency (for example, if one or more countries should leave the Eurozone), we could suffer losses from enforced default by counterparties, be unable to access our own assets, or be unable to effectively manage our risks.

Should the market experience significant volatility, a decrease in business and client activity and market volumes could result, which would adversely affect our ability to generate transaction fees, commissions and margins, particularly in Global Wealth Management and the Investment Bank, as we experienced in the fourth quarter of 2018. A market downturn would likely reduce the volume and valuation of assets that we manage on behalf of clients, which would reduce recurring fee income that is charged based on invested assets in Global Wealth Management and Asset Management and performance-based fees in Asset Management. Such a downturn could also cause a decline in the value of assets that we own and account for as investments or trading positions. In addition, reduced market liquidity or volatility may limit trading opportunities and may therefore reduce transaction-based income and may also impede our ability to manage risks.

We could be materially affected if a crisis develops, regionally or globally, as a result of disruptions in markets due to macroeconomic or political developments, or as a result of the failure of a major market participant. Over time, our strategic plans have become more heavily dependent on our ability to generate growth and revenue in emerging markets, including China, causing us to be more exposed to the risks associated with such markets.

Global Wealth Management derives revenues from all the principal regions, but has a greater concentration in Asia than many peers and a substantial presence in the US, unlike many European peers. The Investment Bank's business is more heavily weighted to Europe and Asia than our peers, while its derivatives business is more heavily weighted to structured products for wealth management clients, in particular with European and Asian underlyings. Our performance may therefore be more affected by political, economic and market developments in these regions and businesses, including the effects of the COVID-19 outbreak, than some other financial service providers.

Our credit risk exposure to clients, trading counterparties and other financial institutions would increase under adverse economic conditions

Credit risk is an integral part of many of our activities, including lending, underwriting and derivatives activities. Adverse economic or market conditions may lead to impairments and defaults on these credit exposures. Losses may be exacerbated by declines in the value of collateral securing loans and other exposures. In our prime brokerage, securities finance and Lombard lending businesses, we extend substantial amounts of credit against securities collateral, the value or liquidity of which may decline rapidly. Our Swiss mortgage and corporate lending portfolios are a large part of our overall lending. We are therefore exposed to the risk of adverse economic developments in Switzerland, including property valuations in the housing market, the strength of the Swiss franc and its effect on Swiss exports, prevailing negative interest rates applied by the Swiss National Bank, economic conditions within the Eurozone or the EU, and the evolution of agreements between Switzerland and the EU or European Economic Area, which represent Switzerland's largest export market. We have exposures related to real estate in various countries, including a substantial Swiss mortgage portfolio. Although we believe this portfolio is prudently managed, we could nevertheless be exposed to losses if a substantial deterioration in the Swiss real estate market were to occur.

As we experienced in 2020, under the IFRS 9 expected credit loss (ECL) regime, credit loss expenses may increase rapidly at the onset of an economic downturn as a result of higher levels of credit impairments (stage 3), as well as higher ECL from stages 1 and 2. These increases may only gradually diminish once the economic outlook improves. Substantial increases in ECL could exceed expected loss for regulatory capital purposes and adversely affect our common equity tier 1 (CET1) capital and regulatory capital ratios.

Low and negative interest rates in Switzerland, the US and the Eurozone and elsewhere could continue to negatively affect our net interest income

The continuing low or negative interest rate environment, particularly in Switzerland, the US and the Eurozone, may further erode interest margins and adversely affect the net interest income generated by the Personal & Corporate Banking and Global Wealth Management businesses. The Swiss National Bank permits Swiss banks to make deposits up to a threshold at zero interest. Any reduction in or limitation on the use of this exemption from the otherwise applicable negative interest rates would exacerbate the effect of negative interest rates in Switzerland on our business.

Low and negative interest rates may also affect customer behavior and hence our overall balance sheet structure. Mitigating actions that we have taken, or may take in the future, such as the introduction of selective deposit fees or minimum lending rates, have resulted and may further result in the loss of customer deposits (a key source of funding for us), net new money outflows and a declining market share in our Swiss lending business.

Our shareholders' equity and capital are also affected by changes in interest rates. In particular, the calculation of our Swiss pension plan's net defined benefit assets and liabilities is sensitive to the applied discount rate and to fluctuations in the value of pension plan assets. Any further reduction in interest rates may lower the discount rates and result in pension plan deficits as a result of the long duration of corresponding liabilities. This could lead to a corresponding reduction in our equity and CET1 capital.

Our plans to ensure uninterrupted business dealings as the UK withdraws from the EU may not be effective

To prepare our business for the UK withdrawal from the EU, in 2019, we completed a merger of UBS Limited, our UK-based subsidiary, into UBS Europe SE, our Germany-headquartered European subsidiary, which is under the direct supervision of the European Central Bank. Our plans to ensure uninterrupted business dealings now that the UK has withdrawn from the EU may not be effective if the EU and the UK do not conclude effective negotiations regarding the handling of the financial sector before temporary equivalence decisions expire or significant divergence in regulatory regimes emerges.

Currency fluctuation may have an adverse effect on our profits, balance sheet and regulatory capital

We are subject to currency fluctuation risks. Although our change from the Swiss franc to the US dollar as our functional and presentation currency in 2018 reduces our exposure to currency fluctuation risks with respect to the Swiss franc, a substantial portion of our assets and liabilities are denominated in currencies other than the US dollar. Additionally, in order to hedge our CET1 capital ratio, our CET1 capital must have foreign currency exposure, which leads to currency sensitivity. As a consequence, it is not possible to simultaneously fully hedge both the amount of capital and the capital ratio. Accordingly, changes in foreign exchange rates may continue to adversely affect our profits, balance sheet and capital, leverage and liquidity coverage ratios.

Regulatory and legal risks

Material legal and regulatory risks arise in the conduct of our business

As a global financial services firm operating in more than 50 countries, we are subject to many different legal, tax and regulatory regimes, including extensive regulatory oversight, and are exposed to significant liability risk. We are subject to a large number of claims, disputes, legal proceedings and government investigations, and we expect that our ongoing business activities will continue to give rise to such matters in the future. The extent of our financial exposure to these and other matters is material and could substantially exceed the level of provisions that we have established. We are not able to predict the financial and non-financial consequences these matters may have when resolved.

We may be subject to adverse preliminary determinations or court decisions that may negatively affect public perception and our reputation, result in prudential actions from regulators, and cause us to record additional provisions for the matter even when we believe we have substantial defenses and expect to ultimately achieve a more favorable outcome. This risk is illustrated by the award of aggregate penalties and damages of EUR 4.5 billion by the court of first instance in France, which we have appealed and is scheduled to be retried in the Court of Appeal in March 2021.

Resolution of regulatory proceedings may require us to obtain waivers of regulatory disqualifications to maintain certain operations; may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations; and may permit financial market utilities to limit, suspend or terminate our participation in them. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material adverse consequences for us.

Our settlements with governmental authorities in connection with foreign exchange, London Interbank Offered Rates (LIBOR) and other benchmark interest rates starkly illustrate the significantly increased level of financial and reputational risk now associated with regulatory matters in major jurisdictions. In connection with investigations related to LIBOR and other benchmark rates and to foreign exchange and precious metals, very large fines and disgorgement amounts were assessed against us, and we were required to enter guilty pleas despite our full cooperation with the authorities in the investigations, and despite our receipt of conditional leniency or conditional immunity from anti-trust authorities in a number of jurisdictions, including the US and Switzerland.

Ever since our material losses arising from the 2007–2009 financial crisis, we have been subject to a very high level of regulatory scrutiny and to certain regulatory measures that constrain our strategic flexibility. While we believe we have remediated the deficiencies that led to those losses, as well as to the unauthorized trading incident announced in September 2011, the effects on our reputation, as well as on relationships with regulatory authorities of the LIBOR-related settlements of 2012 and settlements with some regulators of matters related to our foreign exchange and precious metals business, as well as the extensive efforts required to implement new regulatory expectations, have resulted in continued scrutiny.

We are in active dialog with regulators concerning the actions we are taking to improve our operational risk management, risk control, anti-money laundering, data management and other frameworks, and otherwise seek to meet supervisory expectations, but there can be no assurance that our efforts will have the desired effects. As a result of this history, our level of risk with respect to regulatory enforcement may be greater than that of some of our peers.

Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards

We prepare our consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). The application of these accounting standards requires the use of judgment based on estimates and assumptions that may involve significant uncertainty at the time they are made. This is the case, for example, with respect to the measurement of fair value of financial instruments, the recognition of deferred tax assets, the assessment of the impairment of goodwill, expected credit losses and estimation of provisions for contingencies, including litigation, regulatory and similar matters. Such judgments, including the underlying estimates and assumptions, which encompass historical experience, expectations of the future and other factors, are regularly evaluated to determine their continuing relevance based on current conditions. Using different assumptions could cause the reported results to differ. Changes in assumptions, or failure to make the changes necessary to reflect evolving market conditions, may have a significant effect on the financial statements in the periods when changes occur. Estimates of provisions for contingencies may be subject to a wide range of potential outcomes and significant uncertainty. For example, the broad range of potential outcomes in UBS AG's proceeding in France increases the uncertainty associated with assessing the appropriate provision. If the estimates and assumptions in future periods deviate from the current outlook, UBS AG's financial results may also be negatively affected.

Changes to IFRS or interpretations thereof may cause future reported results and financial position to differ from current expectations, or historical results to differ from those previously reported due to the adoption of accounting standards on a retrospective basis. Such changes may also affect our regulatory capital and ratios. For example, the introduction of the expected credit loss (ECL) framework under IFRS 9 in 2018 fundamentally changed how credit risk arising from loans, loan commitments, guarantees and certain revocable facilities is accounted for. Under the regime, credit loss expenses may increase rapidly at the onset of an economic downturn as a result of higher levels of credit impairments (stage 3), as well as higher ECL from stages 1 and 2, only gradually diminishing once the economic outlook improves. As we observed in the first and second quarters of 2020, this effect may be more pronounced in a deteriorating economic environment. Substantial increases in ECL could exceed expected loss for regulatory capital purposes and adversely affect our CET1 capital and regulatory capital ratios.

If we experience financial difficulties, FINMA has the power to open restructuring or liquidation proceedings or impose protective measures in relation to UBS Group AG, UBS AG or UBS Switzerland AG, and such proceedings or measures may have a material adverse effect on our shareholders and creditors

Under the Swiss Banking Act, FINMA is able to exercise broad statutory powers with respect to Swiss banks and Swiss parent companies of financial groups, such as UBS Group AG, UBS AG and UBS Switzerland AG, if there is justified concern that the entity is over-indebted, has serious liquidity problems or, after the expiration of any relevant deadline, no longer fulfills capital adequacy requirements. Such powers include ordering protective measures, instituting restructuring proceedings (and exercising any Swiss resolution powers in connection therewith), and instituting liquidation proceedings, all of which may have a material adverse effect on shareholders and creditors or may prevent UBS Group AG, UBS AG or UBS Switzerland AG from paying dividends or making payments on debt obligations.

UBS would have limited ability to challenge any such protective measures, and creditors and shareholders would have no right under Swiss law or in Swiss courts to reject them, seek their suspension, or challenge their imposition, including measures that require or result in the deferment of payments.

If restructuring proceedings are opened with respect to UBS Group AG, UBS AG or UBS Switzerland AG, the resolution powers that FINMA may exercise include the power to: (i) transfer all or some of the assets, debt and other liabilities, and contracts of the entity subject to proceedings to another entity; (ii) stay for a maximum of two business days (a) the termination of, or the exercise of rights to terminate, netting rights, (b) rights to enforce or dispose of certain types of collateral or (c) rights to transfer claims, liabilities or certain collateral, under contracts to which the entity subject to proceedings is a party; and / or (iii) partially or fully write down the equity capital and, if such equity capital is fully written down, convert into equity or write down the capital and other debt instruments of the entity subject to proceedings. Shareholders and creditors would have no right to reject, or to seek the suspension of, any restructuring plan pursuant to which such resolution powers are exercised. They would have only limited rights to challenge any decision to exercise resolution powers or to have that decision reviewed by a judicial or administrative process or otherwise.

Upon full or partial write-down of the equity and debt of the entity subject to restructuring proceedings, the relevant shareholders and creditors would receive no payment in respect of the equity and debt that is written down, the write-down would be permanent, and the investors would not, at such time or at any time thereafter, receive any shares or other participation rights, or be entitled to any write-up or any other compensation in the event of a potential recovery of the debtor. If FINMA orders the conversion of debt of the entity subject to restructuring proceedings into equity, the securities received by the investors may be worth significantly less than the original debt and may have a significantly different risk profile, and such conversion would also dilute the ownership of existing shareholders. In addition, creditors receiving equity would be effectively subordinated to all creditors of the restructured entity in the event of a subsequent winding up, liquidation or dissolution of the restructured entity, which would increase the risk that investors would lose all or some of their investment.

FINMA has significant discretion in the exercise of its powers in connection with restructuring proceedings. Furthermore, certain categories of debt obligations, such as certain types of deposits, are subject to preferential treatment. As a result, holders of obligations of an entity subject to a Swiss restructuring proceeding may have their obligations written down or converted into equity even though obligations ranking on par with or junior to such obligations are not written down or converted.

Substantial changes in regulation may adversely affect our businesses and our ability to execute our strategic plans

We are subject to significant new regulatory requirements, including recovery and resolution planning, changes in capital and prudential standards, changes in taxation regimes as a result of changes in governmental administrations, as well as new and revised market standards and fiduciary duties. Notwithstanding attempts by regulators to align their efforts, the measures adopted or proposed for banking regulation differ significantly across the major jurisdictions, making it increasingly difficult to manage a global institution. In addition, Swiss regulatory changes with regard to such matters as capital and liquidity have often proceeded more quickly than those in other major jurisdictions, and Switzerland's requirements for major international banks are among the strictest of the major financial centers. This could put Swiss banks, such as UBS, at a disadvantage when competing with peer financial institutions subject to more lenient regulation or with unregulated non-bank competitors.

Our implementation of additional regulatory requirements and changes in supervisory standards, as well as our compliance with existing laws and regulations, continue to receive heightened scrutiny from supervisors. If we do not meet supervisory expectations in relation to these or other matters, or if additional supervisory or regulatory issues arise, we would likely be subject to further regulatory scrutiny as well as measures that may further constrain our strategic flexibility.

Resolvability and resolution and recovery planning: We have moved significant operations into subsidiaries to improve resolvability and meet other regulatory requirements, and this has resulted in substantial implementation costs, increased our capital and funding costs and reduced operational flexibility. For example, we have transferred all of our US subsidiaries under a US intermediate holding company to meet US regulatory requirements, and have transferred substantially all the operations of Personal & Corporate Banking and Global Wealth Management booked in Switzerland to UBS Switzerland AG to improve resolvability.

These changes require significant time and resources to implement, and create operational, capital, liquidity, funding and tax inefficiencies. Our operations in subsidiaries are subject to local capital, liquidity, stable funding, capital planning and stress testing requirements. These requirements have resulted in increased capital and liquidity requirements in affected subsidiaries, which limit our operational flexibility and negatively affect our ability to benefit from synergies between business units and to distribute earnings to the Group.

Under the Swiss too-big-to-fail (TBTF) framework, we are required to put in place viable emergency plans to preserve the operation of systemically important functions in the event of a failure. Moreover, under this framework and similar regulations in the US, the UK, the EU and other jurisdictions in which we operate, we are required to prepare credible recovery and resolution plans detailing the measures that would be taken to recover in a significant adverse event or in the event of winding down the Group or the operations in a host country through resolution or insolvency proceedings. If a recovery or resolution plan that we produce is determined by the relevant authority to be inadequate or not credible, relevant regulation may permit the authority to place limitations on the scope or size of our business in that jurisdiction, or oblige us to hold higher amounts of capital or liquidity or to change our legal structure or business in order to remove the relevant impediments to resolution.

Capital and prudential standards: As an internationally active Swiss systemically relevant bank (an SRB), we are subject to capital and total loss-absorbing capacity (TLAC) requirements that are among the most stringent in the world. Moreover, many of our subsidiaries must comply with minimum capital, liquidity and similar requirements and, as a result, UBS Group AG and UBS AG have contributed a significant portion of their capital and provide substantial liquidity to these subsidiaries. These funds are available to meet funding and collateral needs in the relevant entities, but are generally not readily available for use by the Group as a whole.

We expect our risk-weighted assets (RWA) to further increase as the effective date for additional capital standards promulgated by the Basel Committee on Banking Supervision (the BCBS) draws nearer.

Increases in capital and liquidity standards could significantly curtail our ability to pursue strategic opportunities and to distribute risk.

Market regulation and fiduciary standards: Our wealth and asset management businesses operate in an environment of increasing regulatory scrutiny and changing standards with respect to fiduciary and other standards of care and the focus on mitigating or eliminating conflicts of interest between a manager or advisor and the client, which require effective implementation across the global systems and processes of investment managers and other industry participants. For example, we have made material changes to our business processes, policies and the terms on which we interact with these clients in order to comply with SEC Regulation Best Interest, which is intended to enhance and clarify the duties of brokers and investment advisers to retail customers, the Volcker Rule, which limits our ability to engage in proprietary trading, as well as changes in European and Swiss market conduct regulation. Future changes in the regulation of our duties to customers may require us to make further changes to our businesses, which would result in additional expense and may adversely affect our business. We may also become subject to other similar regulations substantively limiting the types of activities in which we may engage or the way we conduct our operations.

Some of the regulations applicable to UBS AG as a registered swap dealer with the Commodity Futures Trading Commission (the CFTC) in the US, and certain regulations that will be applicable when UBS AG registers as a security-based swap dealer with the US Securities and Exchange Commission (the SEC), apply to UBS AG globally, including those relating to swap data reporting, record-keeping, compliance and supervision. As a result, in some cases, US rules duplicate or may conflict with legal requirements applicable to us elsewhere, including in Switzerland, and may place us at a competitive disadvantage to firms that are not required to register in the US with the SEC or CFTC.

In many instances, we provide services on a cross-border basis, and we are therefore sensitive to barriers restricting market access for third-country firms. In particular, efforts in the EU to harmonize the regime for third-country firms to access the European market may have the effect of creating new barriers that adversely affect our ability to conduct business in these jurisdictions from Switzerland. In addition, a number of jurisdictions are increasingly regulating cross-border activities based on determinations of equivalence of home country regulation, substituted compliance or similar principles of comity. A negative determination with respect to Swiss equivalence could limit our access to the market in those jurisdictions and may negatively influence our ability to act as a global firm. For example, the EU declined to extend its equivalence determination for Swiss exchanges, which lapsed as of 30 June 2019.

UBS experienced cross-border outflows over a number of years as a result of heightened focus by fiscal authorities on cross-border investment and fiscal amnesty programs, in anticipation of the implementation in Switzerland of the global automatic exchange of tax information, and as a result of the measures UBS has implemented in response to these changes. Further changes in local tax laws or regulations and their enforcement, the implementation of cross-border tax information exchange regimes, national tax amnesty or enforcement programs or similar actions may affect our clients' ability or willingness to do business with us and could result in additional cross-border outflows.

Capital strength is a key component of our business model

Capital strength enables us to grow our businesses, and absorb increases in regulatory and capital requirements. It reassures our clients and stakeholders, allows us to maintain our capital return policy and contributes to our credit ratings. Our capital ratios are driven primarily by RWA, the leverage ratio denominator and eligible capital, all of which may fluctuate based on a number of factors, some of which are outside our control. Our ability to maintain our capital ratios is subject to numerous risks, including the financial results of our businesses, the effect of changes to capital standards, methodologies and interpretations that may adversely affect the calculation of our CET1 ratios, the imposition of risk add-ons or capital buffers, and the application of additional capital, liquidity and similar requirements to subsidiaries. The results of our businesses may be adversely affected by events arising from other factors described herein. In some cases, such as litigation and regulatory risk and operational risk events, losses may be sudden and large. These risks could reduce the amount of capital available for return to shareholders and hinder our ability to achieve our capital returns target of a progressive cash dividend coupled with a share repurchase program.

Our eligible capital may be reduced by losses recognized within net profit or other comprehensive income. Eligible capital may also be reduced for other reasons, including acquisitions which change the level of goodwill, changes in temporary differences related to deferred tax assets included in capital, adverse currency movements affecting the value of equity, prudential adjustments that may be required due to the valuation uncertainty associated with certain types of positions, and changes in the value of certain pension fund assets and liabilities or in the interest rate and other assumptions used to calculate the changes in our net defined benefit obligation recognized in other comprehensive income.

RWA are driven by our business activities, by changes in the risk profile of our exposures, by changes in our foreign currency exposures and foreign exchange rates, and by regulation. For instance, substantial market volatility, a widening of credit spreads, adverse currency movements, increased counterparty risk, deterioration in the economic environment or increased operational risk could result in an increase in RWA. We have significantly reduced our market risk and credit risk RWA in recent years. However, increases in operational risk RWA, particularly those arising from litigation, regulatory and similar matters, and regulatory changes in the calculation of RWA, and regulatory add-ons to RWA, have offset a substantial portion of this reduction. Changes in the calculation of RWA, the imposition of additional supplemental RWA charges or multipliers applied to certain exposures and other methodology changes, as well as the implementation of the capital standards promulgated by the Basel Committee on Banking Supervision, which will take effect in 2023, are expected to increase our RWA.

The leverage ratio is a balance sheet-driven measure and therefore limits balance sheet-intensive activities, such as lending, more than activities that are less balance sheet intensive, and it may constrain our business even if we satisfy other risk-based capital requirements. Our leverage ratio denominator is driven by, among other things, the level of client activity, including deposits and loans, foreign exchange rates, interest rates and other market factors. Many of these factors are wholly or partly outside of our control.

The effect of taxes on our financial results is significantly influenced by tax law changes and reassessments of our deferred tax assets

Our effective tax rate is highly sensitive to our performance, our expectation of future profitability and any potential increases or decreases in statutory tax rates, such as the potential increases in corporate tax rates under discussion in the United States. Further, based on prior years' tax losses, we have recognized deferred tax assets (DTAs) reflecting the probable recoverable level based on future taxable profit as informed by our business plans. If our performance is expected to produce diminished taxable profit in future years, particularly in the US, we may be required to write down all or a portion of the currently recognized DTAs through the income statement in excess of anticipated amortization. This would have the effect of increasing our effective tax rate in the year in which any write-downs are taken. Conversely, if we expect the performance of entities in which we have unrecognized tax losses to improve, particularly in the US or the UK, we could potentially recognize additional DTAs. The effect of doing so would be to reduce our effective tax rate in years in which additional DTAs are recognized and to increase our effective tax rate in future years. Our effective tax rate is also sensitive to any future reductions in statutory tax rates, particularly in the US, which would cause the expected future tax benefit from items such as tax loss carry-forwards in the affected locations to diminish in value. This, in turn, would cause a write-down of the associated DTAs. For example, the reduction in the US federal corporate tax rate to 21% from 35% introduced by the US Tax Cuts and Jobs Act resulted in a USD 2.9 billion net write-down in the Group's DTAs in the fourth quarter of 2017.

We generally revalue our DTAs in the fourth quarter of the financial year based on a reassessment of future profitability taking into account our updated business plans. We consider the performance of our businesses and the accuracy of historical forecasts, tax rates and other factors in evaluating the recoverability of our DTAs, including the remaining tax loss carry-forward period and our assessment of expected future taxable profits over the life of DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

Our results in past years have demonstrated that changes in the recognition of DTAs can have a very significant effect on our reported results. Any future change in the manner in which UBS remeasures DTAs could affect UBS's effective tax rate, particularly in the year in which the change is made.

Our full-year effective tax rate could change if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected, or if branches and subsidiaries generate tax losses that we cannot benefit from through the income statement. In particular, losses at entities or branches that cannot offset for tax purposes taxable profits in other group entities, and which do not result in additional DTA recognition, may increase our effective tax rate. In addition, tax laws or the tax authorities in countries where we have undertaken legal structure changes may cause entities to be subject to taxation as permanent establishments or may prevent the transfer of tax losses incurred in one legal entity to newly organized or reorganized subsidiaries or affiliates or may impose limitations on the utilization of tax losses that relate to businesses formerly conducted by the transferor. Were this to occur in situations where there were also limited planning opportunities to utilize the tax losses in the originating entity, the DTAs associated with such tax losses may be required to be written down through the income statement.

Changes in tax law may materially affect our effective tax rate, and, in some cases, may substantially affect the profitability of certain activities. In addition, statutory and regulatory changes, as well as changes to the way in which courts and tax authorities interpret tax laws, including assertions that we are required to pay taxes in a jurisdiction as a result of activities connected to that jurisdiction constituting a permanent establishment or similar theory, and changes in our assessment of uncertain tax positions, could cause the amount of taxes we ultimately pay to materially differ from the amount accrued.

Discontinuance of, or changes to, benchmark rates may require adjustments to our agreements with clients and other market participants, as well as to our systems and processes

Since April 2013, the UK Financial Conduct Authority (the FCA) has regulated LIBOR, and regulators in other jurisdictions have increased oversight of other interbank offered rates (IBORs) and similar benchmark rates.

The UK Prudential Regulation Authority (the PRA) has confirmed the end-of-2021 deadline for transitioning away from LIBOR for most currencies. The ICE Benchmark Administration (IBA), the FCA-regulated and authorized administrator of LIBOR, is consulting on the timing of the cessation of USD LIBOR. IBA expects that one-week and two-month USD LIBOR settings will cease by the end of 2021, and that the remaining USD LIBOR settings will cease by the end of June 2023.

We have a substantial number of contracts linked to IBORs. In some cases, contracts may contain provisions intended to provide a fallback interest rate in the event of a brief unavailability of the relevant IBOR. These provisions may not be effective or may produce arbitrary results in the event of a permanent cessation of the relevant IBOR. While efforts to transition outstanding new transactions, and historical transactions, as well as operational systems, from IBORs to alternative reference rates (ARRs) have made substantial progress, including through industry-wide protocols such as the International Swaps and Derivatives Association (ISDA) IBOR Fallbacks Supplement and IBOR Fallbacks Protocol, there remain substantial volumes of transactions that require modification to effectively transition to ARRs.

Strategy, management and operational risks

We may not be successful in the ongoing execution of our strategic plans

We have transformed UBS to focus on our Global Wealth Management business and our universal bank in Switzerland, complemented by Asset Management and a significantly smaller and more capital-efficient Investment Bank; we have substantially reduced the risk-weighted assets and leverage ratio denominator usage in Group Functions; and made significant cost reductions. Risk remains that going forward we may not succeed in executing our strategy or achieving our performance targets, or may be delayed in doing so. Macroeconomic conditions, geopolitical uncertainty, changes to regulatory requirements and the continuing costs of meeting these requirements have prompted us to adapt our targets and ambitions in the past and we may need to do so again in the future.

To achieve our strategic plans, we expect to continue to make significant expenditures on technology and infrastructure to improve client experience, improve and further enable digital offerings and increase efficiency. Our investments in new technology may not fully achieve our objectives or improve our ability to attract and retain customers. In addition, we face competition in providing digitally enabled offerings from both existing competitors and new financial service providers in various portions of the value chain. For example, technological advances and the growth of e-commerce have made it possible for e-commerce firms and other companies to offer products and services that were traditionally offered only by banks. These advances have also allowed financial institutions and other companies to provide digitally based financial solutions, including electronic securities trading, payments processing and online automated algorithmic-based investment advice at a low cost to their customers. We may have to lower our prices, or risk losing customers as a result. Our ability to develop and implement competitive digitally enabled offerings and processes will be an important factor in our ability to compete.

As part of our strategy, we seek to improve our operating efficiency, in part by controlling our costs. We may not be able to identify feasible cost reduction opportunities that are consistent with our business goals and cost reductions may be realized later or may be smaller than we anticipate. Higher temporary and permanent regulatory costs and higher business demand than anticipated have partly offset cost reductions and delayed the achievement of our past cost reduction targets, and we could continue to be challenged in the execution of our ongoing efforts to improve operating efficiency.

Changes in our workforce as a result of outsourcing, nearshoring, offshoring, insourcing or staff reductions may introduce new operational risks that, if not effectively addressed, could affect our ability to achieve cost and other benefits from such changes, or could result in operational losses.

As we implement effectiveness and efficiency programs, we may also experience unintended consequences, such as the unintended loss or degradation of capabilities that we need in order to maintain our competitive position, achieve our targeted returns or meet existing or new regulatory requirements and expectations.

Operational risks affect our business

Our businesses depend on our ability to process a large number of transactions, many of which are complex, across multiple and diverse markets in different currencies, to comply with requirements of many different legal and regulatory regimes to which we are subject and to prevent, or promptly detect and stop, unauthorized, fictitious or fraudulent transactions. We also rely on access to, and on the functioning of, systems maintained by third parties, including clearing systems, exchanges, information processors and central counterparties. Any failure of our or third-party systems could have an adverse effect on us. Our operational risk management and control systems and processes are designed to help ensure that the risks associated with our activities – including those arising from process error, failed execution, misconduct, unauthorized trading, fraud, system failures, financial crime, cyberattacks, breaches of information security, inadequate or ineffective access controls and failure of security and physical protection – are appropriately controlled. If our internal controls fail or prove ineffective in identifying and remedying these risks, we could suffer operational failures that might result in material losses, such as the substantial loss we incurred from the unauthorized trading incident announced in September 2011.

We use automation as part of our efforts to improve efficiency, reduce the risk of error and improve our client experience. We intend to expand the use of robotic processing, machine learning and artificial intelligence to further these goals. Use of these tools presents their own risks, including the need for effective design and testing; the quality of the data used for development and operation of machine learning and artificial intelligence tools may adversely affect their functioning and result in errors and other operational risks.

We and other financial services firms have been subject to breaches of security and to cyber- and other forms of attack, some of which are sophisticated and targeted attacks intended to gain access to confidential information or systems, disrupt service or destroy data. These attacks may be attempted through the introduction of viruses or malware, phishing and other forms of social engineering, distributed denial of service attacks and other means. These attempts may occur directly, or using equipment or security passwords of our employees, third-party service providers or other users. In addition to external attacks, we have experienced loss of client data from failure by employees and others to follow internal policies and procedures and from misappropriation of our data by employees and others. We may not be able to anticipate, detect or recognize threats to our systems or data and our preventative measures may not be effective to prevent an attack or a security breach. In the event of a security breach, notwithstanding our preventative measures, we may not immediately detect a particular breach or attack. Once a particular attack is detected, time may be required to investigate and assess the nature and extent of the attack. A successful breach or circumvention of security of our systems or data could have significant negative consequences for us, including disruption of our operations, misappropriation of confidential information concerning us or our customers, damage to our systems, financial losses for us or our customers, violations of data privacy and similar laws, litigation exposure and damage to our reputation.

We are subject to complex and frequently changing laws and regulations governing the protection of client and personal data, such as the EU General Data Protection Regulation. Ensuring that we comply with applicable laws and regulations when we collect, use and transfer personal information requires substantial resources and may affect the ways in which we conduct our business. In the event that we fail to comply with applicable laws, we may be exposed to regulatory fines and penalties and other sanctions. We may also incur such penalties if our vendors or other service providers or clients or counterparties fail to comply with these laws or to maintain appropriate controls over protected data. In addition, any loss or exposure of client or other data may adversely damage our reputation and adversely affect our business.

A major focus of US and other countries' governmental policies relating to financial institutions in recent years has been on fighting money laundering and terrorist financing. We are required to maintain effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, and to verify the identity of our clients under the laws of many of the countries in which we operate. We are also subject to laws and regulations related to corrupt and illegal payments to government officials by others, such as the US Foreign Corrupt Practices Act and the UK Bribery Act. We have implemented policies, procedures and internal controls that are designed to comply with such laws and regulations. Notwithstanding this, US regulators have found deficiencies in the design and operation of anti-money laundering programs in our US operations. We have undertaken a significant program to address these regulatory findings with the objective of fully meeting regulatory expectations for our programs. Failure to maintain and implement adequate programs to combat money laundering, terrorist financing or corruption, or any failure of our programs in these areas, could have serious consequences both from legal enforcement action and from damage to our reputation. Frequent changes in sanctions imposed and increasingly complex sanctions imposed on countries, entities and individuals increase our cost of monitoring and complying with sanctions requirements and increase the risk that we will not identify in a timely manner previously permissible client activity that is subject to a sanction.

As a result of new and changed regulatory requirements and the changes we have made in our legal structure, the volume, frequency and complexity of our regulatory and other reporting has remained elevated. Regulators have also significantly increased expectations regarding our internal reporting and data aggregation, as well as management reporting. We have incurred and continue to incur significant costs to implement infrastructure to meet these requirements. Failure to meet external reporting requirements accurately and in a timely manner or failure to meet regulatory expectations of internal reporting, data aggregation and management reporting could result in enforcement action or other adverse consequences for us.

Certain types of operational control weaknesses and failures could also adversely affect our ability to prepare and publish accurate and timely financial reports.

In addition, despite the contingency plans that we have in place, our ability to conduct business may be adversely affected by a disruption in the infrastructure that supports our businesses and the communities in which we operate. This may include a disruption due to natural disasters, pandemics, civil unrest, war or terrorism and involve electrical, communications, transportation or other services that we use or that are used by third parties with whom we conduct business.

We may not be successful in implementing changes in our wealth management businesses to meet changing market, regulatory and other conditions

In recent years, inflows from lower-margin segments and markets have been replacing outflows from higher-margin segments and markets, in particular for cross-border clients. This dynamic, combined with changes in client product preferences as a result of which low-margin products account for a larger share of our revenues than in the past, has put downward pressure on Global Wealth Management's margins.

We are exposed to possible outflows of client assets in our asset-gathering businesses and to changes affecting the profitability of Global Wealth Management, in particular. Initiatives that we may implement to overcome the effects of changes in the business environment on our profitability, balance sheet and capital positions may not succeed in counteracting those effects and may cause net new money outflows and reductions in client deposits, as happened with our balance sheet and capital optimization program in 2015. There is no assurance that we will be successful in our efforts to offset the adverse effect of these or similar trends and developments.

We may be unable to identify or capture revenue or competitive opportunities, or retain and attract qualified employees

The financial services industry is characterized by intense competition, continuous innovation, restrictive, detailed, and sometimes fragmented regulation and ongoing consolidation. We face competition at the level of local markets and individual business lines, and from global financial institutions that are comparable to us in their size and breadth. Barriers to entry in individual markets and pricing levels are being eroded by new technology. We expect these trends to continue and competition to increase. Our competitive strength and market position could be eroded if we are unable to identify market trends and developments, do not respond to such trends and developments by devising and implementing adequate business strategies, do not adequately develop or update our technology including our digital channels and tools, or are unable to attract or retain the qualified people needed.

The amount and structure of our employee compensation is affected not only by our business results, but also by competitive factors and regulatory considerations.

In recent years, in response to the demands of various stakeholders, including regulatory authorities and shareholders, and in order to better align the interests of our staff with other stakeholders, we have increased average deferral periods for stock awards, expanded forfeiture provisions and, to a more limited extent, introduced clawback provisions for certain awards linked to business performance. We have also introduced individual caps on the proportion of fixed to variable pay for the Group Executive Board (GEB) members, as well as certain other employees.

Constraints on the amount or structure of employee compensation, higher levels of deferral, performance conditions and other circumstances triggering the forfeiture of unvested awards may adversely affect our ability to retain and attract key employees. The loss of key staff and the inability to attract qualified replacements could seriously compromise our ability to execute our strategy and to successfully improve our operating and control environment, and could affect our business performance. Swiss law requires that shareholders approve the compensation of the Board of Directors (the BoD) and the GEB each year. If our shareholders fail to approve the compensation for the GEB or the BoD, this could have an adverse effect on our ability to retain experienced directors and our senior management.

We depend on our risk management and control processes to avoid or limit potential losses in our businesses

Controlled risk-taking is a major part of the business of a financial services firm. Some losses from risk-taking activities are inevitable, but to be successful over time, we must balance the risks we take against the returns generated. Therefore we must diligently identify, assess, manage and control our risks, not only in normal market conditions but also as they might develop under more extreme, stressed conditions, when concentrations of exposures can lead to severe losses.

As seen during the financial crisis of 2007–2009, we have not always been able to prevent serious losses arising from extreme or sudden market events that are not anticipated by our risk measures and systems. Our risk measures, concentration controls and the dimensions in which we aggregated risk to identify correlated exposures proved inadequate in a historically severe deterioration in financial markets. As a result, we recorded substantial losses on fixed-income trading positions, particularly in 2008 and 2009. We have substantially revised and strengthened our risk management and control framework and increased the capital that we hold relative to the risks that we take. Nonetheless, we could suffer further losses in the future if, for example:

- we do not fully identify the risks in our portfolio, in particular risk concentrations and correlated risks;
- our assessment of the risks identified, or our response to negative trends, proves to be untimely, inadequate, insufficient or incorrect;
- our risk models prove insufficient to predict the scale of financial risks the bank faces;
- markets move in ways that we do not expect – in terms of their speed, direction, severity or correlation – and our ability to manage risks in the resulting environment is, therefore, affected;
- third parties to whom we have credit exposure or whose securities we hold are severely affected by events and we suffer defaults and impairments beyond the level implied by our risk assessment; or
- collateral or other security provided by our counterparties and clients proves inadequate to cover their obligations at the time of default.

We also hold legacy risk positions, primarily in Group Functions, that, in many cases, are illiquid and may again deteriorate in value.

We also manage risk on behalf of our clients. The performance of assets we hold for our clients may be adversely affected by the same factors mentioned above. If clients suffer losses or the performance of their assets held with us is not in line with relevant benchmarks against which clients assess investment performance, we may suffer reduced fee income and a decline in assets under management, or withdrawal of mandates.

Investment positions, such as equity investments made as part of strategic initiatives and seed investments made at the inception of funds that we manage, may also be affected by market risk factors. These investments are often not liquid and generally are intended or required to be held beyond a normal trading horizon. Deteriorations in the fair value of these positions would have a negative effect on our earnings.

As UBS Group AG is a holding company, its operating results, financial condition and ability to pay dividends and other distributions and / or to pay its obligations in the future depend on funding, dividends and other distributions received directly or indirectly from its subsidiaries, which may be subject to restrictions

UBS Group AG's ability to pay dividends and other distributions and to pay its obligations in the future will depend on the level of funding, dividends and other distributions, if any, received from UBS AG and other subsidiaries. The ability of such subsidiaries to make loans or distributions, directly or indirectly, to UBS Group AG may be restricted as a result of several factors, including restrictions in financing agreements and the requirements of applicable law and regulatory, fiscal or other restrictions. In particular, UBS Group AG's direct and indirect subsidiaries, including UBS AG, UBS Switzerland AG, UBS Americas Holding LLC and UBS Europe SE, are subject to laws and regulations that restrict dividend payments, authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to UBS Group AG, or could affect their ability to repay any loans made to, or other investments in, such subsidiary by UBS Group AG or another member of the Group. For example, in the early stages of the COVID-19 pandemic, the European Central Bank ordered all banks under its supervision to cease dividend distributions and the Federal Reserve Board has limited capital distributions by bank holding companies and intermediate holding companies. Restrictions and regulatory actions of this kind could impede access to funds that UBS Group AG may need to meet its obligations or to pay dividends to shareholders. In addition, UBS Group AG's right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to all prior claims of the subsidiary's creditors.

Our capital instruments may contractually prevent UBS Group AG from proposing the distribution of dividends to shareholders, other than in the form of shares, if we do not pay interest on these instruments.

Furthermore, UBS Group AG may guarantee some of the payment obligations of certain of the Group's subsidiaries from time to time. These guarantees may require UBS Group AG to provide substantial funds or assets to subsidiaries or their creditors or counterparties at a time when UBS Group AG is in need of liquidity to fund its own obligations.

The credit ratings of UBS Group AG or its subsidiaries used for funding purposes could be lower than the ratings of the Group's operating subsidiaries, which may adversely affect the market value of the securities and other obligations of UBS Group AG or those subsidiaries on a standalone basis.

Our reputation is critical to our success

Our reputation is critical to the success of our strategic plans, business and prospects. Reputational damage is difficult to reverse, and improvements tend to be slow and difficult to measure. Our reputation has been adversely affected by our losses during the financial crisis, investigations into our cross-border private banking services, criminal resolutions of LIBOR-related and foreign exchange matters, as well as other matters. We believe that reputational damage as a result of these events was an important factor in our loss of clients and client assets across our asset-gathering businesses. New events that cause reputational damage could have a material adverse effect on our results of operation and financial condition, as well as our ability to achieve our strategic goals and financial targets.

Liquidity and funding risk

Liquidity and funding management are critical to UBS's ongoing performance

The viability of our business depends on the availability of funding sources, and our success depends on our ability to obtain funding at times, in amounts, for tenors and at rates that enable us to efficiently support our asset base in all market conditions. Our funding sources have generally been stable, but could change in the future because of, among other things, general market disruptions or widening credit spreads, which could also influence the cost of funding. A substantial part of our liquidity and funding requirements are met using short-term unsecured funding sources, including retail and wholesale deposits and the regular issuance of money market securities. A change in the availability of short-term funding could occur quickly.

Moreover, more stringent capital and liquidity and funding requirements will likely lead to increased competition for both secured funding and deposits as a stable source of funding, and to higher funding costs. The addition of loss-absorbing debt as a component of capital requirements, the regulatory requirements to maintain minimum TLAC at UBS's holding company and at subsidiaries, as well as the power of resolution authorities to bail in TLAC and other debt obligations, and uncertainty as to how such powers will be exercised, will increase our cost of funding and could potentially increase the total amount of funding required, in the absence of other changes in our business.

Reductions in our credit ratings may adversely affect the market value of the securities and other obligations and increase our funding costs, in particular with regard to funding from wholesale unsecured sources, and could affect the availability of certain kinds of funding. In addition, as experienced in connection with Moody's downgrade of UBS AG's long-term debt rating in June 2012, rating downgrades can require us to post additional collateral or make additional cash payments under trading agreements. Our credit ratings, together with our capital strength and reputation, also contribute to maintaining client and counterparty confidence, and it is possible that rating changes could influence the performance of some of our businesses.

The requirement to maintain a liquidity coverage ratio of high-quality liquid assets to estimated stressed short-term net cash outflows, and other similar liquidity and funding requirements, oblige us to maintain high levels of overall liquidity, limit our ability to optimize interest income and expense, make certain lines of business less attractive and reduce our overall ability to generate profits. In particular, UBS AG is subjected to increased liquidity coverage requirements under the direction of FINMA. Regulators may consider it necessary to increase these requirements in light of the anticipated economic stresses resulting from the COVID-19 pandemic. The liquidity coverage ratio and net stable funding ratio requirements are intended to ensure that we are not overly reliant on short-term funding and that we have sufficient long-term funding for illiquid assets. The relevant calculations make assumptions about the relative likelihood and amount of outflows of funding and available sources of additional funding in market-wide and firm-specific stress situations. There can be no assurance that in an actual stress situation our funding outflows would not exceed the assumed amounts.

APPENDIX IV

EXTRACT OF
THE UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS OF
UBS AG AND ITS SUBSIDIARIES
FOR THE FIRST QUARTER ENDED 31 MARCH 2021

UBS AG interim consolidated financial statements (unaudited)

Income statement

		For the quarter ended		
USD million	Note	31.3.21	31.12.20	31.3.20
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	3	2,098	2,113	2,457
Interest expense from financial instruments measured at amortized cost	3	(859)	(880)	(1,406)
Net interest income from financial instruments measured at fair value through profit or loss	3	351	370	262
Net interest income	3	1,589	1,602	1,313
Other net income from financial instruments measured at fair value through profit or loss		1,314	1,448	1,775
Credit loss (expense) / release	8	28	(66)	(268)
Fee and commission income	4	6,197	5,548	5,481
Fee and commission expense	4	(478)	(459)	(456)
Net fee and commission income	4	5,719	5,089	5,025
Other income		185	148	164
Total operating income		8,836	8,220	8,009
Personnel expenses	5	4,086	3,308	3,710
General and administrative expenses	6	2,141	2,451	2,080
Depreciation and impairment of property, equipment and software		449	556	405
Amortization and impairment of goodwill and intangible assets		8	10	16
Total operating expenses		6,684	6,324	6,210
Operating profit / (loss) before tax		2,151	1,896	1,799
Tax expense / (benefit)	7	439	324	375
Net profit / (loss)		1,713	1,572	1,424
Net profit / (loss) attributable to non-controlling interests		3	9	3
Net profit / (loss) attributable to shareholders		1,710	1,563	1,421

Statement of comprehensive income

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Comprehensive income attributable to shareholders			
Net profit / (loss)	1,710	1,563	1,421
Other comprehensive income that may be reclassified to the income statement			
Foreign currency translation			
Foreign currency translation movements related to net assets of foreign operations, before tax	(1,407)	1,108	(274)
Effective portion of changes in fair value of hedging instruments designated as net investment hedges, before tax	705	(538)	136
Foreign currency translation differences on foreign operations reclassified to the income statement	1	0	0
Effective portion of changes in fair value of hedging instruments designated as net investment hedges reclassified to the income statement	0	0	(8)
Income tax relating to foreign currency translations, including the impact of net investment hedges	10	(52)	0
Subtotal foreign currency translation, net of tax	(691)[1]	518	(147)
Financial assets measured at fair value through other comprehensive income			
Net unrealized gains / (losses), before tax	(131)	0	208
Realized gains reclassified to the income statement from equity	(8)	(3)	(9)
Realized losses reclassified to the income statement from equity	2	0	0
Income tax relating to net unrealized gains / (losses)	35	3	(51)
Subtotal financial assets measured at fair value through other comprehensive income, net of tax	(102)	0	147
Cash flow hedges of interest rate risk			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	(1,172)	(191)	1,953
Net (gains) / losses reclassified to the income statement from equity	(254)	(256)	(103)
Income tax relating to cash flow hedges	266	87	(345)
Subtotal cash flow hedges, net of tax	(1,160)[2]	(360)	1,505
Cost of hedging			
Change in fair value of cost of hedging, before tax	(13)	(8)	6
Amortization of initial cost of hedging to the income statement	7	7	2
Income tax relating to cost of hedging	0	0	0
Subtotal cost of hedging, net of tax	(6)	(1)	8
Total other comprehensive income that may be reclassified to the income statement, net of tax	(1,958)	157	1,514
Other comprehensive income that will not be reclassified to the income statement			
Defined benefit plans			
Gains / (losses) on defined benefit plans, before tax	(35)	42	104
Income tax relating to defined benefit plans	3	48	124
Subtotal defined benefit plans, net of tax	(32)[3]	90	228
Own credit on financial liabilities designated at fair value			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(29)	(211)	1,156
Income tax relating to own credit on financial liabilities designated at fair value	0	0	(223)
Subtotal own credit on financial liabilities designated at fair value, net of tax	(29)	(211)	934
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(61)	(122)	1,161
Total other comprehensive income	(2,019)	36	2,675
Total comprehensive income attributable to shareholders	(309)	1,599	4,097

Statement of comprehensive income (continued)

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Comprehensive income attributable to non-controlling interests			
Net profit / (loss)	3	9	3
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	(12)	18	(5)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	(12)	18	(5)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(12)	18	(5)
Total comprehensive income attributable to non-controlling interests	(9)	27	(2)
Total comprehensive income			
Net profit / (loss)	1,713	1,572	1,424
Other comprehensive income	(2,032)	54	2,671
of which: other comprehensive income that may be reclassified to the income statement	*(1,958)*	*157*	*1,514*
of which: other comprehensive income that will not be reclassified to the income statement	*(73)*	*(104)*	*1,157*
Total comprehensive income	(319)	1,626	4,095

1 Mainly driven by the weakening of the Swiss franc (6%) and the euro (4%) against the US dollar. 2 Mainly reflects a decrease in net unrealized gains on US dollar hedging derivatives resulting from significant increases in the relevant long-term US dollar interest rates. 3 Mainly includes a net pre-tax OCI loss of USD 154 million related to the Swiss pension plan (primarily driven by an extraordinary employer contribution of USD 152 million that increased the gross plan assets, but led to an OCI loss as no net pension asset could be recognized on the balance sheet as of 31 March 2021 due to the asset ceiling), partly offset by net pre-tax OCI gains of USD 119 million related to our non-Swiss pension plans. Refer to "Note 26 Post-employment benefit plans" in the "Consolidated financial statements" section of the Annual Report 2020 for more information about the effects from changes to the Swiss pension plan and the measures to mitigate them.

Balance sheet

USD million	Note	31.3.21	31.12.20
Assets			
Cash and balances at central banks		158,914	158,231
Loans and advances to banks		18,348	15,344
Receivables from securities financing transactions		82,384	74,210
Cash collateral receivables on derivative instruments	10	35,050	32,737
Loans and advances to customers	8	380,141	380,977
Other financial assets measured at amortized cost	11	26,837	27,219
Total financial assets measured at amortized cost		701,674	688,717
Financial assets at fair value held for trading	9	120,717	125,492
of which: assets pledged as collateral that may be sold or repledged by counterparties		*48,385*	*47,098*
Derivative financial instruments	9, 10	148,284	159,618
Brokerage receivables	9	24,201	24,659
Financial assets at fair value not held for trading	9	68,763	80,038
Total financial assets measured at fair value through profit or loss		361,964	389,808
Financial assets measured at fair value through other comprehensive income	9	8,100	8,258
Investments in associates		1,542	1,557
Property, equipment and software		11,610	11,958
Goodwill and intangible assets		6,427	6,480
Deferred tax assets		9,161	9,174
Other non-financial assets	11	8,755	9,374
Total assets		1,109,234	1,125,327

Balance sheet (continued)

USD million	Note	31.3.21	31.12.20
Liabilities			
Amounts due to banks		12,564	11,050
Payables from securities financing transactions		6,651	6,321
Cash collateral payables on derivative instruments	10	36,571	37,313
Customer deposits		508,903	527,929
Funding from UBS Group AG and its subsidiaries		57,699	53,979
Debt issued measured at amortized cost	13	87,495	85,351
Other financial liabilities measured at amortized cost	11	9,624	10,421
Total financial liabilities measured at amortized cost		719,508	732,364
Financial liabilities at fair value held for trading	9	37,062	33,595
Derivative financial instruments	9, 10	146,041	161,102
Brokerage payables designated at fair value	9	45,600	38,742
Debt issued designated at fair value	9, 12	64,635	59,868
Other financial liabilities designated at fair value	9, 11	30,769	31,773
Total financial liabilities measured at fair value through profit or loss		324,108	325,080
Provisions	15	2,693	2,791
Other non-financial liabilities	11	5,171	7,018
Total liabilities		1,051,481	1,067,254
Equity			
Share capital		338	338
Share premium		24,579	24,580
Retained earnings		26,926	25,251
Other comprehensive income recognized directly in equity, net of tax		5,603	7,585
Equity attributable to shareholders		57,446	57,754
Equity attributable to non-controlling interests		307	319
Total equity		57,753	58,073
Total liabilities and equity		1,109,234	1,125,327

Statement of changes in equity

USD million	Share capital	Share premium	Retained earnings
Balance as of 1 January 2020	**338**	**24,659**	**23,419**
Tax (expense) / benefit		4	
Dividends			
Translation effects recognized directly in retained earnings			0
Share of changes in retained earnings of associates and joint ventures			(40)
New consolidations / (deconsolidations) and other increases / (decreases)		0	
Total comprehensive income for the period			2,583
of which: net profit / (loss)			*1,421*
of which: OCI that may be reclassified to the income statement, net of tax			
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*228*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*934*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation			
Balance as of 31 March 2020	**338**	**24,663**	**25,962**
Balance as of 1 January 2021	338	24,580	25,251
Tax (expense) / benefit		1	
Dividends			
Translation effects recognized directly in retained earnings			23
Share of changes in retained earnings of associates and joint ventures			2
New consolidations / (deconsolidations) and other increases / (decreases)		(1)	
Total comprehensive income for the period			1,649
of which: net profit / (loss)			*1,710*
of which: OCI that may be reclassified to the income statement, net of tax			
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*(32)*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*(29)*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation			
Balance as of 31 March 2021	338	24,579	26,926

1 Excludes other comprehensive income related to defined benefit plans and own credit that is recorded directly in Retained earnings.

Other comprehensive income recognized directly in equity, net of tax[1]	*of which: foreign currency translation*	*of which: financial assets measured at fair value through OCI*	*of which: cash flow hedges*	*of which: cost of hedging*	Total equity attributable to shareholders	Non-controlling interests	Total equity
5,306	*4,032*	*14*	*1,260*		**53,722**	**174**	**53,896**
					4		4
					0	(3)	(3)
0		*0*	*0*		0		0
					(40)		(40)
					0	0	0
1,514	*(147)*	*147*	*1,505*	*8*	4,097	(2)	4,095
					1,421	*3*	*1,424*
1,514	*(147)*	*147*	*1,505*	*8*	*1,514*		*1,514*
					228		*228*
					934		*934*
					0	*(5)*	*(5)*
6,820	*3,885*	*162*	*2,765*	*8*	**57,782**	**169**	**57,951**
7,585	*5,126*	*151*	*2,321*	*(13)*	57,754	319	58,073
					1		1
					0	(3)	(3)
(23)		*0*	*(23)*	*0*	0		0
					2		2
					(1)	0	(1)
(1,958)	*(691)*	*(102)*	*(1,160)*	*(6)*	(309)	(9)	(319)
					1,710	*3*	*1,713*
(1,958)	*(691)*	*(102)*	*(1,160)*	*(6)*	*(1,958)*		*(1,958)*
					(32)		*(32)*
					(29)		*(29)*
					0	*(12)*	*(12)*
5,603	*4,436*	*49*	*1,138*	*(19)*	57,446	307	57,753

Statement of cash flows

	Year-to-date	
USD million	31.3.21	31.3.20
Cash flow from / (used in) operating activities		
Net profit / (loss)	1,713	1,424
Non-cash items included in net profit and other adjustments:		
Depreciation and impairment of property, equipment and software	449	405
Amortization and impairment of goodwill and intangible assets	8	16
Credit loss expense / (release)	(28)	268
Share of net profits of associates / joint ventures and impairment of associates	(53)	(16)
Deferred tax expense / (benefit)	61	192
Net loss / (gain) from investing activities	(146)	84
Net loss / (gain) from financing activities	(1,570)	(12,586)
Other net adjustments	6,619	(275)
Net change in operating assets and liabilities:		
Loans and advances to banks / amounts due to banks	1,995	12,436
Securities financing transactions	(8,614)	(439)
Cash collateral on derivative instruments	(3,068)	(2,034)
Loans and advances to customers	(12,847)	(12,379)
Customer deposits	(2,661)	18,522
Financial assets and liabilities at fair value held for trading and derivative financial instruments	1,705	35,457
Brokerage receivables and payables	7,329	(1,903)
Financial assets at fair value not held for trading, other financial assets and liabilities	8,948	(2,399)
Provisions, other non-financial assets and liabilities	(961)	(1,690)
Income taxes paid, net of refunds	(201)	(258)
Net cash flow from / (used in) operating activities	(1,322)	34,823
Cash flow from / (used in) investing activities		
Purchase of subsidiaries, associates and intangible assets	(1)	(1)
Purchase of property, equipment and software	(368)	(327)
Disposal of property, equipment and software	0	3
Purchase of financial assets measured at fair value through other comprehensive income	(1,376)	(1,835)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	1,412	674
Net (purchase) / redemption of debt securities measured at amortized cost	4	38
Net cash flow from / (used in) investing activities	(329)	(1,449)

Statement of cash flows (continued)

	Year-to-date	
USD million	31.3.21	31.3.20
Cash flow from / (used in) financing activities		
Net short-term debt issued / (repaid)	1,054	5,751
Repayment of lease liabilities	(147)	(135)
Issuance of long-term debt, including debt issued designated at fair value	28,646	21,268
Repayment of long-term debt, including debt issued designated at fair value	(21,458)	(22,703)
Funding from UBS Group AG and its subsidiaries[1]	6,183	530
Net changes in non-controlling interests	(3)	(8)
Net cash flow from / (used in) financing activities	14,275	4,703
Total cash flow		
Cash and cash equivalents at the beginning of the period	173,430	119,804
Net cash flow from / (used in) operating, investing and financing activities	12,624	38,078
Effects of exchange rate differences on cash and cash equivalents	(7,983)	(172)
Cash and cash equivalents at the end of the period[2]	178,071	157,711
of which: cash and balances at central banks[3]	*158,769*	*139,155*
of which: loans and advances to banks	*17,050*	*16,009*
of which: money market paper	*2,252*	*2,547*
Additional information		
Net cash flow from / (used in) operating activities includes:		
Interest received in cash	2,758	3,461
Interest paid in cash	1,679	2,923
Dividends on equity investments, investment funds and associates received in cash	624	727

1 Includes funding from UBS Group AG and its subsidiaries measured at amortized cost (recognized in Funding from UBS Group AG and its subsidiaries in the balance sheet) and measured at fair value (recognized in Other financial liabilities designated at fair value in the balance sheet). 2 USD 4,064 million and USD 4,370 million of cash and cash equivalents (mainly reflected in Loans and advances to banks) were restricted as of 31 March 2021 and 31 March 2020, respectively. Refer to "Note 23 Restricted and transferred financial assets" in the "Consolidated financial statements" section of the Annual Report 2020 for more information. 3 Includes only balances with an original maturity of three months or less.

Notes to the UBS AG interim consolidated financial statements (unaudited)

Note 1 Basis of accounting and other financial reporting effects

Basis of preparation

The consolidated financial statements (the financial statements) of UBS AG and its subsidiaries (together, UBS AG) are prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (the IASB), and are presented in US dollars (USD). These interim financial statements are prepared in accordance with IAS 34, *Interim Financial Reporting*.

In preparing these interim financial statements, the same accounting policies and methods of computation have been applied as in the UBS AG consolidated annual financial statements for the period ended 31 December 2020, except for the changes described in this Note. These interim financial statements are unaudited and should be read in conjunction with UBS AG's audited consolidated financial statements included in the Annual Report 2020. In the opinion of management, all necessary adjustments were made for a fair presentation of UBS AG's financial position, results of operations and cash flows.

Preparation of these interim financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, income, expenses and disclosures of contingent assets and liabilities. These estimates and assumptions are based on the best available information. Actual results in the future could differ from such estimates and differences may be material to the financial statements. Revisions to estimates, based on regular reviews, are recognized in the period in which they occur. For more information about areas of estimation uncertainty that are considered to require critical judgment, refer to "Note 1a Significant accounting policies" in the "Consolidated financial statements" section of the Annual Report 2020.

Amendments to IFRS 9, IAS 39 and IFRS 7 *(Interest Rate Benchmark Reform – Phase 2)*

On 1 January 2021, UBS AG adopted *Interest Rate Benchmark Reform – Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16*, addressing a number of issues in financial reporting areas that arise when interbank offered rates (IBORs) are reformed or replaced.

The amendments provide a practical expedient which permits certain changes in the contractual cash flows of debt instruments attributable to the replacement of IBORs with alternative reference rates (ARRs) to be accounted for prospectively by updating the instrument's effective interest rate (EIR), provided (i) the change is necessary as a direct consequence of IBOR reform and (ii) the new basis for determining the contractual cash flows is economically equivalent to the previous basis.

Where some or all of a change in the basis for determining the contractual cash flows of a financial asset and liability does not meet the above criteria, the practical expedient is first applied to the changes required by interest rate benchmark reform, including updating the EIR. Any additional changes that do not qualify for the practical expedient are accounted for as modification or derecognition, with the resulting gain or loss recognized immediately in the income statement.

UBS AG adopted the contractual cash flow amendments with no material effect on its financial statements.

In terms of hedge accounting, the amendments provide relief in a number of areas. The following hedge accounting reliefs are expected to benefit UBS AG.

– *Risk components*
  The amendments permit UBS AG to designate an alternative benchmark rate as a non-contractually specified risk component, even if it is not separately identifiable at the date when it is designated, provided UBS AG can reasonably expect that it will meet the requirements within 24 months of the first designation and the risk component is reliably measurable. As of 31 March 2021, UBS AG has designated the Secured Overnight Financing Rate (SOFR), the Swiss Average Rate Overnight (SARON) and the Sterling Overnight Index Average (SONIA) as the hedged risk in USD 4.5 billion, USD 0.4 billion and USD 0.7 billion of new fair value hedges of interest rate risk related to debt instruments, respectively.
– *Hedge designation*
  UBS AG will update its hedge documentation to reflect the change in designation relating to IBOR reform by the end of the reporting period in which the changes are made. Following amendments to the hedge documentation, UBS AG will continue its hedge relationships provided the other hedge accounting criteria and requirements of the Phase 2 amendment are met. As of 31 March 2021, no such changes have been made.
– *Amounts accumulated in the cash flow hedge reserve*
  Upon changing the hedge designation as set out above, the accumulated amounts in the cash flow hedge reserve are assumed to be based on the alternative benchmark rate. For discontinued hedging relationships, when the interest rate benchmark on which the hedged future cash flows were based is changed as required by IBOR reform, the amount accumulated in the cash flow hedge reserve is also assumed to be based on the alternative benchmark rate for the purpose of assessing whether the hedged future cash flows are still expected to occur. As of 31 March 2021, no such changes have been made.
– *Retrospective effectiveness assessment as applied to hedges designated under IAS 39*
  UBS AG may elect to reset to zero the cumulative fair value changes of the hedged item and hedging instrument for the purpose of assessing the retrospective effectiveness of a hedging relationship. UBS AG will be able to make such election upon the end of the phase 1 exception for effectiveness assessment. As of 31 March 2021, no such election has been made.

› **Refer to "Note 25 Hedge accounting" in the "Consolidated financial statements" section of the Annual Report 2020 for details about phase 1 accounting reliefs**

The amendments also introduced additional disclosure requirements regarding UBS AG's management of the transition to alternative benchmark rates, its progress at the reporting date and the risks to which it is exposed arising from financial instruments because of the transition.

› **Refer to Note 14 for more information**

Note 2 Segment reporting

UBS AG's businesses are organized globally into four business divisions: Global Wealth Management, Personal & Corporate Banking, Asset Management and the Investment Bank. All four business divisions are supported by Group Functions and qualify as reportable segments for the purpose of segment reporting. Together with Group Functions they reflect the management structure of UBS AG.

› **Refer to "Note 2 Segment reporting" in the "Consolidated financial statements" section of the Annual Report 2020 for more information about UBS AG's reporting segments**

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	UBS AG
For the quarter ended 31 March 2021						
Net interest income	997	513	(4)	114	(31)	1,589
Non-interest income	3,848	500	641	2,161	68	7,218
Income	4,845	1,013	637	2,274	37	8,807
Credit loss (expense) / release	3	23	0	2	0	28
Total operating income	4,848	1,037	637	2,276	37	8,836
Total operating expenses	3,457	647	410	1,882	288	6,684
Operating profit / (loss) before tax	**1,391**	**390**	**227**	**394**	**(251)**	**2,151**
Tax expense / (benefit)						439
Net profit / (loss)						**1,713**
As of 31 March 2021						
Total assets	**377,008**	**221,413**	**28,133**	**371,031**	**111,649**	**1,109,234**

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	UBS AG
For the quarter ended 31 March 2020						
Net interest income	1,031	511	(4)	(95)	(130)	1,313
Non-interest income	3,569	470	518	2,652	(245)	6,964
Income	4,600	981	514	2,557	(376)	8,277
Credit loss (expense) / release	(53)	(77)	0	(122)	(16)	(268)
Total operating income	4,547	904	514	2,436	(391)	8,009
Total operating expenses	3,347	569	357	1,757	181	6,210
Operating profit / (loss) before tax	**1,201**	**335**	**157**	**679**	**(572)**	**1,799**
Tax expense / (benefit)						375
Net profit / (loss)						**1,424**
As of 31 December 2020						
Total assets	**367,714**	**231,710**	**28,266**	**369,778**	**127,858**	**1,125,327**

Note 3 Net interest income

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Net interest income from financial instruments measured at amortized cost and fair value through other comprehensive income			
Interest income from loans and deposits[1]	1,586	1,606	1,870
Interest income from securities financing transactions[2]	135	143	367
Interest income from other financial instruments measured at amortized cost	73	73	89
Interest income from debt instruments measured at fair value through other comprehensive income	35	19	17
Interest income from derivative instruments designated as cash flow hedges	268	271	113
Total interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	2,098	2,113	2,457
Interest expense on loans and deposits[3]	439	461	893
Interest expense on securities financing transactions[4]	258	215	219
Interest expense on debt issued	137	178	267
Interest expense on lease liabilities	26	26	27
Total interest expense from financial instruments measured at amortized cost	859	880	1,406
Total net interest income from financial instruments measured at amortized cost and fair value through other comprehensive income	1,239	1,233	1,051
Net interest income from financial instruments measured at fair value through profit or loss			
Net interest income from financial instruments at fair value held for trading	201	211	202
Net interest income from brokerage balances	197	187	137
Net interest income from securities financing transactions at fair value not held for trading[5]	12	13	33
Interest income from other financial instruments at fair value not held for trading	96	111	202
Interest expense on other financial instruments designated at fair value	(155)	(153)	(311)
Total net interest income from financial instruments measured at fair value through profit or loss	351	370	262
Total net interest income	1,589	1,602	1,313

1 Consists of interest income from cash and balances at central banks, loans and advances to banks and customers, and cash collateral receivables on derivative instruments, as well as negative interest on amounts due to banks, customer deposits, and cash collateral payables on derivative instruments. 2 Includes interest income on receivables from securities financing transactions and negative interest, including fees, on payables from securities financing transactions. 3 Consists of interest expense on amounts due to banks, cash collateral payables on derivative instruments, customer deposits, and funding from UBS Group AG and its subsidiaries, as well as negative interest on cash and balances at central banks, loans and advances to banks, and cash collateral receivables on derivative instruments. 4 Includes interest expense on payables from securities financing transactions and negative interest, including fees, on receivables from securities financing transactions. 5 Includes interest expense on securities financing transactions designated at fair value.

Note 4 Net fee and commission income

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Fee and commission income			
Underwriting fees	420	338	203
of which: equity underwriting fees	*275*	*243*	*106*
of which: debt underwriting fees	*145*	*95*	*97*
M&A and corporate finance fees	238	216	218
Brokerage fees	1,358	959	1,245
Investment fund fees	1,437	1,473	1,295
Portfolio management and related services	2,284	2,145	2,059
Other	461	417	462
Total fee and commission income[1]	6,197	5,548	5,481
of which: recurring	*3,621*	*3,417*	*3,341*
of which: transaction-based	*2,482*	*1,873*	*2,102*
of which: performance-based	*94*	*259*	*39*
Fee and commission expense			
Brokerage fees paid	68	71	86
Distribution fees paid	132	133	156
Other	277	255	214
Total fee and commission expense	478	459	456
Net fee and commission income	5,719	5,089	5,025
of which: net brokerage fees	*1,290*	*888*	*1,158*

1 Reflects third-party fee and commission income for the first quarter of 2021 of USD 3,673 million for Global Wealth Management (fourth quarter of 2020: USD 3,189 million; first quarter of 2020: USD 3,384 million), USD 389 million for Personal & Corporate Banking (fourth quarter of 2020: USD 407 million; first quarter of 2020: USD 354 million), USD 815 million for Asset Management (fourth quarter of 2020: USD 949 million; first quarter of 2020: USD 702 million), USD 1,305 million for the Investment Bank (fourth quarter of 2020: USD 1,054 million; first quarter of 2020: USD 1,008 million) and USD 15 million for Group Functions (fourth quarter of 2020: negative USD 51 million; first quarter of 2020: USD 33 million).

Note 5 Personnel expenses

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Salaries and variable compensation	2,370	1,777	2,132
Financial advisor compensation[1]	1,170	1,077	1,094
Contractors	36	39	28
Social security	211	160	164
Post-employment benefit plans	194	137	177
Other personnel expenses	105	118	113
Total personnel expenses	4,086	3,308	3,710

1 Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements.

Note 6 General and administrative expenses[1]

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Outsourcing costs	89	142	112
IT expenses	125	120	116
Consulting, legal and audit fees	84	162	132
Real estate and logistics costs	127	161	137
Market data services	89	95	86
Marketing & communication	32	75	30
Travel and entertainment	8	15	44
Litigation, regulatory & similar matters[2]	9	148	6
Other[3]	1,578	1,533	1,416
of which: shared services costs charged by UBS Group AG or its subsidiaries	*1,375*	*1,329*	*1,250*
of which: UK and German bank levies	*41*	*38*	*15*
Total general and administrative expenses	2,141	2,451	2,080

1 In the first quarter of 2021, UBS AG changed the presentation of the line items within general and administrative expenses. Prior-period information reflects the new presentation structure, with no effect on Total general and administrative expenses. 2 Reflects the net increase in / (release of) provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 15 for more information. Also includes recoveries from third parties (first quarter of 2021: USD 0 million; fourth quarter of 2020: USD 2 million; first quarter of 2020: USD 1 million). 3 Includes charitable donations.

Note 7 Income taxes

Income tax expenses of USD 439 million were recognized for the first quarter of 2021, representing an effective tax rate of 20.4%, compared with USD 375 million for the first quarter of 2020 and an effective tax rate of 20.8%.

Current tax expenses were USD 377 million, compared with USD 182 million, and related to taxable profits of UBS Switzerland AG and other entities.

Deferred tax expenses were USD 61 million, compared with USD 192 million, and primarily related to the amortization of deferred tax assets previously recognized in relation to tax losses carried forward and deductible temporary differences of UBS Americas Inc.

Note 8 Expected credit loss measurement

a) Credit loss expense

Total net credit loss releases were USD 28 million in the first quarter of 2021, reflecting a USD 26 million net release of credit losses related to stage 1 and 2 positions and USD 3 million of net credit loss releases related to credit-impaired (stage 3) positions.

The USD 26 million stage 1 and 2 net release included USD 13 million from model and risk parameter updates and USD 13 million from a combination of book quality and book size movements.

Stage 3 net credit loss releases were USD 3 million. Stage 3 net expenses of USD 4 million and USD 2 million were recognized in the Investment Bank and Global Wealth Management, respectively, across various positions. In Personal & Corporate Banking, stage 3 net releases of USD 8 million were recognized on various corporate lending positions and on defaulted real estate counterparties as collateral values increased.

Credit loss (expense) / release

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	Total
For the quarter ended 31.3.21						
Stages 1 and 2	4	16	0	5	0	26
Stage 3	(2)	8	0	(4)	0	3
Total credit loss (expense) / release	3	23	0	2	0	28

Note 8 Expected credit loss measurement (continued)

b) Changes to ECL models, scenarios, scenario weights and key inputs

Scenarios

The baseline and the severe downside scenarios, as well as the related macroeconomic factors, were updated and reviewed in light of the economic and political conditions prevailing for the first quarter of 2021 through a series of governance meetings, with input and feedback from UBS AG risk and finance experts across the business divisions and regions.

The changes in the macroeconomic environment in the first quarter of 2021 generally include more optimistic assumptions for both the baseline and severe downside scenarios compared with those applied in 2020, given improvements in economic activity and greater optimism regarding the availability and effective distribution of vaccines, and continued government support. The baseline scenario assumptions on a calendar year basis are included in the table below. The updated severe downside scenario has been recalibrated to reflect the economic and COVID-19-related developments since the fourth quarter of 2020 and has seen only marginal changes, although unemployment levels are now lower.

Scenario weights and post-model adjustments

The overall scenario improvements in the first quarter resulted in stage 1 and 2 ECL net releases.

However, recent developments have raised significant questions around whether the baseline expectations will be met, given the continued uncertainty regarding the COVID-19 pandemic and its near- and mid-term outlook. As a consequence, in this quarter, management reconfirmed the scenario weights on the baseline scenario at 60% and on the severe downside scenario at 40%, and also applied a post-model adjustment of USD 92 million to offset the stage 1 and 2 ECL releases that would have otherwise arisen from the scenario update effects. As of 31 March 2021, the total post-model adjustment to offset the scenario update effects amounted to USD 208 million.

	Baseline		
Key parameters	2020	2021	2022
Real GDP growth (annual percentage change)			
United States	(3.6)	6.1	6.0
Eurozone	(7.4)	5.0	5.3
Switzerland	(4.5)	3.6	3.0
Unemployment rate (%, annual average)			
United States	8.1	5.5	4.4
Eurozone	8.5	9.0	8.3
Switzerland	3.2	3.6	3.3
Real estate (annual percentage change, Q4)			
United States	3.4	2.8	2.9
Eurozone	(0.3)	(1.5)	1.7
Switzerland	4.0	2.0	1.5

Economic scenarios and weights applied

ECL scenario	Assigned weights in %		
	31.3.21	31.12.20	31.3.20
Upside	0.0	0.0	0.0
Baseline	60.0	60.0	70.0
Mild downside	0.0	0.0	0.0
Severe downside	40.0	40.0	30.0

Note 8 Expected credit loss measurement (continued)

c) ECL-relevant balance sheet and off-balance sheet positions including ECL allowances and provisions

The tables below and on the following pages provide information about financial instruments and certain non-financial instruments that are subject to ECL. For amortized-cost instruments, the carrying amount represents the maximum exposure to credit risk, taking into account the allowance for credit losses. Financial assets measured at fair value through other comprehensive income (FVOCI) are also subject to ECL; however, unlike amortized-cost instruments, the allowance for credit losses for FVOCI instruments does not reduce the carrying amount of these financial assets. Instead, the carrying amount of financial assets measured at FVOCI represents the maximum exposure to credit risk.

In addition to on-balance sheet financial assets, certain off-balance sheet and other credit lines are also subject to ECL. The maximum exposure to credit risk for off-balance sheet financial instruments is calculated based on the maximum contractual amounts.

USD million	31.3.21							
	Carrying amount[1] / Total exposure				ECL allowances / provisions			
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	158,914	158,914	0	0	0	0	0	0
Loans and advances to banks	18,348	18,287	61	0	(12)	(8)	(3)	(1)
Receivables from securities financing transactions	82,384	82,385	0	0	(3)	(3)	0	0
Cash collateral receivables on derivative instruments	35,050	35,050	0	0	0	0	0	0
Loans and advances to customers	380,141	359,130	18,995	2,016	(993)	(138)	(184)	(671)
of which: Private clients with mortgages	*142,611*	*132,636*	*9,118*	*857*	*(158)*	*(37)*	*(86)*	*(35)*
of which: Real estate financing	*41,092*	*36,099*	*4,979*	*15*	*(56)*	*(15)*	*(41)*	*0*
of which: Large corporate clients	*13,305*	*11,155*	*1,673*	*477*	*(271)*	*(28)*	*(28)*	*(216)*
of which: SME clients	*14,034*	*11,620*	*1,886*	*527*	*(283)*	*(19)*	*(19)*	*(246)*
of which: Lombard	*141,139*	*141,112*	*0*	*27*	*(34)*	*(5)*	*0*	*(30)*
of which: Credit cards	*1,392*	*1,063*	*301*	*28*	*(33)*	*(9)*	*(8)*	*(16)*
of which: Commodity trade finance	*3,695*	*3,663*	*16*	*15*	*(101)*	*(5)*	*0*	*(96)*
Other financial assets measured at amortized cost	26,837	26,103	314	420	(125)	(32)	(7)	(86)
of which: Loans to financial advisors	*2,473*	*1,961*	*107*	*405*	*(104)*	*(26)*	*(4)*	*(75)*
Total financial assets measured at amortized cost	**701,674**	**679,868**	**19,371**	**2,436**	**(1,133)**	**(180)**	**(195)**	**(758)**
Financial assets measured at fair value through other comprehensive income	**8,100**	**8,100**	**0**	**0**	**0**	**0**	**0**	**0**
Total on-balance sheet financial assets in scope of ECL requirements	**709,774**	**687,967**	**19,371**	**2,436**	**(1,133)**	**(180)**	**(195)**	**(758)**
Off-balance sheet (in scope of ECL)								
Guarantees	17,493	15,377	1,952	164	(59)	(15)	(15)	(29)
of which: Large corporate clients	*3,425*	*2,025*	*1,281*	*119*	*(17)*	*(3)*	*(5)*	*(9)*
of which: SME clients	*1,243*	*936*	*262*	*45*	*(12)*	*0*	*(1)*	*(11)*
of which: Financial intermediaries and hedge funds	*7,579*	*7,304*	*275*	*0*	*(18)*	*(9)*	*(9)*	*0*
of which: Lombard	*2,136*	*2,136*	*0*	*0*	*(2)*	*0*	*0*	*(1)*
of which: Commodity trade finance	*2,057*	*2,031*	*26*	*0*	*(4)*	*(1)*	*0*	*(3)*
Irrevocable loan commitments	38,137	34,312	3,730	95	(138)	(75)	(63)	0
of which: Large corporate clients	*22,943*	*19,600*	*3,278*	*65*	*(121)*	*(68)*	*(54)*	*0*
Forward starting reverse repurchase and securities borrowing agreements	5,988	5,988	0	0	0	0	0	0
Committed unconditionally revocable credit lines	39,835	35,722	4,023	89	(45)	(27)	(18)	0
of which: Real estate financing	*7,227*	*6,786*	*432*	*9*	*(11)*	*(5)*	*(6)*	*0*
of which: Large corporate clients	*4,429*	*2,713*	*1,690*	*25*	*(9)*	*(3)*	*(6)*	*0*
of which: SME clients	*5,036*	*4,120*	*878*	*39*	*(14)*	*(11)*	*(3)*	*0*
of which: Lombard	*8,566*	*8,566*	*0*	*0*	*(1)*	*(1)*	*0*	*0*
of which: Credit cards	*9,175*	*8,695*	*469*	*11*	*(6)*	*(5)*	*(1)*	*0*
of which: Commodity trade finance	*322*	*322*	*0*	*0*	*0*	*0*	*0*	*0*
Irrevocable committed prolongation of existing loans	5,824	5,785	34	5	(3)	(3)	0	0
Total off-balance sheet financial instruments and other credit lines	**107,276**	**97,184**	**9,738**	**354**	**(245)**	**(121)**	**(95)**	**(29)**
Total allowances and provisions					**(1,378)**	**(301)**	**(290)**	**(787)**

1 The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

Note 8 Expected credit loss measurement (continued)

USD million	31.12.20							
	Carrying amount[1] / Total exposure				ECL allowances / provisions			
Financial instruments measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	158,231	158,231	0	0	0	0	0	0
Loans and advances to banks	15,344	15,160	184	0	(16)	(9)	(5)	(1)
Receivables from securities financing transactions	74,210	74,210	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	32,737	32,737	0	0	0	0	0	0
Loans and advances to customers	380,977	358,396	20,341	2,240	(1,060)	(142)	(215)	(703)
of which: Private clients with mortgages	*148,175*	*138,769*	*8,448*	*959*	*(166)*	*(35)*	*(93)*	*(39)*
of which: Real estate financing	*43,429*	*37,568*	*5,838*	*23*	*(63)*	*(15)*	*(44)*	*(4)*
of which: Large corporate clients	*15,161*	*12,658*	*2,029*	*474*	*(279)*	*(27)*	*(40)*	*(212)*
of which: SME clients	*14,872*	*11,990*	*2,254*	*628*	*(310)*	*(19)*	*(23)*	*(268)*
of which: Lombard	*133,850*	*133,795*	*0*	*55*	*(36)*	*(5)*	*0*	*(31)*
of which: Credit cards	*1,558*	*1,198*	*330*	*30*	*(38)*	*(11)*	*(11)*	*(16)*
of which: Commodity trade finance	*3,269*	*3,214*	*43*	*12*	*(106)*	*(5)*	*0*	*(101)*
Other financial assets measured at amortized cost	27,219	26,401	348	469	(133)	(34)	(9)	(90)
of which: Loans to financial advisors	*2,569*	*1,982*	*137*	*450*	*(108)*	*(27)*	*(5)*	*(76)*
Total financial assets measured at amortized cost	**688,717**	**665,135**	**20,873**	**2,709**	**(1,211)**	**(187)**	**(229)**	**(795)**
Financial assets measured at fair value through other comprehensive income	**8,258**	**8,258**	**0**	**0**	**0**	**0**	**0**	**0**
Total on-balance sheet financial assets in scope of ECL requirements	**696,976**	**673,394**	**20,873**	**2,709**	**(1,211)**	**(187)**	**(229)**	**(795)**
Off-balance sheet (in scope of ECL)								
Guarantees	17,081	14,687	2,225	170	(63)	(14)	(15)	(34)
of which: Large corporate clients	*3,710*	*2,048*	*1,549*	*113*	*(20)*	*(4)*	*(5)*	*(12)*
of which: SME clients	*1,310*	*936*	*326*	*48*	*(13)*	*(1)*	*(1)*	*(11)*
of which: Financial intermediaries and hedge funds	*7,637*	*7,413*	*224*	*0*	*(17)*	*(7)*	*(9)*	*0*
of which: Lombard	*641*	*633*	*0*	*8*	*(2)*	*0*	*0*	*(2)*
of which: Commodity trade finance	*1,441*	*1,416*	*25*	*0*	*(2)*	*(1)*	*0*	*0*
Irrevocable loan commitments	41,372	36,894	4,374	104	(142)	(74)	(68)	0
of which: Large corporate clients	*24,209*	*20,195*	*3,950*	*64*	*(121)*	*(63)*	*(58)*	*0*
Forward starting reverse repurchase and securities borrowing agreements	3,247	3,247	0	0	0	0	0	0
Committed unconditionally revocable credit lines	42,077	37,176	4,792	108	(50)	(29)	(21)	0
of which: Real estate financing	*6,328*	*5,811*	*517*	*0*	*(12)*	*(5)*	*(7)*	*0*
of which: Large corporate clients	*4,909*	*2,783*	*2,099*	*27*	*(9)*	*(2)*	*(7)*	*0*
of which: SME clients	*5,827*	*4,596*	*1,169*	*63*	*(16)*	*(12)*	*(4)*	*0*
of which: Lombard	*9,671*	*9,671*	*0*	*0*	*0*	*(1)*	*0*	*0*
of which: Credit cards	*8,661*	*8,220*	*430*	*11*	*(8)*	*(6)*	*(2)*	*0*
of which: Commodity trade finance	*242*	*242*	*0*	*0*	*0*	*0*	*0*	*0*
Irrevocable committed prolongation of existing loans	3,282	3,277	5	0	(2)	(2)	0	0
Total off-balance sheet financial instruments and other credit lines	**107,059**	**95,281**	**11,396**	**382**	**(257)**	**(119)**	**(104)**	**(34)**
Total allowances and provisions					**(1,468)**	**(306)**	**(333)**	**(829)**

1 The carrying amount of financial assets measured at amortized cost represents the total gross exposure net of the respective ECL allowances.

The table below provides information about the ECL gross exposure and the ECL coverage ratio for our core loan portfolios (i.e., *Loans and advances to customers and Loans to financial advisors)* and relevant off-balance sheet exposures. *Cash and balances at central banks*, *Loans and advances to banks*, *Receivables from securities financing transactions*, *Cash collateral receivables on derivative instruments* and *Financial assets measured at fair value through other comprehensive income* are not included in the table below, due to their lower sensitivity to ECL.

ECL coverage ratios are calculated by taking ECL allowances and provisions divided by the gross carrying amount of the exposures.

Coverage ratios for core loan portfolio

	31.3.21							
	Gross carrying amount (USD million)				ECL coverage (bps)			
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	142,770	132,673	9,204	893	11	3	93	396
Real estate financing	41,148	36,113	5,020	15	14	4	81	78
Large corporate clients	13,577	11,184	1,701	692	200	25	162	3,114
SME clients	14,317	11,639	1,905	773	198	16	98	3,179
Lombard	141,173	141,117	0	56	2	0	0	5,260
Credit cards	1,425	1,073	309	44	233	88	266	3,555
Commodity trade finance	3,796	3,668	16	111	267	14	2	8,620
Other loans and advances to customers	22,928	21,801	1,024	103	24	9	26	3,211
Loans to financial advisors	2,578	1,987	111	480	405	131	337	1,558
Total[1]	383,711	361,254	19,290	3,167	29	5	97	2,355

	Gross exposure (USD million)				ECL coverage (bps)			
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	7,455	7,226	217	13	6	5	16	111
Real estate financing	8,513	8,049	455	9	17	7	192	53
Large corporate clients	30,796	24,339	6,249	209	48	31	102	422
SME clients	8,101	6,626	1,367	108	41	20	70	973
Lombard	14,603	14,603	0	0	2	1	0	0
Credit cards	9,175	8,695	469	11	7	6	30	0
Commodity trade finance	2,379	2,352	26	0	18	5	28	9,010
Financial intermediaries and hedge funds	11,501	10,879	622	0	18	10	169	0
Other off-balance sheet commitments	8,764	8,428	332	4	14	7	23	21,306
Total[2]	101,288	91,196	9,738	354	24	13	98	831

1 Includes Loans and advances to customers of USD 381,133 million and Loans to financial advisors of USD 2,578 million, which are presented on the balance sheet line Other assets measured at amortized cost.
2 Excludes Forward starting reverse repurchase and securities borrowing agreements.

Note 8 Expected credit loss measurement (continued)

Coverage ratios for core loan portfolio	31.12.20							
	Gross carrying amount (USD million)				ECL coverage (bps)			
On-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	148,341	138,803	8,540	998	11	2	108	390
Real estate financing	43,492	37,583	5,883	27	15	4	75	1,414
Large corporate clients	15,440	12,684	2,069	686	181	21	192	3,089
SME clients	15,183	12,010	2,277	896	204	16	101	2,991
Lombard	133,886	133,800	0	86	3	0	0	3,592
Credit cards	1,596	1,209	342	46	240	91	333	3,488
Commodity trade finance	3,375	3,219	43	113	315	16	2	8,939
Other loans and advances to customers	20,722	19,229	1,402	91	29	13	25	3,563
Loans to financial advisors	2,677	2,009	142	526	404	135	351	1,446
Total[1]	**384,714**	**360,547**	**20,697**	**3,470**	**30**	**5**	**106**	**2,247**

	Gross exposure (USD million)				ECL coverage (bps)			
Off-balance sheet	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Private clients with mortgages	6,285	6,083	198	3	7	6	16	197
Real estate financing	7,056	6,576	481	0	21	9	185	0
Large corporate clients	32,828	25,026	7,598	205	46	27	92	565
SME clients	9,121	7,239	1,734	148	40	19	63	779
Lombard	14,178	14,170	0	8	2	1	0	1,941
Credit cards	8,661	8,220	430	11	9	8	44	0
Commodity trade finance	1,683	1,658	25	0	10	8	15	8,279
Financial intermediaries and hedge funds	7,690	7,270	448	0	26	13	248	166
Other off-balance sheet commitments	16,309	15,792	482	8	12	6	11	12,414
Total[2]	**103,812**	**92,034**	**11,396**	**382**	**25**	**13**	**91**	**894**

1 Includes Loans and advances to customers of USD 382,036 million and Loans to financial advisors of USD 2,677 million, which are presented on the balance sheet line Other assets measured at amortized cost.
2 Excludes Forward starting reverse repurchase and securities borrowing agreements.

Note 9 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and should be read in conjunction with "Note 21 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2020, which provides more information about valuation principles, valuation governance, fair value hierarchy classification, valuation adjustments, valuation techniques and inputs, sensitivity of fair value measurements, and methods applied to calculate fair values for financial instruments not measured at fair value.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest-level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

Note 9 Fair value measurement (continued)

a) Fair value hierarchy

The fair value hierarchy classification of financial and non-financial assets and liabilities measured at fair value is summarized in the table below.

Determination of fair values from quoted market prices or valuation techniques[1]

	31.3.21				31.12.20			
USD million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value on a recurring basis								
Financial assets at fair value held for trading	101,907	16,630	2,179	120,717	107,526	15,630	2,337	125,492
of which:								
Equity instruments	*85,251*	*736*	*137*	*86,124*	*90,327*	*1,101*	*171*	*91,599*
Government bills / bonds	*8,384*	*1,890*	*10*	*10,284*	*9,028*	*2,207*	*10*	*11,245*
Investment fund units	*7,400*	*1,602*	*31*	*9,033*	*7,374*	*1,794*	*23*	*9,192*
Corporate and municipal bonds	*865*	*9,926*	*783*	*11,575*	*789*	*8,432*	*817*	*10,038*
Loans	*0*	*2,234*	*1,052*	*3,285*	*0*	*1,860*	*1,134*	*2,995*
Asset-backed securities	*6*	*242*	*166*	*415*	*8*	*236*	*181*	*425*
Derivative financial instruments	1,142	145,508	1,633	148,284	795	157,069	1,754	159,618
of which:								
Foreign exchange contracts	*459*	*70,221*	*12*	*70,692*	*319*	*68,425*	*5*	*68,750*
Interest rate contracts	*0*	*39,529*	*391*	*39,920*	*0*	*50,353*	*537*	*50,890*
Equity / index contracts	*0*	*31,369*	*820*	*32,189*	*0*	*33,990*	*853*	*34,842*
Credit derivative contracts	*0*	*1,914*	*395*	*2,309*	*0*	*2,008*	*350*	*2,358*
Commodity contracts	*0*	*2,187*	*14*	*2,201*	*0*	*2,211*	*6*	*2,217*
Brokerage receivables	0	24,201	0	24,201	0	24,659	0	24,659
Financial assets at fair value not held for trading	31,596	32,962	4,206	68,763	40,986	35,110	3,942	80,038
of which:								
Financial assets for unit-linked investment contracts	*21,162*	*0*	*3*	*21,166*	*20,628*	*101*	*2*	*20,731*
Corporate and municipal bonds	*98*	*15,114*	*334*	*15,547*	*290*	*16,957*	*372*	*17,619*
Government bills / bonds	*9,985*	*3,970*	*0*	*13,956*	*19,704*	*3,593*	*0*	*23,297*
Loans	*0*	*6,900*	*1,093*	*7,993*	*0*	*7,699*	*862*	*8,561*
Securities financing transactions	*0*	*6,811*	*119*	*6,930*	*0*	*6,629*	*122*	*6,751*
Auction rate securities	*0*	*0*	*1,587*	*1,587*	*0*	*0*	*1,527*	*1,527*
Investment fund units	*263*	*165*	*99*	*528*	*278*	*121*	*105*	*505*
Equity instruments	*86*	*0*	*530*	*616*	*86*	*0*	*544*	*631*
Other	*0*	*0*	*441*	*441*	*0*	*10*	*408*	*418*
Financial assets measured at fair value through other comprehensive income on a recurring basis								
Financial assets measured at fair value through other comprehensive income	2,154	5,946	0	8,100	1,144	7,114	0	8,258
of which:								
Asset-backed securities	*0*	*5,480*	*0*	*5,480*	*0*	*6,624*	*0*	*6,624*
Government bills / bonds	*2,115*	*43*	*0*	*2,159*	*1,103*	*47*	*0*	*1,150*
Corporate and municipal bonds	*38*	*423*	*0*	*461*	*40*	*444*	*0*	*485*
Non-financial assets measured at fair value on a recurring basis								
Precious metals and other physical commodities	5,709	0	0	5,709	6,264	0	0	6,264
Non-financial assets measured at fair value on a non-recurring basis								
Other non-financial assets[2]	0	1	247	248	0	1	245	246
Total assets measured at fair value	142,508	225,248	8,266	376,022	156,716	239,583	8,278	404,576

Note 9 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)[1]

	31.3.21				31.12.20			
USD million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial liabilities measured at fair value on a recurring basis								
Financial liabilities at fair value held for trading	30,888	6,114	61	37,062	26,889	6,652	55	33,595
of which:								
Equity instruments	*26,191*	*151*	*50*	*26,392*	*22,519*	*425*	*40*	*22,985*
Corporate and municipal bonds	*32*	*4,718*	*7*	*4,757*	*31*	*4,048*	*9*	*4,089*
Government bills / bonds	*4,168*	*807*	*0*	*4,975*	*3,642*	*1,036*	*0*	*4,678*
Investment fund units	*492*	*397*	*3*	*891*	*696*	*1,127*	*5*	*1,828*
Derivative financial instruments	1,405	141,522	3,114	146,041	746	156,884	3,471	161,102
of which:								
Foreign exchange contracts	*541*	*67,047*	*54*	*67,642*	*316*	*70,149*	*61*	*70,527*
Interest rate contracts	*0*	*33,501*	*546*	*34,046*	*0*	*43,389*	*527*	*43,916*
Equity / index contracts	*0*	*36,614*	*2,070*	*38,684*	*0*	*38,870*	*2,306*	*41,176*
Credit derivative contracts	*0*	*2,139*	*369*	*2,508*	*0*	*2,403*	*528*	*2,931*
Commodity contracts	*0*	*1,907*	*59*	*1,966*	*0*	*2,003*	*24*	*2,027*
Financial liabilities designated at fair value on a recurring basis								
Brokerage payables designated at fair value	0	45,600	0	45,600	0	38,742	0	38,742
Debt issued designated at fair value	0	53,900	10,736	64,635	0	50,273	9,595	59,868
Other financial liabilities designated at fair value	0	28,317	2,452	30,769	0	29,682	2,091	31,773
of which:								
Financial liabilities related to unit-linked investment contracts	*0*	*21,357*	*0*	*21,357*	*0*	*20,975*	*0*	*20,975*
Securities financing transactions	*0*	*5,651*	*0*	*5,651*	*0*	*7,317*	*0*	*7,317*
Over-the-counter debt instruments	*0*	*1,261*	*526*	*1,787*	*0*	*1,363*	*697*	*2,060*
Total liabilities measured at fair value	32,293	275,453	16,362	324,108	27,635	282,233	15,212	325,080

1 Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are not included in this table. The fair value of these derivatives was not material for the periods presented. 2 Other non-financial assets primarily consist of properties and other non-current assets held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

b) Valuation adjustments and other items

The table below summarizes the valuation adjustment reserves recognized on the balance sheet. Details about each category are provided further below.

Valuation adjustment reserves on the balance sheet

	As of	
life-to-date gain / (loss), USD million	31.3.21	31.12.20
Deferred day-1 profit or loss reserves	387	269
Own credit adjustments on financial liabilities designated at fair value	(400)	(381)
CVAs, FVAs, DVAs and other valuation adjustments	(977)	(959)

Deferred day-1 profit or loss reserves

The table below summarizes the changes in deferred day-1 profit or loss reserves during the relevant period.

Deferred day-1 profit or loss is generally released into *Other net income from financial instruments measured at fair value through profit or loss* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss reserves

	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Reserve balance at the beginning of the period	269	231	146
Profit / (loss) deferred on new transactions	181	75	118
(Profit) / loss recognized in the income statement	(63)	(37)	(69)
Foreign currency translation	(1)	0	(1)
Reserve balance at the end of the period	387	269	194

Own credit

The valuation of financial liabilities designated at fair value requires consideration of the own credit component of fair value. Own credit risk is reflected in the valuation of UBS's fair value option liabilities where this component is considered relevant for valuation purposes by UBS's counterparties and other market participants. However, own credit risk is not reflected in the valuation of UBS's liabilities that are fully collateralized or for other obligations for which it is established market practice to not include an own credit component.

A description of UBS's methodology to estimate own credit and the related accounting principles is included in "Note 21 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2020.

In the first quarter of 2021, other comprehensive income related to own credit on financial liabilities designated at fair value was negative USD 29 million, primarily due to a tightening of UBS's credit spreads.

Own credit adjustments on financial liabilities designated at fair value

	Included in Other comprehensive income		
	For the quarter ended		
USD million	31.3.21	31.12.20	31.3.20
Recognized during the period:			
Realized gain / (loss)	(6)	(3)	1
Unrealized gain / (loss)	(23)	(208)	1,156
Total gain / (loss), before tax	(29)	(211)	1,156
	As of		
USD million	31.3.21	31.12.20	31.3.20
Recognized on the balance sheet as of the end of the period:			
Unrealized life-to-date gain / (loss)	(400)	(381)	1,069

Credit, funding, debit and other valuation adjustments

A description of UBS's methodology for estimating credit valuation adjustments (CVAs), funding valuation adjustments (FVAs), debit valuation adjustments (DVAs) and other valuation adjustments is included in "Note 21 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2020.

In the first quarter of 2021, FVAs decreased due to a tightening of funding spreads compared with the fourth quarter of 2020. CVAs decreased mainly as a result of lower derivative exposures as US dollar interest rates increased during the quarter. Other valuation adjustments for liquidity and model uncertainty increased, primarily due to extensions on existing trades and new trade executions during the quarter.

CVAs, FVAs, DVAs and other valuation adjustments

	As of	
Life-to-date gain / (loss), USD million	31.3.21	31.12.20
Credit valuation adjustments[1]	(53)	(66)
Funding valuation adjustments	(58)	(73)
Debit valuation adjustments	1	0
Other valuation adjustments	(867)	(820)
of which: liquidity	*(356)*	*(340)*
of which: model uncertainty	*(511)*	*(479)*

1 Amounts do not include reserves against defaulted counterparties.

In the first quarter of 2021, UBS incurred a loss of USD 774 million as a result of closing out a significant portfolio of swaps with a US-based client of its prime brokerage business and the unwinding of related hedges, following the client's default. This loss is presented within Other net income from financial instruments measured at fair value through profit or loss.

c) Transfers between Level 1 and Level 2

The amounts disclosed in this section reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets and liabilities transferred from Level 2 to Level 1, or from Level 1 to Level 2, during the first three months of 2021 were not material.

Note 9 Fair value measurement (continued)

d) Level 3 instruments: valuation techniques and inputs

The table below presents material Level 3 assets and liabilities, together with the valuation techniques used to measure fair value, the inputs used in a given valuation technique that are considered significant as of 31 March 2021 and unobservable, and a range of values for those unobservable inputs.

The range of values represents the highest- and lowest-level inputs used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input or an assessment of the reasonableness of UBS´s estimates and assumptions, but rather the different underlying characteristics of the relevant assets and liabilities held by UBS. The ranges will therefore vary from period to period and parameter to parameter based on characteristics of the instruments held at each balance sheet date. Furthermore, the ranges of unobservable inputs may differ across other financial institutions, reflecting the diversity of the products in each firm's inventory.

The significant unobservable inputs disclosed in the table below are consistent with those included in "Note 21 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2020. A description of the potential effect that a change in each unobservable input in isolation may have on a fair value measurement, including information to facilitate an understanding of factors that give rise to the input ranges shown, is also provided in "Note 21 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2020.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

	Fair value						Range of inputs						
	Assets		Liabilities				31.3.21			31.12.20			
USD billion	31.3.21	31.12.20	31.3.21	31.12.20	Valuation technique(s)	Significant unobservable input(s)[1]	low	high	weighted average[2]	low	high	weighted average[2]	unit[1]
Financial assets and liabilities at fair value held for trading and Financial assets at fair value not held for trading													
Corporate and municipal bonds	*1.1*	*1.2*	*0.0*	*0.0*	Relative value to market comparable	Bond price equivalent	13	143	100	1	143	100	points
					Discounted expected cash flows	Discount margin	337	337		268	268		basis points
Traded loans, loans measured at fair value, loan commitments and guarantees	*2.6*	*2.4*	*0.0*	*0.0*	Relative value to market comparable	Loan price equivalent	1	101	99	0	101	99	points
					Discounted expected cash flows	Credit spread	350	800		190	800		basis points
					Market comparable and securitization model	Credit spread	25	1,547	248	40	1,858	333	basis points
Auction rate securities	*1.6*	*1.5*			Discounted expected cash flows	Credit spread	115	221	162	100	188	140	basis points
Investment fund units[3]	*0.1*	*0.1*	*0.0*	*0.0*	Relative value to market comparable	Net asset value							
Equity instruments[3]	*0.7*	*0.7*	*0.0*	*0.0*	Relative value to market comparable	Price							
Debt issued designated at fair value[4]			10.7	9.6									
Other financial liabilities designated at fair value			2.4	2.1	Discounted expected cash flows	Funding spread	44	175		42	175		basis points
Derivative financial instruments													
Interest rate contracts	*0.4*	*0.5*	*0.5*	*0.5*	Option model	Volatility of interest rates	48	81		29	69		basis points
Credit derivative contracts	*0.4*	*0.3*	*0.4*	*0.5*	Discounted expected cash flows	Credit spreads	2	617		1	489		basis points
						Bond price equivalent	0	102		0	100		points
Equity / index contracts	*0.8*	*0.9*	*2.1*	*2.3*	Option model	Equity dividend yields	0	21		0	13		%
						Volatility of equity stocks, equity and other indices	4	119		4	100		%
						Equity-to-FX correlation	(45)	70		(34)	65		%
						Equity-to-equity correlation	(25)	99		(16)	100		%

1 The ranges of significant unobservable inputs are represented in points, percentages and basis points. Points are a percentage of par (e.g., 100 points would be 100% of par). 2 Weighted averages are provided for non-derivative financial instruments and were calculated by weighting inputs based on the fair values of the respective instruments. Weighted averages are not provided for inputs related to derivative contracts, as this would not be meaningful. 3 The range of inputs is not disclosed as there is a dispersion of values given the diverse nature of the investments. 4 Debt issued designated at fair value is composed primarily of UBS structured notes, which include variable maturity notes with various equity and foreign exchange underlying risks, rates-linked and credit-linked notes, all of which have embedded derivative parameters that are considered to be unobservable. The equivalent derivative instrument parameters are presented in the respective derivative financial instruments lines in this table.

e) Level 3 instruments: sensitivity to changes in unobservable input assumptions

The table below summarizes those financial assets and liabilities classified as Level 3 for which a change in one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, and the estimated effect thereof.

The table shown presents the favorable and unfavorable effects for each class of financial assets and liabilities for which the potential change in fair value is considered significant. The sensitivity of fair value measurements for debt issued designated at fair value and over-the-counter debt instruments designated at fair value is reported with the equivalent derivative or securities financing instrument within the table below.

The sensitivity data shown below presents an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and does not represent the estimated effect of stress scenarios. Typically, these financial assets and liabilities are sensitive to a combination of inputs from Levels 1–3. Although well-defined interdependencies may exist between Levels 1–2 and Level 3 parameters (e.g., between interest rates, which are generally Level 1 or Level 2, and prepayments, which are generally Level 3), these have not been incorporated in the table. Furthermore, direct interrelationships between the Level 3 parameters are not a significant element of the valuation uncertainty.

Sensitivity of fair value measurements to changes in unobservable input assumptions

	31.3.21		31.12.20	
USD million	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Traded loans, loans designated at fair value, loan commitments and guarantees	26	(21)	29	(28)
Securities financing transactions	71	(51)	40	(52)
Auction rate securities	88	(88)	105	(105)
Asset-backed securities	50	(40)	41	(41)
Equity instruments	127	(99)	129	(96)
Interest rate derivative contracts, net	38	(23)	11	(16)
Credit derivative contracts, net	10	(10)	10	(14)
Foreign exchange derivative contracts, net	17	(11)	20	(15)
Equity / index derivative contracts, net	358	(344)	318	(294)
Other	77	(92)	91	(107)
Total	861	(779)	794	(768)

f) Level 3 instruments: movements during the period

Significant changes in Level 3 instruments

The table on the following pages presents additional information about material Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy and, as a result, realized and unrealized gains and losses included in the table may not comprise the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented in the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Assets and liabilities transferred into or out of Level 3 are presented as if those assets or liabilities had been transferred at the beginning of the year.

Note 9 Fair value measurement (continued)

Movements of Level 3 instruments

USD billion	Balance as of 31 December 2019	Total gains / losses included in comprehensive income: Net gains / losses included in income[1]	*of which: related to Level 3 instruments held at the end of the reporting period*	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 March 2020
Financial assets at fair value held for trading	1.8	(0.1)	*(0.1)*	0.4	(1.1)	0.8	0.0	0.2	(0.1)	0.0	2.0
of which:											
Investment fund units	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Corporate and municipal bonds	*0.5*	*0.0*	*0.0*	*0.1*	*(0.3)*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.5*
Loans	*0.8*	*0.0*	*(0.1)*	*0.1*	*(0.5)*	*0.8*	*0.0*	*0.0*	*0.0*	*0.0*	*1.1*
Other	*0.4*	*0.0*	*0.0*	*0.2*	*(0.2)*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.4*
Derivative financial instruments – assets	1.3	0.5	*0.6*	0.0	0.0	0.9	(0.3)	0.1	0.0	0.0	2.4
of which:											
Interest rate contracts	*0.3*	*0.1*	*0.1*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.4*
Equity / index contracts	*0.6*	*0.4*	*0.4*	*0.0*	*0.0*	*0.5*	*(0.1)*	*0.0*	*0.0*	*0.0*	*1.3*
Credit derivative contracts	*0.4*	*0.1*	*0.1*	*0.0*	*0.0*	*0.3*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.7*
Other	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Financial assets at fair value not held for trading	4.0	(0.2)	*(0.2)*	0.3	(0.3)	0.0	0.0	0.0	0.0	0.0	3.7
of which:											
Loans	*1.2*	*(0.1)*	*(0.1)*	*0.3*	*(0.3)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.1*
Auction rate securities	*1.5*	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.4*
Equity instruments	*0.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*
Other	*0.7*	*0.1*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.8*
Derivative financial instruments – liabilities	2.0	1.0	*1.0*	0.0	0.0	0.3	(0.2)	0.8	(0.1)	(0.1)	3.6
of which:											
Interest rate contracts	*0.1*	*0.5*	*0.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.3*	*0.0*	*0.0*	*0.9*
Equity / index contracts	*1.3*	*0.3*	*0.3*	*0.0*	*0.0*	*0.2*	*(0.2)*	*0.0*	*0.0*	*0.0*	*1.6*
Credit derivative contracts	*0.5*	*0.2*	*0.2*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.4*	*(0.1)*	*0.0*	*1.1*
Other	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*
Debt issued designated at fair value	9.6	(1.0)	*(1.0)*	0.0	0.0	2.1	(3.2)	0.3	(0.8)	(0.1)	7.0
Other financial liabilities designated at fair value	1.0	0.1	*0.1*	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.5

1 Net gains / losses included in comprehensive income are composed of Net interest income, Other net income from financial instruments measured at fair value through profit or loss and Other income. 2 Total Level 3 assets as of 31 March 2021 were USD 8.3 billion (31 December 2020: USD 8.3 billion). Total Level 3 liabilities as of 31 March 2021 were USD 16.3 billion (31 December 2020: USD 15.2 billion).

Note 9 Fair value measurement (continued)

	Total gains / losses included in comprehensive income									
Balance as of 31 December 2020[2]	Net gains / losses included in income[1]	*of which: related to Level 3 instruments held at the end of the reporting period*	Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 31 March 2021[2]
2.3	0.0	*0.0*	0.2	(0.6)	0.3	0.0	0.2	(0.2)	0.0	2.2
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
0.8	*0.0*	*0.0*	*0.2*	*(0.1)*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.8*
1.1	*0.0*	*0.0*	*0.0*	*(0.3)*	*0.3*	*0.0*	*0.0*	*(0.2)*	*0.0*	*1.1*
0.4	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.3*
1.8	(0.1)	*(0.1)*	0.0	0.0	0.4	(0.4)	0.0	(0.1)	0.0	1.6
0.5	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.4*
0.9	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.3*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.8*
0.3	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.4*
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
3.9	0.0	*0.0*	0.5	(0.3)	0.0	0.0	0.0	0.0	0.0	4.2
0.9	*(0.1)*	*(0.0)*	*0.4*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.1*
1.5	*0.1*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.6*
0.5	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.5*
1.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1.0*
3.5	0.1	*0.0*	0.0	0.0	0.6	(0.8)	0.0	(0.2)	0.0	3.1
0.5	*0.0*	*0.0*	*0.0*	*0.0*	*0.3*	*(0.1)*	*0.0*	*(0.1)*	*0.0*	*0.5*
2.3	*0.2*	*0.1*	*0.0*	*0.0*	*0.3*	*(0.6)*	*0.0*	*(0.1)*	*0.0*	*2.1*
0.5	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.4*
0.1	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*
9.6	0.2	*0.1*	0.0	0.0	3.2	(1.8)	0.1	(0.3)	(0.2)	10.7
2.1	(0.1)	*(0.1)*	0.0	0.0	0.7	(0.2)	0.0	0.0	0.0	2.4

Note 9 Fair value measurement (continued)

g) Financial instruments not measured at fair value

The table below reflects the estimated fair values of financial instruments not measured at fair value.

Financial instruments not measured at fair value

	31.3.21		31.12.20	
USD billion	Carrying amount	Fair value	Carrying amount	Fair value
Assets				
Cash and balances at central banks	158.9	158.9	158.2	158.2
Loans and advances to banks	18.3	18.3	15.3	15.3
Receivables from securities financing transactions	82.4	82.4	74.2	74.2
Cash collateral receivables on derivative instruments	35.0	35.0	32.7	32.7
Loans and advances to customers	380.1	380.1	381.0	382.3
Other financial assets measured at amortized cost	26.8	27.3	27.2	28.0
Liabilities				
Amounts due to banks	12.6	12.6	11.0	11.1
Payables from securities financing transactions	6.7	6.7	6.3	6.3
Cash collateral payables on derivative instruments	36.6	36.6	37.3	37.3
Customer deposits	508.9	509.0	527.9	528.0
Funding from UBS Group AG and its subsidiaries	57.7	59.2	54.0	55.6
Debt issued measured at amortized cost	87.5	88.3	85.4	86.3
Other financial liabilities measured at amortized cost[1]	6.0	6.0	6.6	6.7

1 Excludes lease liabilities.

The fair values included in the table above have been calculated for disclosure purposes only. The valuation techniques and assumptions relate only to UBS's financial instruments not otherwise measured at fair value. Other institutions may use different methods and assumptions for their fair value estimation, and therefore such fair value disclosures cannot necessarily be compared from one financial institution to another.

Note 10 Derivative instruments

a) Derivative instruments

As of 31.3.21, USD billion	Derivative financial assets	Notional values related to derivative financial assets[1]	Derivative financial liabilities	Notional values related to derivative financial liabilities[1]	Other notional values[2]
Derivative financial instruments					
Interest rate contracts	39.9	991	34.0	901	11,707
Credit derivative contracts	2.3	65	2.5	62	0
Foreign exchange contracts	70.7	3,283	67.6	3,067	2
Equity / index contracts	32.2	468	38.7	599	97
Commodity contracts	2.2	62	2.0	54	12
Loan commitments measured at FVTPL (OTC)	0.0	1	0.0	9	
Unsettled purchases of non-derivative financial instruments[3]	0.6	26	0.3	32	
Unsettled sales of non-derivative financial instruments[3]	0.4	42	0.8	21	
Total derivative financial instruments, based on IFRS netting[4]	148.3	4,938	146.0	4,745	11,817
Further netting potential not recognized on the balance sheet[5]	(130.1)		(127.5)		
of which: netting of recognized financial liabilities / assets	*(105.1)*		*(105.1)*		
of which: netting with collateral received / pledged	*(25.0)*		*(22.5)*		
Total derivative financial instruments, after consideration of further netting potential	18.2		18.5		

As of 31.12.20, USD billion	Derivative financial assets	Notional values related to derivative financial assets[1]	Derivative financial liabilities	Notional values related to derivative financial liabilities[1]	Other notional values[2]
Derivative financial instruments					
Interest rate contracts	50.9	928	43.9	880	11,292
Credit derivative contracts	2.4	58	2.9	65	0
Foreign exchange contracts	68.7	2,951	70.5	2,820	1
Equity / index contracts	34.8	450	41.2	581	91
Commodity contracts	2.2	58	2.0	50	10
Loan commitments measured at FVTPL (OTC)			0.0	10	
Unsettled purchases of non-derivative financial instruments[3]	0.3	18	0.2	10	
Unsettled sales of non-derivative financial instruments[3]	0.2	17	0.3	13	
Total derivative financial instruments, based on IFRS netting[4]	159.6	4,480	161.1	4,430	11,394
Further netting potential not recognized on the balance sheet[5]	(144.4)		(141.2)		
of which: netting of recognized financial liabilities / assets	*(117.2)*		*(117.2)*		
of which: netting with collateral received / pledged	*(27.2)*		*(23.9)*		
Total derivative financial instruments, after consideration of further netting potential	15.2		19.9		

1 In cases where derivative financial instruments are presented on a net basis on the balance sheet, the respective notional values of the netted derivative financial instruments are still presented on a gross basis. Notional amounts of exchange-traded agency transactions and OTC-cleared transactions entered into on behalf of clients are not disclosed as they have a significantly different risk profile. 2 Other notional values relate to derivatives that are cleared through either a central counterparty or an exchange. The fair value of these derivatives is presented on the balance sheet net of the corresponding cash margin under Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments and was not material for all periods presented. 3 Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as derivative financial instruments. 4 Financial assets and liabilities are presented net on the balance sheet if UBS AG has the unconditional and legally enforceable right to offset the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG or its counterparties, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. 5 Reflects the netting potential in accordance with enforceable master netting and similar arrangements where not all criteria for a net presentation on the balance sheet have been met. Refer to "Note 22 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of the Annual Report 2020 for more information.

Note 10 Derivative instruments (continued)

b) Cash collateral on derivative instruments

USD billion	Receivables 31.3.21	Payables 31.3.21	Receivables 31.12.20	Payables 31.12.20
Cash collateral on derivative instruments, based on IFRS netting[1]	35.0	36.6	32.7	37.3
Further netting potential not recognized on the balance sheet[2]	(21.1)	(20.7)	(21.1)	(21.6)
of which: netting of recognized financial liabilities / assets	*(18.2)*	*(18.3)*	*(19.6)*	*(19.6)*
of which: netting with collateral received / pledged	*(2.9)*	*(2.3)*	*(1.5)*	*(2.1)*
Cash collateral on derivative instruments, after consideration of further netting potential	**14.0**	**15.9**	**11.6**	**15.7**

1 Financial assets and liabilities are presented net on the balance sheet if UBS AG has the unconditional and legally enforceable right to offset the recognized amounts, both in the normal course of business and in the event of default, bankruptcy or insolvency of UBS AG or its counterparties, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously. 2 Reflects the netting potential in accordance with enforceable master netting and similar arrangements where not all criteria for a net presentation on the balance sheet have been met. Refer to "Note 22 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of the Annual Report 2020 for more information.

Note 11 Other assets and liabilities

a) Other financial assets measured at amortized cost

USD million	31.3.21	31.12.20
Debt securities	18,533	18,801
of which: government bills / bonds	*9,664*	*9,789*
Loans to financial advisors	2,473	2,569
Fee- and commission-related receivables	2,069	2,014
Finance lease receivables	1,344	1,447
Settlement and clearing accounts	564	614
Accrued interest income	522	592
Other	1,333	1,182
Total other financial assets measured at amortized cost	**26,837**	**27,219**

b) Other non-financial assets

USD million	31.3.21	31.12.20
Precious metals and other physical commodities	5,709	6,264
Bail deposit[1]	1,364	1,418
Prepaid expenses	743	731
VAT and other tax receivables	317	392
Properties and other non-current assets held for sale	248	246
Other	372	323
Total other non-financial assets	**8,755**	**9,374**

1 Refer to item 1 in Note 15b for more information.

Note 11 Other assets and liabilities (continued)

c) Other financial liabilities measured at amortized cost

USD million	31.3.21	31.12.20
Other accrued expenses	1,544	1,508
Accrued interest expenses	946	1,382
Settlement and clearing accounts	1,268	1,181
Lease liabilities	3,667	3,821
Other	2,200	2,530
Total other financial liabilities measured at amortized cost	**9,624**	**10,421**

d) Other financial liabilities designated at fair value

USD million	31.3.21	31.12.20
Financial liabilities related to unit-linked investment contracts	21,357	20,975
Securities financing transactions	5,651	7,317
Over-the-counter debt instruments	1,787	2,060
Funding from UBS Group AG and its subsidiaries	1,907	1,375
Other	68	46
Total other financial liabilities designated at fair value	**30,769**	**31,773**
of which: life-to-date own credit (gain) / loss	*208*	*148*

e) Other non-financial liabilities

USD million	31.3.21	31.12.20
Compensation-related liabilities	2,969	4,776
of which: financial advisor compensation plans	*1,200*	*1,497*
of which: other compensation plans	*704*	*2,034*
of which: net defined benefit liability	*642*	*711*
of which: other compensation-related liabilities [1]	*422*	*534*
Deferred tax liabilities	321	558
Current tax liabilities	1,058	943
VAT and other tax payables	504	470
Deferred income	209	212
Other	111	61
Total other non-financial liabilities	**5,171**	**7,018**

1 Includes liabilities for payroll taxes and untaken vacation.

Note 12 Debt issued designated at fair value

USD million	31.3.21	31.12.20
Issued debt instruments		
Equity-linked[1]	44,615	41,069
Rates-linked	12,668	11,038
Credit-linked	1,804	1,933
Fixed-rate	3,343	3,604
Commodity-linked	1,564	1,497
Other	640	726
Total debt issued designated at fair value	64,635	59,868
of which: life-to-date own credit (gain) / loss	*193*	*233*

1 Includes investment fund unit-linked instruments issued.

Note 13 Debt issued measured at amortized cost

USD million	31.3.21	31.12.20
Certificates of deposit	14,723	15,680
Commercial paper	26,591	25,472
Other short-term debt	6,080	5,515
Short-term debt[1]	47,394	46,666
Senior unsecured debt	23,330	18,483
Covered bonds	2,606	2,796
Subordinated debt	5,253	7,744
of which: low-trigger loss-absorbing tier 2 capital instruments	*4,709*	*7,201*
of which: non-Basel III-compliant tier 2 capital instruments	*544*	*543*
Debt issued through the Swiss central mortgage institutions	8,911	9,660
Other long-term debt	2	3
Long-term debt[2]	40,101	38,685
Total debt issued measured at amortized cost[3]	87,495	85,351

1 Debt with an original contractual maturity of less than one year. 2 Debt with an original contractual maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. 3 Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented.

Note 14 Interest rate benchmark reform

Background

A market-wide reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative reference rates (ARRs). In March 2021, the Financial Conduct Authority (the FCA) announced that the publication of London Interbank Offered Rates (LIBORs) will cease for all non-US dollar LIBORs, as well as for one-week and two-month USD LIBOR, after 31 December 2021. Publication of the remaining USD LIBOR tenors will cease immediately after 30 June 2023.

UBS AG holds a number of financial instrument contracts with significant exposure to IBORs. The majority of UBS AG's IBOR exposure is to CHF LIBOR and USD LIBOR. The ARR for CHF LIBOR is the Swiss Average Rate Overnight (SARON), which was established in 2017. The ARR for USD LIBOR is the Secured Overnight Financing Rate (SOFR); in addition, there are recommended ARRs for GBP LIBOR, JPY LIBOR and EUR LIBOR.

As of 31 March 2021, transition uncertainty with respect to significant interest rate benchmarks remains, with the exception of the Euro Interbank Offered Rate (Euribor). The reform of Euribor is now complete and consisted of a change in the underlying calculation method.

The transition to ARRs has started and includes a number of active steps that will also benefit from the support of associated regulatory activities. There may be some contracts, known as "tough legacy contracts," that cannot be practically transitioned or amended from IBORs to ARRs. The FCA will hold consultations in the second quarter of 2021 on requiring the ICE Benchmark Administration to continue publishing certain LIBOR settings (i.e., one-, three- and six-month settings for the GBP, JPY and USD LIBORs) on a "synthetic" basis, which are not representative of the underlying financial markets, for a certain duration after 31 December 2021. However, these synthetic LIBORs will not be available for use in new contracts, given that they are non-representative, and are instead intended to help reduce disruption where resolution has not been agreed for certain tough legacy contracts. Furthermore, in February 2021, the EU Benchmarks Regulation was amended to enable the European Commission to designate a statutory replacement rate for tough legacy LIBOR contracts that are governed under the laws of EU Member States and outstanding after LIBOR cessation. On 6 April 2021, New York State LIBOR legislation was enacted with the intention of minimizing legal uncertainty and adverse economic effects associated with USD LIBOR transition for tough legacy contracts governed under New York law. For USD LIBOR contracts not governed by New York law, a US Federal bill was put before the House Financial Services Committee in a hearing on 15 April 2021, with industry bodies and regulators currently reviewing and providing feedback.

In October 2020, the International Swaps and Derivatives Association (ISDA) released the IBOR Fallbacks Supplement and IBOR Fallbacks Protocol, amending ISDA standard definitions for interest-rate derivatives to incorporate fallbacks for derivatives linked to certain IBORs. The changes came into effect on 25 January 2021 and, from that date, all newly cleared and non-cleared derivatives between adhering parties that reference ISDA standard definitions now include these fallbacks. UBS AG adhered to the protocol in November 2020.

UBS AG is focused on transitioning existing contracts via bi-lateral and multi-lateral agreements, leveraging industry solutions (e.g., the use of fallback provisions) and through third-party actions (clearing houses, agents, etc.). It is possible that, in certain cases, there will be no realistic possibility to transition all contracts to ARRs. UBS AG continues to communicate with counterparties to effect the change from IBORs.

Governance over the transition to alternative benchmark rates

UBS AG has established a global cross-divisional, cross-functional governance structure and change program to address the scale and complexity of the transition. This global program is sponsored by the Group CFO and led by senior representatives from the business divisions and UBS AG's control and support functions. The program includes governance and execution structures within each business division, together with cross-divisional teams from each control and support function. The progress of these teams is overseen centrally via a monthly operating committee and a monthly steering committee, as well as quarterly updates to the joint Audit and Risk committees.

Risks

A core part of UBS AG's change program is the identification, management and monitoring of the risks associated with IBOR reform and transition. These risks include, but are not limited to, the following:

- economic risks to UBS AG and its clients, through the repricing of existing contracts, reduced transparency and / or liquidity of pricing information, market uncertainty or disruption;
- accounting risks, where the transition impacts the accounting treatment, including hedge accounting and consequential income statement volatility;
- valuation risks arising from the variation between benchmarks that will cease and ARRs, affecting the risk profile of financial instruments;
- operational risks arising from changes to UBS AG's front-to-back processes and systems to accommodate the transition, as well as the revision of operational controls related to the reform; and
- legal and conduct risks relating to UBS AG's engagement with clients and market counterparties around new benchmark products and amendments required for existing contracts referencing benchmarks that will cease.

Note 14 Interest rate benchmark reform (continued)

In some cases, contracts may contain provisions intended to provide a fallback interest rate in the event of a brief unavailability of the relevant IBOR. These provisions may not be effective or may produce arbitrary results in the event of a permanent cessation of the relevant IBOR. While efforts to transition outstanding transactions from IBORs to ARRs have made substantial progress, including through industry-wide protocols, such as the ISDA IBOR Fallbacks Supplement and IBOR Fallbacks Protocol, there are still substantial volumes of transactions that require modification to effectively transition to ARRs.

UBS AG remains confident that it has the transparency, oversight and operational preparedness to progress with the IBOR transition in line with market timelines. UBS AG does not expect changes to its risk management approach and strategy as a result of interest rate benchmark reform.

Progress made during 2020 and the first quarter of 2021

Approaches to transition vary by product type. During 2020, UBS AG transitioned most of its CHF LIBOR-linked deposits to ARRs and launched SARON-based mortgages in the Swiss market and SOFR-based mortgages in the US market. In addition, UBS AG has in place detailed plans and procedures to deliver the changes for all other IBOR exposures, predominantly during 2021.

Financial instruments yet to transition to alternative benchmarks

The amounts included in the table below relate to financial instrument contracts across UBS AG's business divisions where UBS AG has material exposures subject to IBOR reform that have not yet transitioned to ARRs, and that:
- contractually reference an interest rate benchmark that will transition to an alternative benchmark; and
- have a contractual maturity date (including open-ended contracts) after the agreed cessation dates.

Contracts where penalty terms reference IBORs, or where exposure to an IBOR is not the primary purpose of the contract, have not been included, as these contracts do not have a material impact on the transition process.

In line with information provided to management and external parties monitoring UBS AG's transition progress, the table below includes the following financial metrics for instruments subject to interest rate benchmark reform:
- gross carrying value / exposure for non-derivative financial instruments; and
- total trade count for derivative financial instruments.

The exposures included in the table below represent the maximum IBOR exposure, with the actual IBOR exposure dependent upon client preferences and investment decisions. Overall, the effort required to transition is affected by multiple factors, including whether negotiations need to take place with multiple stakeholders (as is the case for syndicated loans or certain listed securities), market readiness – such as liquidity in ARR equivalent products – and a client's technical readiness to handle ARR market conventions.

As significant IBOR exposures transition to ARRs during 2021, the values and trade count disclosed are expected to reduce.

		31.3.21					
		LIBOR benchmark rates[1]					
	Measure	CHF	USD	GBP	EUR[2]	JPY	XCCY
Carrying value of non-derivative financial instruments							
Total non-derivative financial assets	USD million	36,046	72,185	5,399	8,253	3,060	4,469[3]
Total non-derivative financial liabilities	USD million	2,612	13,142	1,429	2,252	1,460	0
Trade count of derivative financial instruments							
Total derivative financial instruments	Trade count	9,749	40,080	13,006	9,613	3,961	5,206[4]
Off-balance sheet exposures							
Total irrevocable loan commitments	USD million	106	4,656	167	0	0	15,188[5]

1 Contracts have been disclosed without regard to early termination rights. Instead, it is assumed that such contracts will transition away from IBORs without such rights being exercised. 2 Includes primarily EUR LIBOR positions. 3 Includes loans related to revolving multi-currency credit lines. 4 Includes cross-currency swaps where either leg or both legs are indexed to an IBOR. 5 Includes loan commitments that can be drawn in different currencies at the client's discretion.

Non-derivative instruments

UBS AG's significant non-derivative IBOR exposures primarily relate to brokerage receivable and payable balances, corporate and private loans, and mortgages, linked to CHF and USD LIBORs.

In March 2021, following the FCA announcement regarding the cessation timelines for IBORs, UBS AG started a centralized communication initiative for private mortgages linked to CHF LIBOR with the objective of transitioning these exposures either through the activation of existing fallbacks or the amendment of contractual terms, where such fallbacks do not exist. US mortgages linked to USD LIBOR are planned to transition to SOFR in 2022–2023, with US securities-based lending agreements expected to switch to SOFR from the fourth quarter of 2021.

UBS AG is also proactively discussing transition mechanisms with many of its brokerage and corporate borrowers in order to transition their exposures throughout 2021 from CHF LIBOR, EUR LIBOR and GBP LIBOR.

For certain non-derivative financial assets and financial liabilities, in particular bonds issued by third parties, UBS AG is dependent on the participation and engagement of others in effecting the transition from IBORs. UBS AG is actively monitoring such exposures and is in discussions with clients.

As presented in the table on the previous page, UBS AG has approximately USD 15 billion of irrevocable commitments that can be drawn down in different currencies with IBOR-based interest rates, primarily USD LIBOR and Euribor, and that expire after the relevant benchmark cessation dates. Related drawn-down amounts under these commitments are USD 4 billion. In addition, UBS AG has approximately USD 16 billion of committed revocable credit lines outstanding that allow for clients to draw down a number of IBOR-linked products. UBS AG has commenced discussions with impacted clients, with plans in place to have all contracts amended by the relevant cessation dates.

Derivative instruments

UBS AG holds derivatives for trading and hedging purposes, including those designated in hedge accounting relationships. A significant number of interest rate and cross-currency swaps have floating legs that reference various benchmarks that will cease.

The majority of derivatives are transacted with clearing houses where UBS AG is dependent upon industry-wide compression activities to reduce exposure and clearing house actions to convert any remaining derivatives nearer the cessation dates.

For derivatives not transacted with clearing houses, as previously noted, UBS AG adhered to the ISDA IBOR Fallback protocol in November 2020, although its preferred approach, in line with regulatory expectations, is to actively switch to ARRs before the relevant cessation dates. UBS AG has begun a series of outreach activities to understand counterparties' intentions regarding whether they seek to adhere to the protocol or will actively switch.

In order to minimize the operational risk of converting high volumes of transactions at the time of cessation, UBS AG has also begun preparations to convert derivative instruments in bulk to ARR equivalents at cessation dates.

Note 15 Provisions and contingent liabilities

a) Provisions

The table below presents an overview of total provisions.

USD million	31.3.21	31.12.20
Provisions other than provisions for expected credit losses	2,448	2,534
Provisions for expected credit losses	245	257
Total provisions	2,693	2,791

The following table presents additional information for provisions other than provisions for expected credit losses.

USD million	Litigation, regulatory and similar matters[1]	Restructuring[2]	Other[3]	Total
Balance as of 31 December 2020	2,135	67	332	2,534
Increase in provisions recognized in the income statement	18	0	6	24
Release of provisions recognized in the income statement	(9)	0	(3)	(11)
Provisions used in conformity with designated purpose	(34)	(8)	(18)	(60)
Capitalized reinstatement costs	0	0	15	15
Foreign currency translation / unwind of discount	(38)	0	(14)	(53)
Balance as of 31 March 2021	2,072	58	318	2,448

1 Comprises provisions for losses resulting from legal, liability and compliance risks. 2 Includes provisions for onerous contracts of USD 44 million as of 31 March 2021 (31 December 2020: USD 49 million) and personnel-related restructuring provisions of USD 9 million as of 31 March 2021 (31 December 2020: USD 13 million). 3 Mainly includes provisions related to real estate, employee benefits and operational risks.

Restructuring provisions primarily relate to onerous contracts and personnel-related provisions. Onerous contracts for property are recognized when UBS AG is committed to pay for non-lease components, such as utilities, service charges, taxes and maintenance, when a property is vacated or not fully recovered from sub-tenants. Personnel-related restructuring provisions are used within a short time period but potential changes in amount may be triggered when natural staff attrition reduces the number of people affected by a restructuring event and therefore the estimated costs.

Information about provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 15b. There are no material contingent liabilities associated with the other classes of provisions.

b) Litigation, regulatory and similar matters

UBS operates in a legal and regulatory environment that exposes it to significant litigation and similar risks arising from disputes and regulatory proceedings. As a result, UBS (which for purposes of this Note may refer to UBS AG and/or one or more of its subsidiaries, as applicable) is involved in various disputes and legal proceedings, including litigation, arbitration, and regulatory and criminal investigations.

Such matters are subject to many uncertainties, and the outcome and the timing of resolution are often difficult to predict, particularly in the earlier stages of a case. There are also situations where UBS may enter into a settlement agreement. This may occur in order to avoid the expense, management distraction or reputational implications of continuing to contest liability, even for those matters for which UBS believes it should be exonerated. The uncertainties inherent in all such matters affect the amount and timing of any potential outflows for both matters with respect to which provisions have been established and other contingent liabilities. UBS makes provisions for such matters brought against it when, in the opinion of management after seeking legal advice, it is more likely than not that UBS has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required, and the amount can be reliably estimated. Where these factors are otherwise satisfied, a provision may be established for claims that have not yet been asserted against UBS, but are nevertheless expected to be, based on UBS's experience with similar asserted claims. If any of those conditions is not met, such matters result in contingent liabilities. If the amount of an obligation cannot be reliably estimated, a liability exists that is not recognized even if an outflow of resources is probable. Accordingly, no provision is established even if the potential outflow of resources with respect to such matters could be significant. Developments relating to a matter that occur after the relevant reporting period, but prior to the issuance of financial statements, which affect management's assessment of the provision for such matter (because, for example, the developments provide evidence of conditions that existed at the end of the reporting period), are adjusting events after the reporting period under IAS 10 and must be recognized in the financial statements for the reporting period.

Specific litigation, regulatory and other matters are described below, including all such matters that management considers to be material and others that management believes to be of significance due to potential financial, reputational and other effects. The amount of damages claimed, the size of a transaction or other information is provided where available and appropriate in order to assist users in considering the magnitude of potential exposures.

In the case of certain matters below, we state that we have established a provision, and for the other matters, we make no such statement. When we make this statement and we expect disclosure of the amount of a provision to prejudice seriously our position with other parties in the matter because it would reveal what UBS believes to be the probable and reliably estimable outflow, we do not disclose that amount. In some cases we are subject to confidentiality obligations that preclude such disclosure. With respect to the matters for which we do not state whether we have established a provision, either: (a) we have not established a provision, in which case the matter is treated as a contingent liability under the applicable accounting standard; or (b) we have established a provision but expect disclosure of that fact to prejudice seriously our position with other parties in the matter because it would reveal the fact that UBS believes an outflow of resources to be probable and reliably estimable.

With respect to certain litigation, regulatory and similar matters for which we have established provisions, we are able to estimate the expected timing of outflows. However, the aggregate amount of the expected outflows for those matters for which we are able to estimate expected timing is immaterial relative to our current and expected levels of liquidity over the relevant time periods.

The aggregate amount provisioned for litigation, regulatory and similar matters as a class is disclosed in the "Provisions" table in Note 15a above. It is not practicable to provide an aggregate estimate of liability for our litigation, regulatory and similar matters as a class of contingent liabilities. Doing so would require UBS to provide speculative legal assessments as to claims and proceedings that involve unique fact patterns or novel legal theories, that have not yet been initiated or are at early stages of adjudication, or as to which alleged damages have not been quantified by the claimants. Although UBS therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, UBS believes that the aggregate amount of possible future losses from this class that are more than remote substantially exceeds the level of current provisions.

Litigation, regulatory and similar matters may also result in non-monetary penalties and consequences. For example, the non-prosecution agreement UBS entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with submissions of benchmark interest rates, including, among others, the British Bankers' Association London Interbank Offered Rate (LIBOR), was terminated by the DOJ based on its determination that UBS had committed a US crime in relation to foreign exchange matters. As a consequence, UBS AG pleaded guilty to one count of wire fraud for conduct in the LIBOR matter, paid a fine and was subject to probation, which ended in January 2020.

A guilty plea to, or conviction of, a crime could have material consequences for UBS. Resolution of regulatory proceedings may require UBS to obtain waivers of regulatory disqualifications to maintain certain operations, may entitle regulatory authorities to limit, suspend or terminate licenses and regulatory authorizations, and may permit financial market utilities to limit, suspend or terminate UBS's participation in such utilities. Failure to obtain such waivers, or any limitation, suspension or termination of licenses, authorizations or participations, could have material consequences for UBS.

The risk of loss associated with litigation, regulatory and similar matters is a component of operational risk for purposes of determining capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of the UBS Group first quarter 2021 report.

Provisions for litigation, regulatory and similar matters by business division and in Group Functions[1]

USD million	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Group Functions	Total
Balance as of 31 December 2020	861	115	0	227	932	2,135
Increase in provisions recognized in the income statement	11	0	1	1	5	18
Release of provisions recognized in the income statement	(8)	0	0	(1)	0	(9)
Provisions used in conformity with designated purpose	(27)	0	0	(5)	(2)	(34)
Foreign currency translation / unwind of discount	(27)	(6)	0	(5)	0	(38)
Balance as of 31 March 2021	810	109	1	217	935	2,072

1 Provisions, if any, for matters described in this Note are recorded in Global Wealth Management (item 3 and item 4) and Group Functions (item 2). Provisions, if any, for the matters described in items 1 and 6 of this Note are allocated between Global Wealth Management and Personal & Corporate Banking, and provisions, if any, for the matters described in this Note in item 5 are allocated between the Investment Bank and Group Functions.

Note 15 Provisions and contingent liabilities (continued)

1. Inquiries regarding cross-border wealth management businesses

Tax and regulatory authorities in a number of countries have made inquiries, served requests for information or examined employees located in their respective jurisdictions relating to the cross-border wealth management services provided by UBS and other financial institutions. It is possible that the implementation of automatic tax information exchange and other measures relating to cross-border provision of financial services could give rise to further inquiries in the future. UBS has received disclosure orders from the Swiss Federal Tax Administration (FTA) to transfer information based on requests for international administrative assistance in tax matters. The requests concern a number of UBS account numbers pertaining to current and former clients and are based on data from 2006 and 2008. UBS has taken steps to inform affected clients about the administrative assistance proceedings and their procedural rights, including the right to appeal. The requests are based on data received from the German authorities, who seized certain data related to UBS clients booked in Switzerland during their investigations and have apparently shared this data with other European countries. UBS expects additional countries to file similar requests.

The Swiss Federal Administrative Court ruled in 2016 that, in the administrative assistance proceedings related to a French bulk request, UBS has the right to appeal all final FTA client data disclosure orders. On 30 July 2018, the Swiss Federal Administrative Court granted UBS's appeal by holding the French administrative assistance request inadmissible. The FTA filed a final appeal with the Swiss Federal Supreme Court. On 26 July 2019, the Supreme Court reversed the decision of the Federal Administrative Court. In December 2019, the court released its written decision. The decision requires the FTA to obtain confirmation from the French authorities that transmitted data will be used only for the purposes stated in their request before transmitting any data. The stated purpose of the original request was to obtain information relating to taxes owed by account holders. Accordingly, any information transferred to the French authorities must not be passed to criminal authorities or used in connection with the ongoing case against UBS discussed in this item. In February 2020, the FTA ordered that UBS would not be granted party status in the French administrative assistance proceedings. UBS appealed this decision to the Federal Administrative Court. On 15 July, the Federal Administrative Court upheld the FTA's decision, holding that UBS will no longer have party status in these proceedings. The Swiss Federal Supreme Court has determined that it will not hear UBS's appeal of this decision.

Since 2013, UBS (France) S.A., UBS AG and certain former employees have been under investigation in France for alleged complicity in unlawful solicitation of clients on French territory, regarding the laundering of proceeds of tax fraud, and banking and financial solicitation by unauthorized persons. In connection with this investigation, the investigating judges ordered UBS AG to provide bail ("*caution*") of EUR 1.1 billion and UBS (France) S.A. to post bail of EUR 40 million, which was reduced on appeal to EUR 10 million.

A trial in the court of first instance took place from 8 October 2018 until 15 November 2018. On 20 February 2019, the court announced a verdict finding UBS AG guilty of unlawful solicitation of clients on French territory and aggravated laundering of the proceeds of tax fraud, and UBS (France) S.A. guilty of aiding and abetting unlawful solicitation and laundering the proceeds of tax fraud. The court imposed fines aggregating EUR 3.7 billion on UBS AG and UBS (France) S.A. and awarded EUR 800 million of civil damages to the French state. UBS has appealed the decision. Under French law, the judgment is suspended while the appeal is pending. The trial in the Court of Appeal took place between 8-24 March 2021. At the conclusion of the trial, the prosecutor asserted that the maximum penalty was EUR 2.2 billion and requested the court to award a penalty of at least EUR 2 billion. The French state asked for civil damages of EUR 1 billion. The judgment on the merits of the case is currently set for 27 September 2021. A subsequent appeal to the Cour de Cassation, France's highest court, is possible with respect to questions of law.

UBS believes that based on both the law and the facts the judgment of the court of first instance should be reversed. UBS believes it followed its obligations under Swiss and French law as well as the European Savings Tax Directive. Even assuming liability, which it contests, UBS believes the penalties and damage amounts awarded greatly exceed the amounts that could be supported by the law and the facts. In particular, UBS believes the court incorrectly based the penalty on the total regularized assets rather than on any unpaid taxes on those assets for which a fraud has been characterized and further incorrectly awarded damages based on costs that were not proven by the civil party. Notwithstanding that UBS believes it should be acquitted, our balance sheet at 31 March 2021 reflected provisions with respect to this matter in an amount of EUR 450 million (USD 528 million at 31 March 2021). The wide range of possible outcomes in this case contributes to a high degree of estimation uncertainty. The provision reflected on our balance sheet at 31 March 2021 reflects our best estimate of possible financial implications, although it is reasonably possible that actual penalties and civil damages could exceed the provision amount.

In 2016, UBS was notified by the Belgian investigating judge that it is under formal investigation ("*inculpé*") regarding the laundering of proceeds of tax fraud, of banking and financial solicitation by unauthorized persons, and of serious tax fraud.

Our balance sheet at 31 March 2021 reflected provisions with respect to matters described in this item 1 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

2. Claims related to sales of residential mortgage-backed securities and mortgages

From 2002 through 2007, prior to the crisis in the US residential loan market, UBS was a substantial issuer and underwriter of US residential mortgage-backed securities (RMBS) and was a purchaser and seller of US residential mortgages.

In November 2018, the DOJ filed a civil complaint in the District Court for the Eastern District of New York. The complaint seeks unspecified civil monetary penalties under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 related to UBS's issuance, underwriting and sale of 40 RMBS transactions in 2006 and 2007. UBS moved to dismiss the civil complaint on 6 February 2019. On 10 December 2019, the district court denied UBS's motion to dismiss.

Our balance sheet at 31 March 2021 reflected a provision with respect to matters described in this item 2 in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of this matter cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

3. Madoff

In relation to the Bernard L. Madoff Investment Securities LLC (BMIS) investment fraud, UBS AG, UBS (Luxembourg) S.A. (now UBS Europe SE, Luxembourg branch) and certain other UBS subsidiaries have been subject to inquiries by a number of regulators, including the Swiss Financial Market Supervisory Authority (FINMA) and the Luxembourg Commission de Surveillance du Secteur Financier. Those inquiries concerned two third-party funds established under Luxembourg law, substantially all assets of which were with BMIS, as well as certain funds established in offshore jurisdictions with either direct or indirect exposure to BMIS. These funds faced severe losses, and the Luxembourg funds are in liquidation. The documentation establishing both funds identifies UBS entities in various roles, including custodian, administrator, manager, distributor and promoter, and indicates that UBS employees serve as board members.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees, seeking amounts totaling approximately EUR 2.1 billion, which includes amounts that the funds may be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee).

A large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff fraud. The majority of these cases have been filed in Luxembourg, where decisions that the claims in eight test cases were inadmissible have been affirmed by the Luxembourg Court of Appeal, and the Luxembourg Supreme Court has dismissed a further appeal in one of the test cases.

In the US, the BMIS Trustee filed claims against UBS entities, among others, in relation to the two Luxembourg funds and one of the offshore funds. The total amount claimed against all defendants in these actions was not less than USD 2 billion. In 2014, the US Supreme Court rejected the BMIS Trustee's motion for leave to appeal decisions dismissing all claims except those for the recovery of approximately USD 125 million of payments alleged to be fraudulent conveyances and preference payments. In 2016, the bankruptcy court dismissed these claims against the UBS entities. In February 2019, the Court of Appeals reversed the dismissal of the BMIS Trustee's remaining claims, and the US Supreme Court subsequently denied a petition seeking review of the Court of Appeals' decision. The case has been remanded to the Bankruptcy Court for further proceedings.

4. Puerto Rico

Declines since 2013 in the market prices of Puerto Rico municipal bonds and of closed-end funds (funds) that are sole-managed and co-managed by UBS Trust Company of Puerto Rico and distributed by UBS Financial Services Incorporated of Puerto Rico (UBS PR) led to multiple regulatory inquiries, which in 2014 and 2015, led to settlements with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico, the US Securities and Exchange Commission (SEC) and the Financial Industry Regulatory Authority.

Since then UBS clients in Puerto Rico who own the funds or Puerto Rico municipal bonds and/or who used their UBS account assets as collateral for UBS non-purpose loans filed customer complaints and arbitration demands. Allegations include fraud, misrepresentation and unsuitability of the funds and of the loans seeking aggregate damages of USD 3.4 billion, of which USD 2.8 billion have been resolved through settlements, arbitration or withdrawal of claims.

A shareholder derivative action was filed in 2014 against various UBS entities and current and certain former directors of the funds, alleging hundreds of millions of US dollars in losses in the funds. In 2015, defendants' motion to dismiss was denied.

In 2011, a purported derivative action was filed on behalf of the Employee Retirement System of the Commonwealth of Puerto Rico (System) against over 40 defendants, including UBS PR, which was named in connection with its underwriting and consulting services. Plaintiffs alleged that defendants violated their purported fiduciary duties and contractual obligations in connection with the issuance and underwriting of USD 3 billion of bonds by the System in 2008 and sought damages of over USD 800 million. In 2016, the court granted the System's request to join the action as a plaintiff. In 2017, the court denied defendants' motion to dismiss the complaint. In 2020, the court denied plaintiffs' motion for summary judgment.

Note 15 Provisions and contingent liabilities (continued)

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments on Puerto Rico bonds. In 2016, US federal legislation created an oversight board with power to oversee Puerto Rico's finances and to restructure its debt. The oversight board has imposed a stay on the exercise of certain creditors' rights. In 2017, the oversight board placed certain of the bonds into a bankruptcy-like proceeding under the supervision of a Federal District Judge.

In May 2019, the oversight board filed complaints in Puerto Rico federal district court bringing claims against financial, legal and accounting firms that had participated in Puerto Rico municipal bond offerings, including UBS, seeking a return of underwriting and swap fees paid in connection with those offerings. UBS estimates that it received approximately USD 125 million in fees in the relevant offerings.

In August 2019, and February and November 2020, four US insurance companies that insured issues of Puerto Rico municipal bonds sued UBS and several other underwriters of Puerto Rico municipal bonds. The actions collectively seek recovery of an aggregate of USD 955 million in damages from the defendants. The plaintiffs in these cases claim that defendants failed to reasonably investigate financial statements in the offering materials for the insured Puerto Rico bonds issued between 2002 and 2007, which plaintiffs argue they relied upon in agreeing to insure the bonds notwithstanding that they had no contractual relationship with the underwriters.

Our balance sheet at 31 March 2021 reflected provisions with respect to matters described in this item 4 in amounts that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provisions that we have recognized.

5. Foreign exchange, LIBOR and benchmark rates, and other trading practices

Foreign exchange-related regulatory matters: Beginning in 2013, numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. As a result of these investigations, UBS entered into resolutions with the UK Financial Conduct Authority (FCA), the US Commodity Futures Trading Commission (CFTC), FINMA, the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking, the DOJ's Criminal Division and the European Commission. UBS has ongoing obligations under the Cease and Desist Order of the Federal Reserve Board and the Office of the Comptroller of the Currency (as successor to the Connecticut Department of Banking), and to cooperate with relevant authorities and to undertake certain remediation measures. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Investigations relating to foreign exchange matters by certain authorities remain ongoing notwithstanding these resolutions.

Foreign exchange-related civil litigation: Putative class actions have been filed since 2013 in US federal courts and in other jurisdictions against UBS and other banks on behalf of putative classes of persons who engaged in foreign currency transactions with any of the defendant banks. UBS has resolved US federal court class actions relating to foreign currency transactions with the defendant banks and persons who transacted in foreign exchange futures contracts and options on such futures under a settlement agreement that provides for UBS to pay an aggregate of USD 141 million and provide cooperation to the settlement classes. Certain class members have excluded themselves from that settlement and have filed individual actions in US and English courts against UBS and other banks, alleging violations of US and European competition laws and unjust enrichment.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of persons and businesses in the US who directly purchased foreign currency from the defendants and alleged co-conspirators for their own end use. In March 2017, the court granted UBS's (and the other banks') motions to dismiss the complaint. The plaintiffs filed an amended complaint in August 2017. In March 2018, the court denied the defendants' motions to dismiss the amended complaint.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office, the Monetary Authority of Singapore, the Hong Kong Monetary Authority, FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. UBS reached settlements or otherwise concluded investigations relating to benchmark interest rates with the investigating authorities. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation measures with respect to benchmark interest rate submissions. UBS has been granted conditional leniency or conditional immunity from authorities in certain jurisdictions, including the Antitrust Division of the DOJ and the Swiss Competition Commission (WEKO), in connection with potential antitrust or competition law violations related to certain rates. However, UBS has not reached a final settlement with WEKO, as the Secretariat of WEKO has asserted that UBS does not qualify for full immunity.

LIBOR and other benchmark-related civil litigation: A number of putative class actions and other actions are pending in the federal courts in New York against UBS and numerous other banks on behalf of parties who transacted in certain interest rate benchmark-based derivatives. Also pending in the US and in other jurisdictions are a number of other actions asserting losses related to various products whose interest rates were linked to LIBOR and other benchmarks, including adjustable rate mortgages, preferred and debt securities, bonds pledged as collateral, loans, depository accounts, investments and other interest-bearing instruments. The complaints allege manipulation, through various means, of certain benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, SGD SIBOR and SOR and Australian BBSW, and seek unspecified compensatory and other damages under varying legal theories.

USD LIBOR class and individual actions in the US: In 2013 and 2015, the district court in the USD LIBOR actions dismissed, in whole or in part, certain plaintiffs' antitrust claims, federal racketeering claims, CEA claims, and state common law claims. Although the Second Circuit vacated the district court's judgment dismissing antitrust claims, the district court again dismissed antitrust claims against UBS in 2016. Certain plaintiffs have appealed that decision to the Second Circuit. Separately, in 2018, the Second Circuit reversed in part the district court's 2015 decision dismissing certain individual plaintiffs' claims and certain of these actions are now proceeding. UBS entered into an agreement in 2016 with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received final court approval. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs sought permission to appeal that ruling to the Second Circuit. In July 2018, the Second Circuit denied the petition to appeal of the class of USD lenders and in November 2018 denied the petition of the USD exchange class. In December 2019, UBS entered into an agreement with representatives of the class of USD lenders to settle their USD LIBOR class action. The agreement has received final court approval. In January 2019, a putative class action was filed in the District Court for the Southern District of New York against UBS and numerous other banks on behalf of US residents who, since 1 February 2014, directly transacted with a defendant bank in USD LIBOR instruments. The complaint asserts antitrust claims. The defendants moved to dismiss the complaint in August 2019. On 26 March 2020 the court granted defendants' motion to dismiss the complaint in its entirety. Plaintiffs have appealed the dismissal. In August 2020, an individual action was filed in the Northern District of California against UBS and numerous other banks alleging that the defendants conspired to fix the interest rate used as the basis for loans to consumers by jointly setting the USD LIBOR rate and monopolized the market for LIBOR-based consumer loans and credit cards.

Other benchmark class actions in the US: In 2014, 2015 and 2017, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiffs' claims, including plaintiffs' federal antitrust and racketeering claims. In August 2020, the court granted defendants' motion for judgment on the pleadings and dismissed the lone remaining claim in the action as impermissibly extraterritorial. Plaintiffs have appealed. In 2017, the court dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds. In April 2020, the appeals court reversed the dismissal and in August 2020 plaintiffs in that action filed an amended complaint. Defendants moved to dismiss the amended complaint in October 2020. In 2017, the court dismissed the CHF LIBOR action on standing grounds and failure to state a claim. Plaintiffs filed an amended complaint following the dismissal, and the court granted a renewed motion to dismiss in September 2019. Plaintiffs have appealed. Also in 2017, the court in the EURIBOR lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs have appealed. In October 2018, the court in the SIBOR / SOR action dismissed all but one of plaintiffs' claims against UBS. Plaintiffs filed an amended complaint following the dismissal, and the court granted a renewed motion to dismiss in July 2019. Plaintiffs appealed. In March 2021, the Second Circuit reversed the dismissal. In November 2018, the court in the BBSW lawsuit dismissed the case as to UBS and certain other foreign defendants for lack of personal jurisdiction. Following that dismissal, plaintiffs filed an amended complaint in April 2019, which UBS and other defendants named in the amended complaint moved to dismiss. In February 2020, the court in the BBSW action granted in part and denied in part defendants' motions to dismiss the amended complaint. In August 2020, UBS and other BBSW defendants joined a motion for judgment on the pleadings. The court dismissed the GBP LIBOR action in August 2019. Plaintiffs have appealed.

Government bonds: Putative class actions have been filed since 2015 in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. A consolidated complaint was filed in 2017 in the US District Court for the Southern District of New York alleging that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction and in the secondary market and asserting claims under the antitrust laws and for unjust enrichment. Defendants' motions to dismiss the consolidated complaint was granted on 31 March 2021. Plaintiffs may seek permission to file an amended complaint. Similar class actions have been filed concerning European government bonds and other government bonds.

UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding government bond trading practices. As a result of its review to date, UBS has taken appropriate action.

With respect to additional matters and jurisdictions not encompassed by the settlements and orders referred to above, our balance sheet at 31 March 2021 reflected a provision in an amount that UBS believes to be appropriate under the applicable accounting standard. As in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 15 Provisions and contingent liabilities (continued)

6. Swiss retrocessions

The Federal Supreme Court of Switzerland ruled in 2012, in a test case against UBS, that distribution fees paid to a firm for distributing third-party and intra-group investment funds and structured products must be disclosed and surrendered to clients who have entered into a discretionary mandate agreement with the firm, absent a valid waiver. FINMA issued a supervisory note to all Swiss banks in response to the Supreme Court decision. UBS has met the FINMA requirements and has notified all potentially affected clients.

The Supreme Court decision has resulted, and may continue to result, in a number of client requests for UBS to disclose and potentially surrender retrocessions. Client requests are assessed on a case-by-case basis. Considerations taken into account when assessing these cases include, among other things, the existence of a discretionary mandate and whether or not the client documentation contained a valid waiver with respect to distribution fees.

Our balance sheet at 31 March 2021 reflected a provision with respect to matters described in this item 6 in an amount that UBS believes to be appropriate under the applicable accounting standard. The ultimate exposure will depend on client requests and the resolution thereof, factors that are difficult to predict and assess. Hence, as in the case of other matters for which we have established provisions, the future outflow of resources in respect of such matters cannot be determined with certainty based on currently available information and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that we have recognized.

Note 16 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of UBS AG's operations with a functional currency other than the US dollar into US dollars.

	Closing exchange rate			Average rate[1]		
	As of			For the quarter ended		
	31.3.21	31.12.20	31.3.20	31.3.21	31.12.20	31.3.20
1 CHF	1.06	1.13	1.04	1.09	1.11	1.04
1 EUR	1.17	1.22	1.10	1.20	1.19	1.10
1 GBP	1.38	1.37	1.24	1.38	1.34	1.28
100 JPY	0.90	0.97	0.93	0.93	0.96	0.93

1 Monthly income statement items of operations with a functional currency other than the US dollar are translated into US dollars using month-end rates. Disclosed average rates for a quarter represent an average of three month-end rates, weighted according to the income and expense volumes of all operations of UBS AG with the same functional currency for each month. Weighted average rates for individual business divisions may deviate from the weighted average rates for UBS AG.

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