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.

15,000,000 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$0.208 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 29 June 2017 (the "**Base Listing Document**") as supplemented by an addendum to the Base Listing Document dated 28 August 2017 (the "**Addendum**"), 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).

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.

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 12 June 2018.

As at the date hereof, the Issuer's long term credit rating by Standard & Poor's Credit Market Services Europe Limited is A+, by Moody's Deutschland GmbH is A1, by Fitch Ratings Limited is AA- and by Scope Ratings GmbH 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.

11 June 2018

Subject as set out below, the Issuer accepts full responsibility for the accuracy of the information contained in this document, the Base Listing Document and the Addendum 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, the Base Listing Document and the Addendum 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:	15,000,000 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[1] and Source:	30,417.36 (out of the money) (Reuters)
Strike Level:	35,000
Gearing[1]:	25.01x
Premium[1]:	19.06**%**
Volatility[1]:	Implied: 31.00% Historical: 25.00%
Launch Date:	4 June 2018
Closing Date:	11 June 2018
Dealing Commencement Date:	12 June 2018
Last Trading Date:	The fifth Business Day immediately preceding the Expiry Date, currently being 20 December 2018
Expiry Date:	28 December 2018 (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

[1] 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.

Valuation Date:	The Expiry Date, or if such day is not a Relevant Stock Exchange 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.

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 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) 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, at any time during the half hour period that ends at the time by reference to which the Issuer determines the value of the Index, 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.

(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 (i) 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); or (ii) is otherwise considered by the Issuer to be appropriate and such adjustment or amendment is approved by SGX-ST.

(d) *Notice of Determinations*. 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 determinations in accordance with Condition 9.

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 or (iii) considered by the Issuer to be appropriate and such modification is approved by SGX-ST. 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. Illegality

The Issuer shall have the right to terminate the Warrants if it shall have determined in its absolute discretion that 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**"). In such circumstances the Issuer will, however, 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, the Base Listing Document and the Addendum. 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:	15,000,000 Warrants
Form:	The Warrants will be issued subject to, and with the benefit of, an instrument by way of deed poll dated 11 June 2018 (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 12 June 2018.
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, the Base Listing Document and the Addendum.

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 237 to 240 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 4 June 2018):

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
The Bank of East Asia, Limited	23

Utilities

Company Name	Stock Code
Cheung Kong Infrastructure Holdings Ltd.	1038
China Resources Power Holdings Company Limited	836
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
New World Development Company Limited	17
Sino Land Company Limited	83
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
China Mengniu Dairy Co. Ltd.	2319
China Merchants Holdings (International) Company Limited	144
China Mobile Limited	941
China Petroleum & Chemical Corporation	386
China Shenhua Energy Company Limited	1088
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
Hengan International Group Company Limited	1044
MTR Corporation Limited	66
PetroChina Company Limited	857
Sands China Ltd.	1928
Sunny Optical Technology (Group) Co. Ltd.	2382
Swire Pacific Limited 'A'	19
Tencent Holdings Limited	700
Want Want China Holdings Ltd.	151
WH Group Ltd.	288

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.

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

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**[1] – 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:

[1] 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

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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	:	25 times the minimum permitted price movement in the Warrants in accordance with the rules of the SGX-ST
(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), the DMM will not provide the bid price. In such an instance, the DMM will provide the offer price only;

(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, 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

All applicable provisions of the Financial Services and Markets Act 2000 (the "**FSMA**") must be complied with in respect of anything done in relation to any Warrants in, from or otherwise involving the United Kingdom. An invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) may only be communicated or caused to be communicated in connection with the issue or sale of any Warrants in circumstances in which Section 21(1) of the FSMA would not, if the Issuer was not an authorised person, apply to the Issuer.

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 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, any estate or trust the income of which is subject to United States income taxation regardless of its source, and any other "U.S. person" as such term is defined in Regulation S under the Securities Act.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "**Relevant Member State**"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "**Relevant Implementation Date**") the Warrants may not be offered to the public in that Relevant Member State, except that, with effect from and including the Relevant Implementation Date, the Warrants may be offered to the public in that Relevant Member State:

(a) in the period beginning on the date of publication of a prospectus in relation to those Warrants which has been approved by the competent authority in that

Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive and ending on the date specified in such prospectus;

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

(c) at any time to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive); or

(d) at any time in any other circumstances falling within Article 3(2) of the Prospectus Directive.

For the purposes of this provision, the expression an "**offer of Warrants to the public**" in relation to any Warrants in any Relevant Member 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 the Warrants, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "**Prospectus Directive**" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in each Relevant Member State and the expression "**2010 PD Amending Directive**" means Directive 2010/73/EU.

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 2017.

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 2018.

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 243 of the Base Listing Document, and the Addendum.

1. Save as disclosed in the Base Listing Document (as amended and supplemented by the Addendum) 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 One Raffles Quay, #50-01 North Tower, Singapore 048583, 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 Christie Ng, Legal & Compliance.

3. Settlement of trades done on a normal "ready basis" on the SGX-ST generally take place on the third 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 December 2017.

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;

(d) the Addendum; and

(e) 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 Corporate Center and the business divisions Global Wealth Management, Personal & Corporate Banking, Asset Management and the Investment Bank. UBS's strategy is centered on its leading Global Wealth Management business and its premier universal bank in Switzerland, which are enhanced by Asset Management and the Investment Bank. UBS focuses on businesses that, in its opinion, have a strong competitive position in their targeted markets, are capital efficient, and have an attractive long-term structural growth or profitability outlook.

On 31 March 2018, UBS Group's common equity tier1 ("**CET1**") capital ratio was 13.1%, the CET1 leverage ratio was 3.76% on a fully applied basis, the total loss-absorbing capacity ratio was 31.2% on a fully applied basis, and the total loss-absorbing capacity leverage ratio was 9% on a fully applied basis.[1] On the same date, invested assets stood at CHF 3,155 billion, equity attributable to shareholders was CHF 51,243 million and market capitalisation was CHF 64,752 million. On the same date, UBS employed 62,537 people[2].

On 31 March 2018, UBS AG consolidated CET1 capital ratio was 13.2%, the CET1 leverage ratio was 3.78% on a fully applied basis, the total loss-absorbing capacity ratio was 30.7% on a fully applied basis, and the total loss-absorbing capacity leverage ratio was 8.8% on a fully applied basis.[1] On the same date, invested assets stood at CHF 3,155 billion and equity attributable to UBS AG shareholders was CHF 50,788 million. On the same date, UBS AG Group employed 46,433 people[2].

The rating agencies Standard & Poor's Credit Market Services Europe Limited ("**Standard & Poor's**"), Moody's Deutschland GmbH ("**Moody's**"), Fitch Ratings Limited ("**Fitch Ratings**"), and Scope Ratings GmbH ("**Scope 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, Standard & Poor's and Scope Ratings 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 A1 (possible upgrade, ratings under review) from Moody's, long-term issuer default rating of AA- (outlook: stable) from Fitch Ratings and issuer rating of AA- (outlook: stable) from Scope Ratings.

[1] All figures based on the Basel III framework as applicable to Swiss systemically relevant banks. Refer to the "*Capital management*" section of the Annual Report 2017, the UBS Group First Quarter 2018 Report and the UBS AG First Quarter 2018 Report, as defined herein, for more information.

[2] Full-time equivalents.

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 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.

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.

2. 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.

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.

3. Business Overview

3.1 Organizational 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 a Corporate Center.

In 2014, UBS began adapting its legal entity structure to improve the resolvability of the Group in response to too big to fail requirements in Switzerland and recovery and resolution regulation in other countries in which the Group operates. In December 2014, UBS Group AG became the holding company of the Group.

In 2015, UBS AG transferred its Personal & Corporate Banking and Wealth Management businesses booked in Switzerland to the newly established UBS Switzerland AG, a banking subsidiary of UBS AG in Switzerland, and UBS implemented a more self-sufficient business and operating model for UBS Limited, UBS's investment banking subsidiary in the UK. In 2016, UBS Americas Holding LLC was designated as intermediate holding company for UBS's US subsidiaries and UBS merged its Wealth Management subsidiaries in various European countries into UBS Europe SE. Additionally, UBS transferred the majority of Asset Management's operating subsidiaries to UBS Asset Management AG.

UBS Business Solutions AG, a wholly owned subsidiary of UBS Group AG, was established in 2015 and acts as the Group service company. In 2017, UBS's shared services functions in Switzerland and the UK were transferred from UBS AG to UBS Business Solutions AG. UBS also completed the transfer of shared services functions in the US to its US service company, UBS Business Solutions US LLC, a wholly owned subsidiary of UBS Americas Holding LLC.

UBS continues to consider further changes to the Group's legal structure in response to regulatory requirements and other external developments, including the anticipated exit of the United Kingdom from the European Union. Such changes may include further consolidation of operating subsidiaries in the EU, and adjustments to the booking entity or location of products and services.

UBS Group AG's interests in subsidiaries and other entities as of 31 December 2017, 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 2017 published on 9 March 2018 ("**Annual Report 2017**").

UBS AG's interests in subsidiaries and other entities as of 31 December 2017, 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 2017.

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 Business Divisions and Corporate Center

UBS operates as a group with four business divisions (Global Wealth Management, Personal & Corporate Banking, Asset Management, and the Investment Bank) and a Corporate Center. Each of the business divisions and the Corporate Center are described below. A description of the Group's strategy can be found under "*Our strategy*" in the "*Operating environment and strategy*" section of the Annual Report 2017; a description of the businesses, strategies, clients, organisational structures, products and services of the business divisions and the Corporate Center can also be found in the "*Operating environment and strategy*" section of the Annual Report 2017.

3.2.1 Global Wealth Management

Global Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world. Its clients benefit from the full spectrum of resources that a global firm can offer, including investment management, wealth planning, banking and lending, and corporate financial advice. Global Wealth Management's model gives clients access to a wide range of products from the world's leading third-party institutions that complement UBS's own offerings.

3.2.2 Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio. Its business is central to UBS's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to help clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for the other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS's Swiss infrastructure and banking products platform, both of which are leveraged across the Group.

3.2.3 Asset Management

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

3.2.4 Investment Bank

The Investment Bank provides investment advice, financial solutions and capital market access, with principal offices in all major financial centres. It serves corporate, institutional and wealth management clients across the globe and partners with UBS’s wealth management, personal and corporate banking and asset management businesses. The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS Securities Research.

3.2.5 Corporate Center

Corporate Center provides services to the Group through the reporting units Corporate Center – Services and Group Asset and Liability Management ("**Group ALM**"). Corporate Center also includes the Non-core and Legacy Portfolio unit. Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Human Resources, Group Operations, Group Sourcing and Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Risk Control, Group Communications & Branding, Group Regulatory & Governance, and UBS and Society. Group ALM manages the structural risks of UBS's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with the Group's liquidity and funding portfolios. Group ALM also seeks to optimize the Group's financial performance by matching assets and liabilities within the context of the Group's liquidity, funding and capital targets and constraints. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into the Group's risk governance framework. Non-core and Legacy Portfolio manages legacy positions from businesses exited by the Investment Bank, and is overseen by a committee chaired by the Group Chief Risk Officer.

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.

3.4 Recent Developments

3.4.1 UBS AG consolidated key figures

Selected consolidated financial information

UBS AG derived the selected consolidated financial information included in the table below for the years ended 31 December 2017, 2016 and 2015 from the Annual Report 2017, which contains the audited consolidated financial statements of UBS AG, as well as additional unaudited consolidated financial information, for the year ended 31 December 2017 and comparative figures for the years ended 31 December 2016 and 2015. The selected consolidated financial information included in the table below for the quarter ended 31 March 2018 and 31 March 2017 was derived from the UBS AG First Quarter 2018 Report, which contains the UBS AG interim consolidated financial statements (unaudited), as well as additional unaudited consolidated financial information, for the quarter ended 31 March 2018 and comparative figures for the quarter ended 31 March 2017.

The consolidated financial statements were prepared in accordance with International Financial Reporting Standards ("**IFRS**") issued by the International Accounting Standards Board ("**IASB**") and are stated in Swiss francs ("**CHF**"). Information for the years ended 31 December 2017, 2016 and 2015 which is indicated as being unaudited in the table below was included in the Annual Report 2017, 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. The Annual Report 2017 and the UBS AG First Quarter 2018 Report are incorporated by reference herein. The section "*Measurement of performance*" of the Annual Report 2017 contains an explanation of the use of the information contained under the heading "*Key performance indicators*" in the table below and the definitions of each of these key performance indicators. Prospective investors should read the whole of this Prospectus and the documents incorporated by reference herein 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		
CHF million, except where indicated	31.3.18	31.3.17	31.12.17	31.12.16	31.12.15
	unaudited		*audited, except where indicated*		
Results					
Operating income	7,823	7,560	29,479	28,421	30,605
Operating expenses	6,040	5,919	24,481	24,352	25,198
Operating profit / (loss) before tax	1,783	1,641	4,998	4,069	5,407
Net profit / (loss) attributable to shareholders	1,370	1,231	845	3,207	6,235
Key performance indicators					
Profitability and growth					
Return on tangible equity (%) [1]	12.5	10.8	2.0*	6.9*	13.5*
Cost / income ratio (%) [2]	77.0	78.3	82.7*	85.6*	82.0*
Net profit growth (%) [3]	11.3	72.7	(73.7)*	(48.6)*	78.0*
Resources					
Common equity tier 1 capital ratio (%) [4, 5]	13.2	14.9	14.0*	14.5*	15.4*
Common equity tier 1 leverage ratio (%) [6]	3.78	3.75	3.7*	3.7*	3.6*
Going concern leverage ratio (%) [7, 8]	4.6	4.2	4.2*	4.2*	-
Additional information					
Profitability					
Return on equity (%) [9]	10.8	9.3	1.6*	5.9*	11.7*
Return on risk-weighted assets, gross (%) [10]	12.8	13.6	12.8*	13.2*	14.3*
Return on leverage ratio denominator, gross (%) [11]	3.5	3.4	3.4*	3.2*	-
Resources					
Total assets	920,280	910,924	916,363	935,353	943,256
Equity attributable to shareholders	50,788	51,990	50,718	53,662	55,248
Common equity tier 1 capital [5]	33,424	33,137	33,240	32,447	32,042
Risk-weighted assets [5]	253,784	222,207	236,606*	223,232*	208,186*
Going concern capital ratio (%) [8]	15.9	16.6	15.6*	16.3*	-
Total loss-absorbing capacity ratio (%) [8]	30.7	32.0	31.4*	29.6*	-
Leverage ratio denominator [12]	883,676	882,670	887,189*	870,942*	898,251*
Total loss-absorbing capacity leverage ratio (%) [8]	8.8	8.1	8.4*	7.6*	-
Other					
Invested assets (CHF billion) [13]	3,155	2,922	3,179	2,810	2,678
Personnel (full-time equivalents)	46,433	55,972	46,009*	56,208*	58,131*

* unaudited

[1] Net profit attributable to shareholders before amortization and impairment of goodwill and intangible assets (annualized as applicable) / average equity attributable to shareholders less average goodwill and intangible assets.
[2] Operating expenses / operating income before credit loss (expense) or recovery.
[3] Change in net profit attributable to shareholders from continuing operations between current and comparison periods / net profit attributable to shareholders from continuing operations of comparison period.
[4] Common equity tier 1 capital / risk-weighted assets.
[5] Based on the Basel III framework as applicable to Swiss systemically relevant banks ("SRB").
[6] Common equity tier 1 capital / leverage ratio denominator. Calculated in accordance with Swiss SRB rules applicable as of 1 January 2020.
[7] Total going concern capital / leverage ratio denominator.
[8] Based on the Swiss SRB rules applicable as of 1 January 2020 that became effective on 1 July 2016. Figures for prior periods are not available.
[9] Net profit attributable to shareholders (annualized as applicable) / average equity attributable to shareholders.
[10] Operating income before credit loss (annualized as applicable) / average fully applied risk-weighted assets.
[11] Operating income before credit loss (annualized as applicable) / average fully applied leverage ratio denominator. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. For periods prior to 31 December 2015 the leverage ratio denominator is calculated in accordance with former Swiss SRB rules. Therefore the figure for the period ended on 31 December 2015 is not presented as it is not available on a fully comparable basis.
[12] From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules.
[13] Includes invested assets for Personal & Corporate Banking.

3.4.2 Accounting, Regulatory and legal developments

IFRS 9, Financial Instruments

Effective 1 January 2018, UBS adopted IFRS 9, Financial Instruments, which replaces IAS 39, Financial Instruments: Recognition and Measurement and substantially changes the classification, measurement and impairment of financial assets, income statement and balance sheet presentation and disclosure of financial instruments and other arrangements in scope. As permitted by IFRS 9, UBS elected not to restate prior-period information. The adoption of IFRS 9 has resulted in a CHF 0.6 billion reduction in UBS's IFRS consolidated equity, net of tax, as well as a CHF 0.3 billion reduction in common equity tier 1 capital as of 1 January 2018 with no material effect on UBS's capital ratios.

IFRS 15, Revenue from Contracts with Customers

Effective 1 January 2018, UBS adopted IFRS 15, Revenue from Contracts with Customers, which replaces IAS 18, Revenue, and establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. As permitted by IFRS 15, UBS elected not to restate prior-period information. The adoption of IFRS 15 has resulted in a reduction in UBS's IFRS consolidated equity of CHF 24 million, net of tax.

Swiss Federal Council consults on amendments to the Capital Adequacy Ordinance

In February 2018, the Swiss Federal Council issued a consultation on amendments to the Capital Adequacy Ordinance. Domestic systemically important banks ("**D-SIBs**") would be subject to gone concern requirements, conceptually similar to those in effect for global systematically important banks ("**G-SIBs**"). These requirements would be limited to 40% of the going concern requirements for D-SIBs and could be fully met by state guarantees or similar mechanisms. The consultation also:

- introduces a new capital treatment, applicable for all banks, whereby the current capital deduction for investments in subsidiaries would be replaced with a risk-weighting approach. This proposed change incorporates requirements that UBS has been applying since 1 July 2017, as required by a FINMA decree.
- specifies going and gone concern requirements at a single-entity level that would result in new, as yet undetermined gone concern requirements for UBS AG standalone.

The consultation closes on 30 May 2018 and requirements are expected to enter into force on 1 January 2019.

Swiss Federal Council proposes tax law amendments related to loss-absorbing instruments

In February 2018, the Swiss Federal Council proposed amendments to Swiss tax law that, if enacted, would reduce the additional tax burden on debt issuances by bank top holding companies. The proposed changes would permit systemically important banks, such as UBS, to issue debt directly from their holding companies, as is contemplated under the international capital framework and the Swiss Capital Adequacy Ordinance, without incurring significant corporate tax disadvantages, as is the case today. As a next step, the proposal will be subject to debate in the Swiss Parliament.

Swiss Federal Council adopts bill on Tax Proposal 17

In March 2018, the Swiss Federal Council adopted a revised bill on corporate tax reform, known as Tax Proposal 17 ("**TP17**"). TP17 aims to reform the corporate tax system in Switzerland in response to international developments by abolishing preferential corporate tax regimes at the cantonal level and suggests measures to maintain the competitiveness of Switzerland in the tax field. Key elements include the introduction of a tax incentive on revenues from patents in accordance with OECD standards, additional deductions for research and development expenditure, an increase in the taxation of dividends from qualified participations and optional reliefs on the capital tax. Furthermore, TP17 would increase the cantonal share of the direct federal tax income from 17.0% to 21.2%. This increase is intended to permit cantons to reduce cantonal corporate income tax rates. TP17 is expected to affect UBS's tax liability in Switzerland, although the ultimate effect cannot be determined until the legislation is enacted and contemplated changes are implemented by the cantons. TP17 may also affect the competitiveness of Switzerland as a business location.

Duties to customers in the US

In April 2018, the SEC proposed a new regulation and interpretation intended to enhance and clarify the duties of brokers and investment advisers to retail customers. The proposals would require broker-dealers and investment advisers to provide a new relationship summary to customers describing the relationship with the customer, the services offered, standards of conduct, fees and costs, conflicts of interest and disciplinary information. The new regulation would apply to broker-dealers and would require they act in a customer's best interest when making an investment or investment strategy recommendation to a retail investor. The proposed interpretation clarifies certain obligations of investment advisers relating to acting in the best interest of clients, obtaining best execution of transactions, providing ongoing advice and monitoring, and disclosing and mitigating conflicts of interest. The proposed requirements, if adopted, would apply to a large portion of Global Wealth Management's business in the US.

The proposals overlap with the US Department of Labor's ("**DOL**") fiduciary rule, which applies to retirement accounts, and which was being phased in through 2019. The DOL fiduciary rule was invalidated by a US court of appeals in March 2018.

Refer to the "Recent developments" section of the UBS Group First Quarter 2018 Report and the "Note 1 Basis of accounting" in the "Consolidated financial statements" section of the UBS AG First Quarter 2018 Report, as well as to "IFRS 9, Financial Instruments" and "IFRS 15, Revenue from Contracts with Customers" in the "Significant accounting and financial reporting changes in 2018" section of the Annual Report 2017 for further information on key accounting, regulatory and legal developments.

3.5 Trend Information

As indicated in the UBS Group First Quarter 2018 Report, UBS remains confident that global economic growth prospects will continue to provide a supportive backdrop to markets, even though geopolitical tensions and the rise of protectionism remain a threat to investor confidence. All of UBS's businesses are affected by economic growth expectations, interest rates, equity market levels and foreign exchange rates. While higher compared with last year's historic lows, market volatility remains muted overall, which is usually less conducive to client activity. Due to seasonal factors, second quarter transaction-based income in UBS's Investment Bank and Global Wealth Management businesses is also typically lower than in the first quarter. In the second quarter, funding costs related to long-term debt and capital instruments issued to comply with regulatory funding and liquidity requirements will be higher compared with the same period in 2017. UBS continues to expect US dollar interest rates to rise gradually and the US economy to further improve, both of which will likely be supportive of US dollar net interest income. Momentum in UBS's businesses is in UBS's opinion good, and UBS expects its results in the second quarter to provide further evidence of the strengths of UBS's diversified business model as well as UBS's progress towards achieving its strategic and financial targets.

Refer to "*Current market climate and industry trends*" and "*Risk factors*" in the "*Operating environment and strategy*" section of the Annual Report 2017 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 NYSE, UBS AG also complies with the relevant NYSE corporate governance standards.

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 is the most senior body of UBS AG. 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

Member	Title	Term of office	Current principal positions outside UBS AG
Axel A. Weber	Chairman	2019	Chairman of the Board of Directors of UBS Group AG; board member of the Swiss Bankers Association; Trustees Board member of Avenir Suisse; Advisory Board member of the "Beirat Zukunft Finanzplatz"; board member of the Swiss Finance Council; Chairman of the board of the Institute of International Finance; board member of the International Monetary Conference; member of the European Financial Services Round Table; member of the European Banking Group; member of the International Advisory Panel, Monetary Authority of Singapore; member of the Group of Thirty, Washington, D.C.; Chairman of the Board of Trustees

			of DIW Berlin; Advisory Board member of the Department of Economics at the University of Zurich; member of the Trilateral Commission.
Michel Demaré	Independent Vice Chairman	2019	Independent Vice-Chairman of the Board of Directors of UBS Group AG; board member of Louis-Dreyfus Commodities Holdings BV; board member of Vodafone Group Plc; Vice Chairman of the Supervisory Board of IMD, Lausanne; Advisory Board member of the Department of Banking and Finance at the University of Zurich.
David Sidwell	Member	2019	Senior Independent Director of the Board of Directors of UBS Group AG; Senior Advisor at Oliver Wyman, New York; board member of Chubb Limited; board member of GAVI Alliance; Chairman of the Board of Village Care, New York.
Jeremy Anderson	Member	2019	Member of the Board of Directors of UBS Group AG; trustee at UK Productivity Leadership Group.
Reto Francioni	Member	2019	Member of the Board of Directors of UBS Group AG; professor at the University of Basel; board member of Coca-Cola HBC AG; Chairman of the board of Swiss International Air Lines AG; board member of Francioni AG; board member of MedTech Innovation Partners AG.
Ann F. Godbehere	Member	2019	Member of the Board of Directors of UBS Group AG; board member of Rio Tinto plc (chairman of the audit committee); board member of Rio Tinto Limited (chairman of the audit committee).
Fred Hu	Member	2019	Member of the Board of Directors of UBS Group AG; non-executive chairman of the board of Yum China Holdings; board member of Hong Kong Exchanges and Clearing Ltd.; founder and chairman of Primavera Capital Limited; non-executive director of Dalian Wanda Commercial Properties Co Ltd.; board member of China Asset Management; board member of Minsheng Financial Leasing Co.; member of non-profit organizations, including co-chairman of the Nature Conservancy's Asia Pacific Council and director of the Executive Committee of China Venture Capital and Private Equity Association Ltd.
Julie G. Richardson	Member	2019	Member of the Board of Directors of UBS Group AG; board member of The Hartford Financial Services Group, Inc. (chairman of the audit committee); board member of Yext (chairman of the audit committee); board member of Vereit, Inc. (chairman of the compensation committee).
Isabelle Romy	Member	2019	Member of the Board of Directors of UBS Group AG; partner and board member at Froriep Legal AG, Zurich; associate professor at the University of Fribourg and at the Federal Institute of Technology, Lausanne; vice chairman of the Sanction Commission of SIX Swiss Exchange; member of the Fundraising Committee of the Swiss National Committee for UNICEF; Supervisory Board member of the CAS program Financial Regulation of the University of Bern and University of Geneva.
Robert W. Scully	Member	2019	Member of the Board of Directors of UBS Group AG; board member of Chubb Limited; board member of Zoetis Inc.; board member of KKR & Co LP; board member of the Dean's Advisors of Harvard Business School.
Beatrice Weder di Mauro	Member	2019	Member of the Board of Directors of UBS Group AG; distinguished fellow at INSEAD in Singapore; Supervisory Board member of Robert Bosch GmbH; board member of Bombardier Inc.; member of the ETH Zurich Foundation Board of Trustees; Economic Advisory Board member of Fraport AG; Advisory Board member of Deloitte Germany; Deputy Chairman of the University Council of the University of Mainz.
Dieter Wemmer	Member	2019	Member of the Board of Directors of UBS Group AG; board member of Ørsted A/S; member of the CFO Forum; member of the Systemic Risk Working Group of the European Central Bank and the Bank for International Settlements; member of the Berlin Center of Corporate Governance.

4.1.2 Organizational principles and structure

Following each AGM, the BoD meets to appoint one or more Vice Chairmen, BoD committee members, 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 committees comprise the Audit Committee and the Risk Committee. The BoD has also established a Special Committee, which is an ad-hoc committee, called and held on an ad-hoc basis, focused on internal and regulatory investigations.

4.1.3 Audit Committee

The Audit Committee ("**AC**") consists of five BoD members, all of whom were determined by the BoD to be fully independent. As a group, members of the Audit Committee must have the necessary qualifications and skills to perform all of their duties and together must possess financial literacy and experience in banking and risk management.

The AC itself does not perform audits, but monitors the work of the external auditors who in turn are responsible for auditing UBS AG's consolidated and standalone annual financial statements and for reviewing the quarterly financial statements.

The function of the AC is to serve as an independent and objective body with oversight of: (i) UBS AG's accounting policies, financial reporting and disclosure controls and procedures, (ii) the quality, adequacy and scope of external audit, (iii) UBS AG's compliance with financial reporting requirements, (iv) senior management's approach to internal controls with respect to the production and integrity of the financial statements and disclosure of the financial performance, and (v) the performance of Internal Audit in conjunction with the Chairman of the BoD.

Together with the external auditors and Internal Audit, the AC in particular reviews the annual financial statements of UBS AG and, where applicable, the quarterly financial statements as well as the consolidated annual and quarterly financial statements and consolidated annual report of UBS AG, as proposed by management, in order to recommend their approval to the BoD or propose any adjustments the AC considers appropriate.

Periodically, and at least annually, the AC assesses the qualifications, expertise, effectiveness, independence and performance of the external auditors and their lead audit partner, in order to support the BoD in reaching a decision in relation to the appointment or dismissal of the external auditors and to the rotation of the lead audit partner. The BoD then submits these proposals to the shareholders for approval at the AGM.

The members of the AC are Jeremy Anderson (Chairperson), Michel Demaré, Ann F. Godbehere, Isabelle Romy and Beatrice Weder di Mauro.

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

Member and business address	**Function**	**Current principal positions outside UBS AG**
Sergio P. Ermotti	President of the Executive Board	Member of the Group Executive Board and Group Chief Executive Officer of UBS Group AG; board member of UBS Switzerland AG; Chairman of the Board of Directors of UBS Business Solutions AG; Chairman of the UBS Optimus

UBS AG, Bahnhofstrasse 45, CH-8001 Zurich		Foundation board; Chairman of the Fondazione Ermotti, Lugano; Chairman and President of the board of the Swiss-American Chamber of Commerce; board member of the Fondazione Lugano per il Polo Culturale, Lugano; board member of the Global Apprenticeship Network; member of the Institut International D'Etudes Bancaires; member of the Saïd Business School Global Leadership Council, University of Oxford.
Martin Blessing UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	co-President Global Wealth Management	Member of the Group Executive Board and co-President Global Wealth Management of UBS Group AG; member of the Executive Board of Baden-Baden Entrepreneur Talks.
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 Business Solutions AG; board member of UBS Switzerland 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; board member of UBS Business Solutions AG; Chairman of the Swiss-American Chamber of Commerce's legal committee; Chairman of the Swiss Advisory Council of the American Swiss Foundation; member of the Foundation Council of the UBS International Center of Economics in Society; member of the Professional Ethics Commission of the Association of Swiss Corporate Lawyers; member of the Supervisory Board of the Fonds de Dotation LUMA / Arles.
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.
Sabine Keller-Busse UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	Chief Operating Officer	Member of the Group Executive Board and Group Chief Operating Officer of UBS Group AG; board member of UBS Business Solutions AG; vice-chairman of the Board of Directors of SIX Group (Chairman of the nomination & compensation committee); Foundation Board member of the UBS Pension Fund; Foundation Board member of the University Hospital Zurich.
Ulrich Körner UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	President Asset Management and President UBS Europe, Middle East and Africa	Member of the Group Executive Board, President Asset Management and President UBS Europe, Middle East and Africa at UBS Group AG; member of the Supervisory Board of UBS Europe SE; Chairman of the Foundation Board of the UBS Pension Fund; Chairman of the Widder Hotel AG, Zurich; member of the UBS Optimus Foundation Board; Vice President of the board of Lyceum Alpinum Zuoz; member of the Financial Service Chapter Board of the Swiss-American Chamber of Commerce; Advisory Board member of the Department of Banking and Finance at the University of Zurich; member of the business advisory council of the Laureus Foundation Switzerland.
Tom Naratil UBS AG, 1200 Harbor Boulevard, Weehawken, NJ 07086 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; board member of the Clearing House Supervisory Board; member of the Board of Consultors for the College of Nursing at Villanova University.
Andrea Orcel UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	President Investment Bank	Member of the Group Executive Board and President Investment Bank at UBS Group AG; board member of UBS Limited; board member of UBS Americas Holding LLC.
Kathryn Shih UBS AG, 2 International Finance Centre, 8 Finance Street, Central, Hong Kong	President UBS Asia Pacific	Member of the Group Executive Board of UBS Group AG and President UBS Asia Pacific; board member of Kenford International Ltd.; board member of Shih Co Charitable Foundation Ltd.; member of the Hong Kong Trade Development Council (Financial Services Advisory Committee).

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.

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 AGM of 4 May 2016, 2 March 2017 and 26 April 2018, Ernst & Young Ltd, Aeschengraben 9, CH-4002 Basel ("**Ernst & Young**") were elected as auditors 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.

6. Major Shareholders of the Issuer

UBS Group AG owns 100% of the outstanding shares of UBS AG.

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 2017 is available in the section "*UBS AG consolidated financial statements*" of the Annual Report 2017 and in the UBS AG's standalone financial statements for the year ended 31 December 2017 (the "**Standalone Financial Statements 2017**"), respectively; and for financial year 2016 it is available in the "*Consolidated financial statements*" section of the UBS Group AG and UBS AG annual report 2016, in English, published on 10 March 2017 ("**Annual Report 2016**") and in the UBS AG's standalone financial statements for the year ended 31 December 2016 (the "**Standalone Financial Statements 2016**"). The consolidated and standalone financial accounts are closed on 31 December of each year.

With respect to the financial year 2017, reference is made to:

(i) the following parts of the Annual Report 2017: the UBS AG consolidated financial statements, in particular to the Income statement on page 470, the Balance sheet on page 473, the Statement of changes in equity on pages 474-477 (inclusive), the Statement of cash flows on pages 479-480 (inclusive) and the Notes to the consolidated financial statements on pages 481-622 (inclusive); and

(ii) the following parts of the Standalone Financial Statements 2017: the Income statement on page 1, the Balance sheet on pages 2-3, the Statement of appropriation of retained earnings and proposed dividend distribution on page 4, and the Notes to the UBS AG standalone financial statements on pages 5-22 (inclusive).

With respect to the financial year 2016, reference is made to:

(i) the following parts of the Annual Report 2016: the UBS AG consolidated financial statements, in particular to the Income statement on page 478, the Balance sheet on page 481, the Statement of changes in equity on pages 482-485 (inclusive), the Statement of cash flows on pages 487-488 (inclusive) and the Notes to the consolidated financial statements on pages 489-634 (inclusive); and

(ii) the following parts of the Standalone Financial Statements 2016: the Income statement on page 1, the Balance sheet on pages 2-3 (inclusive), the Statement of appropriation of retained earnings and proposed dividend distribution out of capital contribution reserve on page 4, and the Notes to the UBS AG standalone financial statements on pages 5-21 (inclusive).

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 the Corporate Center. 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 2017 and 2016 were audited by Ernst & Young. The reports of the auditors on the consolidated financial statements can be found on pages 463-469 (inclusive) of the Annual Report 2017 and on pages 471-477 (inclusive) of the Annual Report 2016. The reports of the auditors on the standalone financial statements of UBS AG can be found on pages 23-26 (inclusive) of the Standalone Financial Statements 2017 and on pages 22-25 (inclusive) of the Standalone Financial Statements 2016.

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 2017 and 31 December 2016.

7.3 Interim Financial Information

Reference is also made to the UBS Group AG first quarter 2018 report published on 23 April 2018 ("**UBS Group First Quarter 2018 Report**") and the UBS AG first quarter 2018 report, published on 27 April 2018 ("**UBS AG First Quarter 2018 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 2018. 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.

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 14a Provisions*" of the UBS AG's consolidated financial statements included in the UBS AG

First Quarter 2018 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 it 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**") described in item 5 of this section, which UBS entered into with the US Department of Justice ("**DOJ**"), Criminal Division, Fraud Section in connection with UBS's 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 is subject to probation through 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 UBS's 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 2018 Report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit[1]

CHF million	**Global Wealth Management**	**Personal & Corporate Banking**	**Asset Management**	**Investment Bank**	**CC – Services**	**CC – Group ALM**	**CC – Non-core and Legacy Portfolio**	**UBS**
Balance as of 31 December 2017	555	79	1	345	240	0	1,224	2,444
Increase in provisions recognized in the income statement	35	0	0	2	0	0	0	37
Release of provisions recognized in the income statement	(4)	0	0	(3)	(24)	0	0	(31)
Provisions used in conformity with designated purpose	(33)	0	0	(15)	0	0	(33)	(81)
Foreign currency translation / unwind of discount	(8)	0	0	(6)	0	0	(26)	(39)
Balance as of 31 March 2018	546	79	1	323	216	0	1,166	2,331

1 Provisions, if any, for the matters described in this section are recorded in Global Wealth Management (item 3 and item 4), the Investment Bank (item 7) and Corporate Center – Non-core and Legacy Portfolio (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, Corporate Center – Services and Corporate Center – Non-core and Legacy Portfolio.

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.

Since 2013, UBS (France) S.A. and UBS AG and certain former employees have been under investigation in France for alleged complicity in having illicitly solicited clients on French territory and regarding the laundering of proceeds of tax fraud and of 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.

In February 2016, the investigating judges notified UBS AG and UBS (France) S.A. that they have closed their investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation (*réquisitoire*). In March 2017, the investigating judges issued the trial order (*ordonnance de renvoi*) that charges UBS AG and UBS (France) S.A., as well as various former employees, with illicit solicitation of clients on French territory and with participation in the laundering of the proceeds of tax fraud, and which transfers the case to court. The trial schedule has not yet been announced. In October 2017, the Investigation Chamber of the Court of Appeals decided that UBS (France) S.A. shall not be constituted as a civil party in the guilty plea proceedings against the former UBS (France) S.A. Head of Front Office. UBS (France) S.A. has appealed this decision to the French Supreme Court ("Cour de cassation"). The appeal is pending, although the criminal court subsequently found the individual's guilty plea to be invalid.

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 and of banking, financial solicitation by unauthorized persons and serious tax fraud.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

UBS's balance sheet at 31 March 2018 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. A subsidiary of UBS, UBS Real Estate Securities Inc. ("**UBS RESI**"), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

UBS was not a significant originator of US residential loans. A branch of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008, and securitized less than half of these loans.

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: When UBS acted as an RMBS sponsor or mortgage seller, it generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, UBS was in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. In 2012, certain RMBS trusts filed an action ("**Trustee Suit**") in the US District Court for the Southern District of New York ("**SDNY**") seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion. Approximately 9,000 loans were at issue in a bench trial in the SDNY in 2016, following which the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. In October 2017, UBS and certain holders of the RMBS in the Trustee Suit entered into an agreement under which UBS has agreed to pay an aggregate of USD 543 million into the relevant RMBS trusts, plus certain attorneys' fees. A portion of UBS's settlement costs will be borne by other parties that indemnified UBS. The agreement was subject to the trustee for the RMBS trusts becoming a party thereto by 9 March 2018. The trustee for the RMBS trusts has informed UBS that it would not accept the proposed settlement under the agreement between UBS and the RMBS holders. UBS has been in discussions with the trustee about the terms on which it would become a party to a settlement, although there can be no assurance that the trustee will agree to a settlement on terms that are acceptable to UBS. Other than the Trustee Suit, 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.

Mortgage-related regulatory matters: In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 ("**FIRREA**"), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and subsequently provided a revised list of transactions. UBS has provided information in response to this subpoena. UBS also received and responded to subpoenas from the New York State Attorney General ("**NYAG**") and other state attorneys general relating to UBS's RMBS business. In March 2018, UBS and the NYAG reached an agreement to resolve the NYAG's investigation, whereby UBS will pay USD 41 million and provide consumer relief in a stated amount of USD 189 million calculated as set forth in the settlement agreement. UBS has also responded to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. UBS is cooperating with the authorities in these matters.

UBS's balance sheet at 31 March 2018 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 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 (CSSF). 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 aggregating 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 fraudulent conveyances and preference payments. In 2016, the Bankruptcy Court dismissed the remaining claims against the UBS entities. The BMIS Trustee appealed. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to those made by the BMIS Trustee, and seeking unspecified damages. These claims have either been voluntarily withdrawn or dismissed on the basis that the courts did not have jurisdiction to hear the claims against the UBS entities. In 2016, the plaintiff in one of those claims appealed the dismissal. In February 2018, the United States Court of Appeals for the Second

Circuit affirmed the dismissal of the plaintiff's claim.

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**") have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of USD 2.5 billion, of which claims with aggregate claimed damages of USD 1.5 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims are 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. Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management and the co-manager of certain of the funds, seeking damages for investor losses in the funds during the period from May 2008 through May 2014. In 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendant's motion for summary judgment based on a forum selection clause in the loan agreements. The Puerto Rico Supreme Court reversed that decision and remanded the case back to the trial court for reconsideration. On reconsideration the trial court granted defendant's motion and dismissed the action.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico ("**OCFI**") in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority ("**FINRA**") announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. UBS also understands that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. UBS is cooperating with the authorities in this inquiry.

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.

Beginning in 2015, and continuing through 2017, certain agencies and public corporations of the Commonwealth of Puerto Rico (“**Commonwealth**”) defaulted on certain interest payments on Puerto Rico bonds. The funds hold significant amounts of those bonds and the defaults on interest payments have had, and are expected to continue to have, an adverse effect on dividends from the funds. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors’ rights on the Puerto Rico bonds continue to be in effect. 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 creditors’ rights. In May and June 2017, the oversight board placed certain of the bonds into a bankruptcy-like proceeding under the supervision of a Federal District Judge. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth’s finances, or any restructuring of the Commonwealth’s obligations may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

UBS’s balance sheet at 31 March 2018 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 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: Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes UBS’s precious metals and related structured products businesses. Numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. In 2014 and 2015, UBS reached settlements with the UK Financial Conduct Authority ("**FCA**") and the US Commodity Futures Trading Commission ("**CFTC**") in connection with their foreign exchange investigations, FINMA issued an order concluding its formal proceedings relating to UBS’s foreign exchange and precious metals businesses, and the Board of Governors of the Federal Reserve System ("**Federal Reserve Board**") and the Connecticut Department of Banking issued a Cease and Desist Order and assessed monetary penalties against UBS AG. In addition, the DOJ’s Criminal Division (“**Criminal Division**”) terminated the 2012 NPA with UBS AG related to UBS’s submissions of benchmark interest rates and UBS AG pleaded guilty to one count of wire fraud, paid a fine and is subject to probation through January 2020. In January 2018, UBS reached a settlement with the CFTC in connection with the CFTC’s precious metals investigations. As part of that settlement, UBS paid a USD 15 million civil monetary penalty. UBS has ongoing obligations to cooperate with these authorities and to undertake certain remediation. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ ("**Antitrust Division**") 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 and precious metals 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. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In

2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 2003. The complaints assert claims under the Commodity Exchange Act ("**CEA**") and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The settlement agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 ("**ERISA**") for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal. The appeals court heard oral argument in June 2017.

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 their 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 2016, a putative class action was 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. The complaint asserts claims under federal and state antitrust laws. In response to defendants' motion to dismiss, plaintiffs agreed to dismiss their complaint. In 2017, two new putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of different proposed classes of indirect purchasers of currency, and a consolidated complaint was filed in June 2017. In March 2018, the court dismissed the consolidated complaint. Plaintiffs have filed a motion seeking leave to file an amended complaint. Putative class actions are also pending against UBS and other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases sought to amend their complaints to add new allegations about UBS, which the court granted. The plaintiffs filed amended complaints in 2017. In March 2017, the court in New York granted UBS's motion to dismiss the platinum and palladium action. In May 2017, plaintiffs in the platinum and palladium action filed an amended complaint that did not allege claims against UBS.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office ("**SFO**"), the Monetary Authority of Singapore ("**MAS**"), the Hong Kong Monetary Authority ("**HKMA**"), FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted or are continuing to conduct investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. In 2012, UBS reached settlements relating to benchmark interest rates with the FSA, the CFTC and the Criminal Division of the DOJ, and FINMA issued an order in its proceedings with respect to UBS relating to benchmark interest rates. In addition, UBS entered into settlements with the European Commission ("**EC**") and with the Swiss Competition Commission ("**WEKO**") regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives. UBS has ongoing obligations to cooperate with the authorities with whom UBS has reached resolutions and to undertake certain remediation 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 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. Investigations by certain governmental authorities remain ongoing notwithstanding these resolutions.

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 individual 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, USD and SGD SIBOR and SOR, Australian BBSW and USD ISDAFIX, 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. 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 preliminary court approval and remains subject to final approval. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs have sought permission to appeal that ruling to the Second Circuit.

Other benchmark class actions and ISDAFIX class action in the US. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims for lack of standing. In 2015, this court dismissed plaintiff's federal racketeering claims on the same basis and affirmed its previous dismissal of plaintiff's antitrust claims against UBS. In 2017, this court also dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds, as did the court in the CHF LIBOR action. Also in 2017, the courts in the EURIBOR and the SIBOR / SOR lawsuits dismissed the cases as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs in the CHF LIBOR and SIBOR / SOR actions have filed amended complaints following the dismissals, which UBS and other defendants have moved to dismiss. UBS and other defendants have also moved to dismiss the GBP LIBOR and Australian BBSW actions. In 2017, the district court preliminarily approved a settlement agreement under which UBS would pay USD 14 million to resolve putative class actions filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX.

Government bonds: Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY, and a consolidated complaint was filed in 2017. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other 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 2018 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 has 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 March 2018 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 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.

7. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission ("**SFC**") has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. The SFC has previously indicated that it intended to take enforcement action against UBS and certain employees in relation to certain of these offerings. In March 2018, the SFC issued a decision notice in relation to one of the offerings under investigation. The notice provides for a fine of HKD 119 million and a suspension of UBS Securities Hong Kong Limited's ability to act as a sponsor for Hong Kong listed initial public offerings for 18 months. UBS has appealed the decision.

The specific litigation, regulatory and other matters described above under items (1) to (7) 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 "*Note 14 Provisions and contingent liabilities*" to UBS AG consolidated financial statements included in the UBS AG First Quarter 2018 Report. The proceedings indicated below are matters that have recently been considered material, but are not currently considered material, by UBS. Besides the proceedings described above and below, there are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened, of which UBS AG is aware) that may have, or have had in the recent past, significant effects on UBS AG Group's and/or UBS AG's financial position or profitability and are or have been pending during the last twelve months until the date of this document.

RMBS-related lawsuits concerning disclosures: UBS has been named as a defendant in lawsuits relating to its role as underwriter and issuer of RMBS. In April 2017, UBS reached a final settlement in a lawsuit brought in the US District Court for the District of Kansas by the National Credit Union Administration ("**NCUA**") as conservator for certain failed credit unions, asserting misstatements and omissions in the offering documents for USD 1.15 billion in original principal balance of RMBS purchased by the credit unions. UBS and the NCUA settled this matter for USD 445 million. A similar case brought by the NCUA in the SDNY was settled in 2016. A portion of UBS's settlement costs will be borne by other parties that indemnified UBS.

Banco UBS Pactual tax indemnity: Pursuant to the 2009 sale of Banco UBS Pactual S.A. ("**Pactual**") by UBS to BTG Investments, LP ("**BTG**"), BTG has submitted contractual indemnification claims. The claims pertain principally to several tax assessments issued by the Brazilian tax authorities against Pactual relating to the period from December 2006 through March 2009, when UBS owned Pactual. These assessments are being challenged in administrative and judicial proceedings. In August 2017, UBS and BTG agreed to resolve the largest indemnification claim (UBS's portion of which was approximately BRL 2 billion) relating to a tax assessment that had disallowed goodwill amortization deductions. In connection with this resolution, UBS paid CHF 245 million to BTG, which then submitted the underlying tax assessment for resolution in a Brazilian tax amnesty program. In early 2018, the decision in favor of BTG on the largest remaining exposure (BRL 461 million) became final, leaving approximately BRL 278 million in remaining assessments subject to indemnification claims, all pending at various levels of the administrative or judicial court system.

Wealth management cross-border TEFRA inquiries: In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York ("**USAO EDNY**") and from the SEC, which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 ("**TEFRA**") and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations. In 2018, UBS was informed by the USAO EDNY and the SEC that they have closed their investigations and that they will not take any action.

Puerto Rico 2012 claims: Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain closed-end funds and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012. In 2016, the court denied plaintiffs' motion for class certification. In March 2017, the US Court of Appeals for the First Circuit denied plaintiffs' petition seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification. In August 2017 the district court dismissed the case.

7.5 Material Contracts

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 or Trading Position; Material Adverse Change in Prospects

There has been no significant change in the financial or trading position of UBS AG or UBS AG Group since 31 March 2018, which is the end of the last financial period for which financial information has been published.

There has been no material adverse change in the prospects of UBS AG or UBS AG Group since 31 December 2017.

8. Share Capital

As reflected in its Articles of Association most recently registered with the Commercial Register 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), (ii) no authorized capital and (iii) 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 on Display

- The annual report of UBS Group AG and UBS AG as of 31 December 2016, comprising the introductory section, as well as the sections (1) Operating environment and strategy, (2) Financial and operating performance, (3) Risk, treasury and capital management, (4) Corporate governance, responsibility and compensation, (5) Financial statements (including the "Statutory auditor's report on the audit of the consolidated financial statements" and the "Report of Independent Registered Public Accounting Firm"), (6) Additional regulatory information, and the Appendix;

- The UBS AG standalone financial statements and regulatory information for the year ended 31 December 2016 (including the "Report of the statutory auditor on the financial statements");

- The annual report of UBS Group AG and UBS AG as of 31 December 2017, comprising the introductory section, as well as the sections (1) Operating environment and strategy, (2) Financial and operating performance, (3) Risk, treasury and capital management, (4) Corporate governance, responsibility and compensation, (5) Consolidated financial statements (including the "Statutory auditor's report on the audit of the consolidated financial statements" and the "Report of Independent Registered Public Accounting Firm"), (6) Standalone financial statements, (7) Significant regulated subsidiary and sub-group information, (8) Additional regulatory information, and the Appendix;

- The UBS AG standalone financial statements and regulatory information for the year ended 31 December 2017 (including the "Report of the statutory auditor on the financial statements");

- The UBS Group First Quarter 2018 Report and the UBS AG First Quarter 2018 Report;

- The Articles of Association of UBS AG,

shall be maintained in printed format, for free distribution, at the offices of the Issuer for a period of twelve months after the publication of this document. In addition, the annual and quarterly reports, as well as quarterly result materials of UBS Group AG and UBS AG are published on UBS's website, at www.ubs.com/investors or a successor address. The Articles of Association of UBS AG are also available on UBS's Corporate Governance website, at www.ubs.com/governance.

APPENDIX II

EXTRACT OF
THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF
UBS AG AND ITS SUBSIDIARIES
FOR THE FULL YEAR ENDED 31 DECEMBER 2017

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of UBS AG

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UBS AG and subsidiaries (the Company) as of 31 December 2017 and 2016, and the related consolidated income statements, statements of comprehensive income, changes in equity and cash flows, for each of the three years in the period ended 31 December 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the consolidated financial position of UBS AG and subsidiaries as of December 31, 2017 and 2016, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2017, in conformity with International Financial Reporting Standards, as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), UBS AG and subsidiaries' internal control over financial reporting as of 31 December 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated 8 March 2018, expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's Board of Directors. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Ernst & Young Ltd

Ernst & Young Ltd

We have served as the Company's auditor since 1998.

Basel, 8 March 2018

UBS AG consolidated financial statements

Primary financial statements

Audited |

Income statement

		For the year ended		
CHF million	Note	31.12.17	31.12.16	31.12.15
Interest income	3	14,208	13,782	13,178
Interest expense	3	(7,728)	(7,399)	(6,449)
Net interest income	3	6,480	6,383	6,729
Credit loss (expense) / recovery	11	(128)	(37)	(117)
Net interest income after credit loss expense		6,352	6,346	6,612
Net fee and commission income	4	17,214	16,447	17,184
Net trading income	3	4,974	4,943	5,696
Other income	5	939	685	1,112
Total operating income		29,479	28,421	30,605
Personnel expenses	6	14,673	15,591	15,954
General and administrative expenses	7	8,811	7,690	8,219
Depreciation and impairment of property, equipment and software	14	928	980	918
Amortization and impairment of intangible assets	15	70	91	107
Total operating expenses		24,481	24,352	25,198
Operating profit / (loss) before tax		4,998	4,069	5,407
Tax expense / (benefit)	8	4,077	781	(908)
Net profit / (loss)		921	3,288	6,314
Net profit / (loss) attributable to preferred noteholders		72	78	77
Net profit / (loss) attributable to non-controlling interests		4	4	3
Net profit / (loss) attributable to shareholders		845	3,207	6,235

Statement of comprehensive income

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Comprehensive income attributable to shareholders			
Net profit / (loss)	845	3,207	6,235
Other comprehensive income that may be reclassified to the income statement			
Foreign currency translation			
Foreign currency translation movements, before tax	(753)	251	(174)
Foreign exchange amounts reclassified to the income statement from equity	21	126	(90)
Income tax relating to foreign currency translation movements	196	(84)	(1)
Subtotal foreign currency translation, net of tax	(535)	293	(266)
Financial assets available for sale			
Net unrealized gains / (losses) on financial assets available for sale, before tax	99	240	180
Impairment charges reclassified to the income statement from equity	15	5	1
Realized gains reclassified to the income statement from equity	(206)	(372)	(298)
Realized losses reclassified to the income statement from equity	14	25	45
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	(7)	28	8
Subtotal financial assets available for sale, net of tax	(86)	(73)	(64)
Cash flow hedges			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	45	246	550
Net realized (gains) / losses reclassified to the income statement from equity	(826)	(1,082)	(1,199)
Income tax relating to cash flow hedges	160	170	131
Subtotal cash flow hedges, net of tax	(621)	(666)	(518)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(1,242)	(447)	(848)
Other comprehensive income that will not be reclassified to the income statement			
Defined benefit plans			
Gains / (losses) on defined benefit plans, before tax	299	(876)	322
Income tax relating to defined benefit plans	6	52	(19)
Subtotal defined benefit plans, net of tax	305	(824)	304
Own credit on financial liabilities designated at fair value			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(312)	(120)	
Income tax relating to own credit on financial liabilities designated at fair value	(1)	5	
Subtotal own credit on financial liabilities designated at fair value, net of tax	(313)	(115)	
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(8)	(939)	304
Total other comprehensive income	(1,250)	(1,386)	(545)
Total comprehensive income attributable to shareholders	(404)	1,820	5,690

Table continues on the next page.

Statement of comprehensive income (continued)

Table continued from previous page.

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Comprehensive income attributable to preferred noteholders			
Net profit / (loss)	72	78	77
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	351	271	(59)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	351	271	(59)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	351	271	(59)
Total comprehensive income attributable to preferred noteholders	423	349	18
Comprehensive income attributable to non-controlling interests			
Net profit / (loss)	4	4	3
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	1	0	(2)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	1	0	(2)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	1	0	(2)
Total comprehensive income attributable to non-controlling interests	5	3	1
Total comprehensive income			
Net profit / (loss)	921	3,288	6,314
Other comprehensive income	(898)	(1,115)	(606)
of which: other comprehensive income that may be reclassified to the income statement	*(1,242)*	*(447)*	*(848)*
of which: other comprehensive income that will not be reclassified to the income statement	*344*	*(669)*	*243*
Total comprehensive income	23	2,173	5,709

Balance sheet

CHF million	Note	31.12.17	31.12.16
Assets			
Cash and balances with central banks		87,775	107,767
Due from banks	10, 11	13,693	13,125
Cash collateral on securities borrowed	24	12,393	15,111
Reverse repurchase agreements	24	77,240	66,246
Trading portfolio assets	22	130,807	96,661
of which: assets pledged as collateral that may be sold or repledged by counterparties	*23*	*35,363*	*30,260*
Positive replacement values	12, 22, 24	118,229	158,411
Cash collateral receivables on derivative instruments	24	23,434	26,664
Loans	10, 11	321,718	307,004
Financial assets designated at fair value	22, 24, 25	58,556	65,024
Financial assets available for sale	13, 22	8,665	15,676
Financial assets held to maturity	13	9,166	9,289
Investments in associates	28	1,018	963
Property, equipment and software	14	7,985	8,297
Goodwill and intangible assets	15	6,398	6,556
Deferred tax assets	8	9,783	13,144
Other assets	16	29,505	25,412
Total assets		916,363	935,353
Liabilities			
Due to banks	17	7,533	10,645
Cash collateral on securities lent	24	1,789	2,818
Repurchase agreements	24	15,255	6,612
Trading portfolio liabilities	22	30,463	22,825
Negative replacement values	12, 22, 24	116,134	153,810
Cash collateral payables on derivative instruments	24	30,247	35,472
Due to customers	17	447,141	450,199
Financial liabilities designated at fair value	18, 22, 24	54,202	55,017
Debt issued	19	104,749	78,998
Provisions	20	3,084	4,169
Other liabilities	8, 21	54,990	60,443
Total liabilities		865,588	881,009
Equity			
Share capital		386	386
Share premium		26,966	29,505
Retained earnings		29,102	28,265
Other comprehensive income recognized directly in equity, net of tax		(5,736)	(4,494)
Equity attributable to shareholders		50,718	53,662
Equity attributable to preferred noteholders		0	642
Equity attributable to non-controlling interests		57	40
Total equity		50,775	54,343
Total liabilities and equity		916,363	935,353

Statement of changes in equity

CHF million	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 1 January 2015	**384**	**32,057**	**(37)**	**22,902**
Issuance of share capital	1			
Acquisition of treasury shares			(292)	
Premium on shares issued and warrants exercised		290		
Tax (expense) / benefit		9		
Dividends		(2,914)		(8)
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		35	328	
Total comprehensive income for the year				6,538
of which: net profit / (loss)				*6,235*
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				*304*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation				
Balance as of 31 December 2015	**386**	**29,477**	**0**	**29,433**
Issuance of share capital				
Premium on shares issued and warrants exercised		4		
Tax (expense) / benefit		25		
Dividends				(3,434)
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(2)		(1)
Total comprehensive income for the year				2,267
of which: net profit / (loss)				*3,207*
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				*(824)*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit				*(115)*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation				

Other comprehensive income recognized directly in equity, net of tax[1]	*of which: foreign currency translation*	*of which: financial assets available for sale*	*of which: cash flow hedges*	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(3,199)	*(5,591)*	*236*	*2,156*	**52,108**	**2,013**	**45**	**54,165**
				1			1
				(292)			(292)
				290			290
				9			9
				(2,922)	(77)	(5)	(3,004)
				0	1		1
				364		(1)	363
(848)	*(266)*	*(64)*	*(518)*	5,690	18	1	5,709
				6,235	*77*	*3*	*6,314*
(848)	*(266)*	*(64)*	*(518)*	*(848)*			*(848)*
				304			*304*
				0	*(59)*	*(2)*	*(61)*
(4,047)	*(5,857)*	*172*	*1,638*	**55,248**	**1,954**	**41**	**57,243**
				0			0
				4			4
				25			25
				(3,434)	(78)	(5)	(3,517)
				0	(1,583)		(1,583)
				(3)		0	(2)
(447)	*293*	*(73)*	*(666)*	1,820	349	3	2,173
				3,207	*78*	*4*	*3,288*
(447)	*293*	*(73)*	*(666)*	*(447)*			*(447)*
				(824)			*(824)*
				(115)			*(115)*
				0	*271*	*0*	*271*

Statement of changes in equity (continued)

CHF million	Share capital	Share premium	Treasury shares	Retained earnings
Balance as of 31 December 2016	**386**	**29,505**	**0**	**28,265**
Issuance of share capital				
Premium on shares issued and warrants exercised		6		
Tax (expense) / benefit		16		
Dividends		(2,250)		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(311)[2]		
Total comprehensive income for the year				837
of which: net profit / (loss)				*845*
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				*305*
of which: OCI that will not be reclassified to the income statement, net of tax – own credit				*(313)*
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation				
Balance as of 31 December 2017	386	26,966	0	29,102

1 Excludes defined benefit plans and own credit that are recorded directly in retained earnings. 2 Includes a CHF 307 million reduction related to the transfer of shared services functions in Switzerland from UBS AG to UBS Business Solutions AG, a wholly owned subsidiary of UBS Group AG. Refer to Note 30 for more information.

Other comprehensive income recognized directly in equity, net of tax[1]	*of which: foreign currency translation*	*of which: financial assets available for sale*	*of which: cash flow hedges*	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(4,494)	*(5,564)*	*98*	*972*	53,662	642	40	54,343
				0			0
				6			6
				16			16
				(2,250)	(72)	(4)	(2,327)
				0	(993)		(993)
				(311)		17	(294)
(1,242)	*(535)*	*(86)*	*(621)*	(404)	423	5	23
				845	*72*	*4*	*921*
(1,242)	*(535)*	*(86)*	*(621)*	*(1,242)*			*(1,242)*
				305			*305*
				(313)			*(313)*
				0	*351*	*1*	*352*
(5,736)	*(6,099)*	*12*	*351*	50,718	0	57	50,775

Financial statements

UBS AG shares issued and treasury shares held

As of 31 December 2017, shares issued by UBS AG totaled 3,858,408,466 (31 December 2016: 3,858,408,466 shares).

No treasury shares were held as of 31 December 2017 and as of 31 December 2016.

Conditional share capital

As of 31 December 2017, UBS AG's share capital could have been increased through the issuance of 136,200,312 shares upon exercise of employee options.

Additional conditional capital up to a maximum number of 380,000,000 shares was available as of 31 December 2017 for conversion rights and warrants granted in connection with the issuance of bonds or similar financial instruments.

Statement of cash flows

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Cash flow from / (used in) operating activities			
Net profit / (loss)	921	3,288	6,314
Non-cash items included in net profit and other adjustments:			
Depreciation and impairment of property, equipment and software	928	980	918
Amortization and impairment of intangible assets	70	91	107
Credit loss expense / (recovery)	128	37	117
Share of net profits of associates / joint ventures and impairment of associates	(68)	(106)	(169)
Deferred tax expense / (benefit)	3,248	2	(1,614)
Net loss / (gain) from investing activities	(203)	(1,176)	(934)
Net loss / (gain) from financing activities	2,132	9,647	(1,654)
Other net adjustments	(519)	(300)	3,628
Net change in operating assets and liabilities:			
Due from / to banks	(3,184)	(1,183)	1,768
Cash collateral on securities borrowed and reverse repurchase agreements	(7,654)	7,933	(2,712)
Cash collateral on securities lent and repurchase agreements	7,432	(6,637)	(2,909)
Trading portfolio and replacement values	(21,931)	6,024	6,853
Financial assets designated at fair value	7,316	(60,658)	(1,446)
Cash collateral on derivative instruments	(2,479)	(4,169)	3,285
Loans	(15,411)	3,740	841
Due to customers	(11,187)	33,925	(17,362)
Other assets, provisions and other liabilities	(10,417)	(8,204)	7,516
Income taxes paid, net of refunds	(992)	(649)	(551)
Net cash flow from / (used in) operating activities	(51,872)	(17,413)	1,997
Cash flow from / (used in) investing activities			
Purchase of subsidiaries, associates and intangible assets	(102)	(26)	(13)
Disposal of subsidiaries, associates and intangible assets[1]	336	93	477
Purchase of property, equipment and software	(1,500)	(1,746)	(1,841)
Disposal of property, equipment and software	213	209	547
Purchase of financial assets available for sale	(8,448)	(7,271)	(101,189)
Disposal and redemption of financial assets available for sale	14,917	54,097	93,584
Net (purchase) / redemption of financial assets held to maturity	(77)	(8,996)	
Net cash flow from / (used in) investing activities	5,338	36,359	(8,434)

Table continues on the next page.

Statement of cash flows (continued)

Table continued from previous page.

CHF million	For the year ended 31.12.17	31.12.16	31.12.15
Cash flow from / (used in) financing activities			
Net short-term debt issued / (repaid)	24,141	5,440	(6,404)
Distributions paid on UBS AG shares	(2,250)	(3,434)	(2,626)
Issuance of long-term debt, including financial liabilities designated at fair value	49,506	33,453	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(43,299)	(34,081)	(44,221)
Dividends paid and repayments of preferred notes	(776)	(1,366)	(108)
Net changes in non-controlling interests	(5)	(5)	(5)
Net cash flow from / (used in) financing activities	27,317	6	(5,573)
Total cash flow			
Cash and cash equivalents at the beginning of the year	121,107	102,962	116,715
Net cash flow from / (used in) operating, investing and financing activities	(19,216)	18,952	(12,011)
Effects of exchange rate differences on cash and cash equivalents	264	(807)	(1,742)
Cash and cash equivalents at the end of the year[2]	102,154	121,107	102,962
of which: cash and balances with central banks	87,700	107,715	91,306
of which: due from banks	12,406	11,927	10,732
of which: money market paper[3]	2,049	1,465	924
Additional information			
Net cash flow from / (used in) operating activities includes:			
Interest received in cash	12,457	12,223	11,144
Interest paid in cash	6,627	6,141	5,267
Dividends on equity investments, investment funds and associates received in cash[4]	1,790	1,595	2,120

1 Includes dividends received from associates. 2 CHF 2,434 million, CHF 2,662 million and CHF 3,963 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 23 for more information. 3 Money market paper is included in the balance sheet under Trading portfolio assets (31 December 2017: CHF 131 million, 31 December 2016: CHF 75 million, 31 December 2015: CHF 795 million), Financial assets available for sale (31 December 2017: CHF 23 million, 31 December 2016: CHF 430 million, 31 December 2015: CHF 129 million) and Financial assets designated at fair value (31 December 2017: CHF 1,894 million, 31 December 2016: CHF 959 million, 31 December 2015: CHF 0 million). 4 Includes dividends received from associates (2017: CHF 51 million, 2016: CHF 50 million, 2015: CHF 114 million) reported within Cash flow from / (used in) investing activities.

Changes in liabilities arising from financing activities

CHF million	Debt issued	*of which: short-term*	*of which: long-term*	Financial liabilities designated at fair value	Funding from UBS Group AG and its subsidiaries[2]	Total
Balance as of 1 January 2017	78,998	*26,178*	*52,820*	55,017	24,632	158,647
Cash flows	25,534	*24,141*	*1,393*	(5,556)	10,371	30,348
Non-cash changes	217	*634*	*(417)*	4,740	(254)	4,704
of which: foreign currency translation	*561*	*634*	*(73)*	*593*	*(138)*	*1,016*
of which: fair value changes				*4,147*		*4,147*
of which: other	*(344)[1]*	*0*	*(344)[1]*	*0*	*(115)[1]*	*(459)*
Balance as of 31 December 2017	104,749	*50,953*	*53,796*	54,202	34,749	193,700

1 Includes the effect of fair value hedges on long-term debt issued. Refer to Note 1a item k and Note 19 for more information. 2 Represents Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG that is reported in the balance sheet line Due to customers.

Notes to the UBS AG consolidated financial statements

Note 1 Summary of significant accounting policies

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 8 March 2018, 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 (IASB), and are presented in Swiss francs (CHF), which is also the functional currency of UBS AG's Head Office and its Swiss-based operations.

Disclosures provided in the "Risk, treasury and capital management" section of this report that are marked as audited 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.

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 the estimates and assumptions, which encompass historical experience, expectations of the future and other pertinent factors, to determine their continuing relevance based on current conditions and it updates them as necessary. Changes in those estimates and assumptions may have a significant impact on the Financial Statements. Further, actual results may differ significantly from UBS AG's estimates, which could result in significant loss to it, beyond what it anticipated or provided for.

The following areas contain estimation uncertainty or require critical judgment and have a significant effect on the amounts recognized in the Financial Statements:

- fair value of financial instruments (refer to item 3f in this Note and to Note 22)
- allowances and provisions for credit losses (refer to item 3g in this Note and to Note 11)
- pension and other post-employment benefit plans (refer to item 7 in this Note and to Note 26)
- income taxes (refer to item 8 in this Note and to Note 8)
- goodwill (refer to item 11 in this Note and to Note 15)
- provisions and contingent liabilities (refer to item 12 in this Note and to Note 20)
- consolidation of structured entities (refer to item 1 in this Note and to Note 28).

1) Consolidation

a. Consolidation principles

The Financial Statements comprise the financial statements of UBS AG and its subsidiaries, presented as a single economic entity, whereby intercompany transactions and balances have been eliminated. UBS AG consolidates all entities that it controls, including controlled 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.

Where an entity is governed by voting rights, control is generally indicated by a direct shareholding of more than one-half of the voting rights.

Note 1 Summary of significant accounting policies (continued)

In other cases, the assessment of control is more complex and requires greater use of judgment. Where UBS AG has an interest in an entity that absorbs variability, UBS AG considers whether it has power over the relevant activities of the entity that allows it to affect the variability of its returns. Consideration is given to all facts and circumstances to determine whether UBS AG has power over another entity; that is, the current ability to direct the relevant activities of an entity when decisions about those activities need to be made. Factors such as the purpose and design of the entity, rights held through contractual arrangements, such as call rights, put rights or liquidation rights, as well as potential decision-making rights are all considered in this assessment. Where UBS AG has power over the relevant activities, a further assessment is made to determine whether, through that power, it has the ability to affect its own returns by assessing whether power is held in a principal or agent capacity. Consideration is given to (i) the scope of decision-making authority, (ii) rights held by other parties, including removal or other participating rights, and (iii) exposure to variability, including remuneration, relative to total variability of the entity as well as whether that exposure is different from that of other investors. If, after review of these factors, UBS AG concludes that it can exercise its power to affect its own returns, the entity is consolidated.

Subsidiaries, including SEs, are consolidated from the date when control is obtained and are 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 of the elements required to establish that control is present.

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

b. Structured entities

UBS AG sponsors the formation of SEs and interacts with non-sponsored SEs for a variety of reasons, including allowing clients to obtain or be exposed to particular risk profiles, to provide funding or to sell or purchase credit risk. An SE is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such entities generally have a narrow and well-defined objective and include those historically referred to as special purpose entities, as well as some investment funds. UBS AG assesses whether an entity is an SE by considering the nature of the activities of the entity as well as the substance of voting or similar rights afforded to other parties, including investors and independent boards or directors. UBS AG considers rights such as the ability to liquidate the entity or remove the decision maker to be similar to voting rights when the holder has the substantive ability to exercise such rights without cause. In the absence of such rights or in cases where the existence of such rights cannot be fully established, the entity is considered to be an SE.

The classes of SEs with which UBS AG is involved include:

– *Securitization structured entities* are established to issue securities to investors that are backed by assets held by the SE and whereby (i) significant credit risk associated with the securitized exposures has been transferred to third parties and (ii) there is more than one risk position or tranche issued by the securitization vehicle in line with the Basel III securitization definition. All securitization entities are classified as SEs.
– *Client investment structured entities* are established predominantly for clients to invest in specific assets or risk exposures through purchasing notes issued by the SE, predominantly on a fixed-term basis. The SE may source assets via a transfer from UBS AG or through an external market transaction. In some cases, UBS AG may enter into derivatives with the SE to either align the cash flows of the entity with the investor's intended investment objective or to introduce other desired risk exposures. In certain cases, UBS AG may have interests in a third-party-sponsored SE to hedge specific risks or participate in asset-backed financing.
– *Investment fund structured entities* have a collective investment objective, are managed by an investment manager and are either passively managed, so that any decision making does not have a substantive effect on variability, or are actively managed and investors or their governing bodies do not have substantive voting or similar rights. UBS AG creates and sponsors a large number of funds in which it may have an interest through the receipt of variable management fees and / or a direct investment. In addition, UBS AG has interests in a number of funds created and sponsored by third parties, including exchange-traded funds and hedge funds, to hedge issued structured products.

When UBS AG does not consolidate an SE, but has an interest in an SE or has sponsored an SE, disclosures are provided on the nature of these interests and sponsorship activities.

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. As the nature and extent of UBS AG's involvement are unique to each entity, there is no uniform consolidation outcome by entity. Certain entities within a class may be consolidated while others may not.

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

2) Segment reporting

As of 31 December 2017, UBS AG's businesses were organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which were supported by Corporate Center. The five business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center, reflect the management structure of UBS AG. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Financial information about the five business divisions and Corporate Center (with its units: Services, Group Asset and Liability Management (Group ALM), Non-core and Legacy Portfolio) is presented separately in internal reporting to management.

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. Commissions are credited to the reportable segments based on the corresponding client relationship. 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. Net interest income is generally allocated to the reportable segments based on their balance sheet positions. Interest income earned from managing UBS AG's consolidated equity is allocated to the reportable segments based on average attributed equity. Assets and liabilities of the reportable segments are funded through and invested with Corporate Center – Group ALM, 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 management. Certain assets managed centrally by Corporate Center – Services and Corporate Center – Group ALM may be allocated to other segments on a basis different to that on which the corresponding costs or revenues are allocated. For example, certain assets that are reported in Corporate Center – Services or Corporate Center – Group ALM may be retained on the balance sheet of these components of Corporate Center notwithstanding that the costs or revenues associated with these assets may be entirely or partly allocated to the segments. Similarly, certain assets are reported in the business divisions, whereas the corresponding costs or revenues are entirely or partly allocated to Corporate Center – Services and Corporate Center – Group ALM.

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

→ **Refer to Notes 1c and 2 for more information**

3) Financial instruments

a. Recognition

UBS AG recognizes financial instruments when it becomes a party to the contractual provisions of the instrument. UBS AG applies settlement date accounting to all regular way purchases and sales of financial instruments.

In transactions in which UBS AG acts as a transferee, to the extent that the transfer of a financial asset does not qualify for derecognition by the transferor, UBS AG does not recognize the transferred asset as its asset.

UBS AG also acts in a fiduciary capacity, which results in the holding or placing of assets on behalf of individuals, trusts, retirement benefit plans and other institutions. Unless the recognition criteria are satisfied, these assets are not recognized on UBS AG's balance sheet. Consequently, the related income is excluded from these 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 the client cash balances.

b. Classification, measurement and presentation

Upon initial recognition, UBS records financial instruments at fair value plus, for financial instruments not measured at fair value through profit or loss, directly attributable transaction costs. After initial recognition, UBS AG classifies, measures and presents its financial assets and liabilities in accordance with IAS 39, *Financial Instruments: Recognition and Measurement* as described in the following table.

→ **Refer to Note 25a for an overview of financial assets and liabilities by IAS 39 category**

→ **Refer to the balance sheet for references to Notes that provide information on the composition of individual financial asset and liability categories**

Note 1 Summary of significant accounting policies (continued)

<table>
<tr><th>Financial assets classification</th><th>Significant items included</th><th>Measurement and presentation</th></tr>
<tr><td>Held for trading</td><td>All derivatives with a positive replacement value, except those that are designated and effective hedging instruments.

Any other financial asset acquired principally for the purpose of selling or repurchasing in the near term, or 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), equity instruments, and assets held under unit-linked investment contracts.</td><td rowspan="2">Measured at fair value with changes recognized in profit or loss.

Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in Net trading income, except interest and dividend income on instruments other than derivatives (refer to item 3c in this Note), interest on derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain short duration foreign exchange contracts, which are reported in Net interest income.

Derivative assets are generally presented as Positive replacement values.

Bifurcated embedded derivatives are measured at fair value, but presented on the same balance sheet line as the host contract measured at amortized cost.

The presentation of fair value changes on derivatives that are designated and effective hedging instruments differs depending on the type of hedge relationship (refer to item 3k in this Note for more information).

Financial assets held for trading (other than derivatives) are presented as Trading portfolio assets.

Financial assets designated at fair value through profit or loss are presented as Financial assets designated at fair value.</td></tr>
<tr><td>Designated at fair value through profit or loss</td><td>A financial asset may be designated at fair value through profit or loss only upon initial recognition and this designation is irrevocable.

The fair value option can be applied only if one of the following criteria is met:
– the financial instrument is a hybrid instrument that includes a substantive embedded derivative;
– the financial instrument is part of a portfolio that is risk managed on a fair value basis and reported to senior management on that basis; or
– the application of the fair value option eliminates or significantly reduces an accounting mismatch that would otherwise arise.

UBS AG designated at fair value through profit or loss the following financial assets:
– Certain structured loans, reverse repurchase and securities borrowing agreements that are managed on a fair value basis.
– Loans that are hedged predominantly with credit derivatives. These instruments are designated at fair value to eliminate an accounting mismatch.
– Certain debt securities held as high-quality liquid assets (HQLA) and managed by Corporate Center – Group ALM on a fair value basis.
– Assets held to hedge delivery obligations related to cash-settled employee compensation plans. These assets are designated at fair value in order to eliminate an accounting mismatch that would otherwise arise due to the liability being measured on a fair value basis.</td></tr>
<tr><td>Loans and receivables (amortized cost)</td><td>Non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not assets for which UBS AG may not recover substantially all of its initial net investment for reasons other than credit deterioration. This classification includes:
– cash and balances with central banks
– cash collateral receivables on derivative instruments
– residential and commercial mortgages
– secured loans, including reverse repurchase agreements, receivables under stock borrowing and Lombard loans, and unsecured loans
– certain securities held within Corporate Center – Non-core and Legacy Portfolio
– trade and lease receivables.</td><td>Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).

Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments are deferred and amortized over the life of the loan using the effective interest rate method.

Loans and receivables are presented on the balance sheet primarily as Cash and balances with central banks, Due from banks, Loans, Cash collateral on securities borrowed, Reverse repurchase agreements and Cash collateral receivables on derivative instruments.

Amounts arising from exchange-traded derivatives (ETD) and certain over-the-counter (OTC) derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j in this Note) are presented within Cash collateral receivables on derivative instruments.</td></tr>
</table>

Note 1 Summary of significant accounting policies (continued)

Financial assets classification	Significant items included	Measurement and presentation
Available for sale	Financial assets classified as available for sale are non-derivative financial assets that are not classified as held for trading, designated at fair value through profit or loss, or loans and receivables. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM, certain asset-backed securities managed by Corporate Center – Group ALM, as well as investment fund holdings and strategic and commercial equity investments.	Measured at fair value with unrealized gains and losses reported in *Other comprehensive income*, net of applicable income taxes, until such investments are sold, collected or otherwise disposed of, or until any such investment is determined to be impaired (refer to item 3i in this Note). Upon disposal, any accumulated balances in *Other comprehensive income* are reclassified to the income statement and reported within *Other income.* Interest and dividend income are recognized in the income statement in accordance with item 3c in this Note. Refer to item 13 in this Note for information on the treatment of foreign exchange translation gains and losses.
Held to maturity	Non-derivative financial assets with fixed or determinable payments and fixed maturities for which UBS AG has the positive intention and ability to hold to maturity. This classification mainly includes debt securities held as HQLA and managed by Corporate Center – Group ALM.	Measured at amortized cost using the effective interest rate method less allowances for credit losses (refer to items 3c and 3g in this Note).

Financial liabilities classification	Significant items included	Measurement and presentation
Held for trading	– 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). – All derivatives with a negative replacement value, except those that are designated and effective hedging instruments.	Measurement of trading liabilities follows the same principles as for held for trading assets, and measurement of liabilities designated at fair value through profit or loss follows the same principles as for assets designated at fair value through profit or loss. Presented as *Trading portfolio liabilities* and *Financial liabilities designated at fair value,* respectively. Derivative liabilities are generally presented as *Negative replacement values.* Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract measured at amortized cost. Derivatives that are designated and effective hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to item 3k in this Note for more information). Amounts due under unit-linked investment contracts are presented as *Other liabilities.*
Designated at fair value through profit or loss	UBS AG designated at fair value through profit or loss 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. – Loan commitments that are hedged predominantly with credit derivatives and hence eliminate an accounting mismatch.	
Amortized cost	This classification includes: – Demand and time deposits, retail savings / deposits, cash collateral on securities lent, non-structured fixed-rate bonds, subordinated debt, certificates of deposit, covered bonds. – Cash collateral payables on derivative instruments.	Measured at amortized cost using the effective interest rate method. Amortized cost liabilities are presented on the balance sheet primarily as *Due to banks, Due to customers, Cash collateral on securities lent, Repurchase agreements, Cash collateral payables on derivative instruments* and *Debt issued.* Amounts arising from ETD and certain OTC derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to items 3d and 3j of this Note) are presented within *Cash collateral payables on derivative instruments.*

Note 1 Summary of significant accounting policies (continued)

c. Interest income and expense

Interest income or expense is determined by reference to a financial instrument's amortized-cost basis calculated using the effective interest rate (EIR) method. UBS AG also uses this method to determine the interest income and expense for financial instruments (excluding derivatives) measured at fair value through profit or loss. Interest income or expense on financial instruments measured at amortized cost, debt instruments measured at fair value through profit or loss and available-for-sale financial assets are presented within *Net interest income*. In addition, *Net interest income* includes the interest income and expense on derivatives designated as hedging instruments in effective hedge relationships and forward points on certain short duration foreign exchange contracts.

Upfront fees, including loan commitment fees 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 classified as available for sale. Such fees and costs are therefore 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.*

Interest income on financial assets, excluding derivatives, is included in *Interest income* when positive and in *Interest expense* when negative, because negative interest income arising on a financial asset does not meet the definition of revenue. 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*. Dividend income on all financial assets is included in *Interest income.*

→ **Refer to item 3k in this Note and Note 3 for more information**

d. Derecognition

Financial assets

UBS AG derecognizes a financial asset, or a portion of a financial asset, from its balance sheet where the contractual rights to cash flows from the asset have expired, or have been transferred, usually by sale, thus exposing the purchaser to either 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.

A financial asset is considered to have been transferred when UBS AG (i) transfers the contractual rights to receive the cash flows of the financial asset or (ii) retains the contractual rights to receive the cash flows of that asset, but assumes a contractual obligation to pay the cash flows to one or more entities.

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 right to the cash flows of the pledged assets, as may be evidenced, for example, by the counterparty's right to sell or repledge the assets. Where the counterparty to the pledged financial assets has not received the contractual right to the cash flows, UBS AG does not consider this to be a transfer for the purposes of derecognition.

UBS AG enters into certain transactions where it transfers financial assets recognized on its balance sheet but retains either all or a portion of the risks and rewards of the transferred financial assets. If all or substantially all of the risks and rewards are retained, the transferred financial assets are not derecognized from the balance sheet; for example, securities lending and repurchase transactions or where financial assets are sold to a third party with a total return swap resulting in UBS AG retaining all or substantially all of the risks and rewards of the transferred assets. These types of transactions are accounted for as secured financing transactions as described in item 3e of this Note.

In transactions where substantially all of the risks and rewards of ownership of a financial asset are neither retained nor transferred, UBS AG derecognizes the financial asset if control over the asset is surrendered, and the rights and obligations retained following the transfer are recognized separately as assets and liabilities, respectively. 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 options contracts cleared through central clearing counterparties are considered to be settled on a daily basis through the daily margining process, as the payment or receipt of the variation margin represents legal or economic settlement of a derivative contract, which results in derecognition of the associated positive and negative replacement values.

→ **Refer to Note 24 for more information**

Financial liabilities

UBS AG derecognizes a financial liability from its balance sheet when it is extinguished, that is, when the obligation specified in the contract is discharged, canceled or has expired. 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, such an exchange or modification results in derecognition of the original liability and the recognition of a new liability with any difference in the respective carrying amounts being recognized in the income statement.

e. Securities borrowing / lending and repurchase / reverse repurchase transactions

Securities borrowing / lending and repurchase / reverse repurchase transactions are generally entered into on a collateralized basis. In such transactions, UBS AG typically borrows or lends equity and debt securities in exchange for securities or cash collateral.

These transactions are treated as collateralized financing transactions where the securities transferred / received are not derecognized or recognized on balance sheet. Securities transferred / received with the right to resell or repledge are disclosed separately.

In reverse repurchase and securities borrowing agreements, the cash delivered is derecognized and a corresponding receivable, including accrued interest, is recorded in the balance sheet lines *Reverse repurchase agreements* and *Cash collateral on securities borrowed,* respectively, representing UBS AG's right to receive the cash. Similarly, in repurchase and securities lending agreements, the cash received is recognized and a corresponding obligation, including accrued interest, is recorded in the balance sheet lines *Repurchase agreements* and *Cash collateral on securities lent,* respectively. Additionally, the sale of securities that is settled by delivering securities received in reverse repurchase or securities borrowing transactions triggers the recognition of a trading liability.

Repurchase and reverse repurchase transactions with the same counterparty, maturity, currency and central securities depository (CSD) are generally presented net, subject to meeting the netting requirements described in item 3j of this Note.

→ **Refer to Notes 23 and 24 for more information**

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.

All financial instruments measured at fair value are categorized into one of three fair value hierarchy levels. Level 1 financial instruments are those for which fair values can be derived from quoted prices in active markets. Level 2 financial instruments are those for which fair values must be derived using valuation techniques for which all significant inputs are, or are based on, observable market data. Level 3 financial instruments are those for which fair values can only be derived on the basis of valuation techniques for which significant inputs are not based on observable market data.

Critical accounting estimates and judgments

The use of valuation techniques, modeling assumptions and estimates of unobservable market inputs require 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 require a higher level of judgment to calculate a fair value than those entirely based on observable inputs.

Valuation techniques, including models, that are used to determine fair values are periodically reviewed and validated by qualified personnel, independent of those who created them. Models are calibrated to ensure that outputs reflect observable market data, to the extent possible. Also, models prioritize the use of observable inputs, when available, over unobservable inputs. Judgment is required in selecting appropriate models as well as inputs for which observable data is less readily or not available.

UBS AG's valuation techniques may not fully reflect all the factors relevant to the fair value of financial instruments held. Valuations are therefore adjusted, where appropriate, to allow for additional factors, including credit risk, model risk and liquidity risk.

UBS AG's governance framework over fair value measurement is described in Note 22b.

The level of subjectivity and the degree of management judgment involved in the development of estimates and the selection of assumptions are more significant for instruments valued using specialized and sophisticated models and where some or all of the parameter inputs are less observable (Level 3 instruments) and may require adjustment to reflect factors that market participants would consider in estimating fair value, such as close-out costs, credit exposure, model-driven valuation uncertainty, funding costs and benefits, trading restrictions and other factors, which are presented in Note 22d. 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 22g.

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

Note 1 Summary of significant accounting policies (continued)

g. Allowances and provisions for credit losses

A claim is impaired and an allowance or provision for credit losses is recognized when objective evidence demonstrates that a loss event has occurred after the initial recognition and that the loss event has an impact on the future cash flows that can be reliably estimated (incurred loss approach). UBS AG considers a claim to be impaired if it will be unable to collect all amounts due on it based on the original contractual terms due to credit deterioration of the issuer or counterparty. A claim can be a loan or receivable carried at amortized cost, or a commitment, such as a letter of credit, a guarantee or a similar instrument.

An allowance for credit losses is reported as a decrease in the carrying value of a financial asset. For an off-balance sheet item, such as a commitment, a provision for credit loss is reported in *Provisions*. Changes to allowances and provisions for credit losses are recognized in *Credit loss expense / recovery*.

→ **Refer to Notes 10 and 11 for more information**

Critical accounting estimates and judgments

Allowances and provisions for credit losses are evaluated at both a counterparty-specific level and collectively. Judgment is used in making assumptions about the timing and amount of impairment losses.

Counterparty-specific allowances and provisions

Loans are evaluated individually for impairment if objective evidence indicates that a loan may be impaired. Individual credit exposures are evaluated on the basis of the borrower's overall financial condition, resources and payment record, the prospects of support from contractual guarantors and, where applicable, the realizable value of any collateral. The impairment loss for a loan is the excess of the carrying value of the financial asset over the estimated recoverable amount. The estimated recoverable amount is the present value, calculated using the loan's original effective interest rate, of expected future cash flows, including amounts that may result from restructuring or the liquidation of collateral. If a loan has a variable interest rate, the discount rate for calculating the recoverable amount is the current effective interest rate. Upon impairment, interest income is accrued by applying the original effective interest rate to the impaired carrying value of the loan.

All impaired loans are reviewed and analyzed at least annually. Any subsequent changes to the amounts and timing of the expected future cash flows compared with prior estimates result in a change in the allowance for credit losses and are charged or credited to *Credit loss expense / recovery*. An allowance for impairment is reversed only when the credit quality has improved to such an extent that there is reasonable assurance of timely collection of principal and interest in accordance with the original contractual terms of the instrument, or the equivalent value thereof. A write-off is made when all or part of a financial asset is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are credited to *Credit loss expense / recovery*.

Collective allowances and provisions

Collective allowances and provisions are calculated for portfolios with similar credit risk characteristics, taking into account historical loss experience and current conditions. The methodology and assumptions used are reviewed regularly to reduce any differences between estimated and actual loss experience. For all of its portfolios, UBS AG also assesses whether there have been any unforeseen developments that might result in impairments that are not immediately observable at a counterparty level. To determine whether an event-driven collective allowance for credit losses is required, UBS AG considers global economic drivers to assess the most vulnerable countries and industries. As the allowance cannot be allocated to individual loans, the loans are not considered to be impaired and interest is accrued on each loan according to its contractual terms. If objective evidence becomes available that indicates that an individual financial asset is impaired, it is removed from the group of financial assets assessed for impairment on a collective basis and is assessed separately as counterparty-specific.

h. Restructured loans

A renegotiated or restructured loan is a loan for which the terms have been modified or for which additional collateral has been requested that was not contemplated in the original contract.

Typical key features of terms and conditions granted through restructuring to avoid default include special interest rates, postponement of interest or principal payments, debt / equity swaps, modification of the schedule of repayments, subordination or amendment of loan maturity. There is no change in the EIR following a renegotiation.

If a loan is restructured with preferential conditions (i.e., new or modified terms and conditions are agreed upon that do not meet the normal market criteria for the quality of the obligor and the type of loan), it is classified as defaulted. It will remain so until the loan is collected, written off or non-preferential conditions are granted that supersede the preferential conditions.

Concessions granted where there is no evidence of financial difficulty, or where any changes to terms and conditions are within UBS AG's usual risk appetite, are not deemed restructured.

A restructuring of a loan could lead to a fundamental change in the terms, resulting in the original loan being derecognized and a new loan being recognized.

If a loan is derecognized in these circumstances, the new loan is measured at fair value at initial recognition. Any allowance taken to date against the original loan is derecognized and is not attributed to the new loan. Consequently, the new loan is assessed for impairment on an individual basis. If the loan is not impaired, the loan is included within the general collective loan assessment for the purpose of measuring credit losses.

i. Impairment of financial assets classified as available for sale

At each balance sheet date, UBS AG assesses whether indicators of impairment are present. Available-for-sale debt instruments are impaired when there is objective evidence, using the same criteria described in item 3g, that, as a result of one or more events that occurred after the initial recognition of the asset, the estimated future cash flows have decreased.

Objective evidence that there has been an impairment of an available-for-sale equity instrument is a significant or prolonged decline in the fair value of the asset. UBS AG uses a rebuttable presumption that such instruments are impaired where there has been a decline in fair value of more than 20% below its original cost or fair value has been below original cost for more than six months.

To the extent a financial asset classified as available for sale is determined to be impaired, the related cumulative net unrealized loss previously recognized in *Other comprehensive income* is reclassified to the income statement within *Other income*. For equity instruments, any further loss is recognized directly in the income statement, whereas for debt instruments, any further loss is recognized in the income statement only if there is additional objective evidence of impairment. After the recognition of an impairment on a financial asset classified as available for sale, increases in the fair value of equity instruments are reported in *Other comprehensive income.* For debt instruments, such increases in the fair value, up to amortized cost in the transaction currency, are recognized in *Other income,* provided that the fair value increase is related to an event occurring after the impairment loss was recorded. Increases in excess of that amount are reported in *Other comprehensive income*.

j. Netting

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) 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 24 for more information**

k. Hedge accounting

UBS AG uses derivative and non-derivative instruments to manage exposures to interest rate and foreign currency risks, including exposures arising from forecast transactions. Qualifying instruments may be designated as hedging instruments in (i) hedges of the change in fair value of recognized assets or liabilities (fair value hedges), (ii) hedges of the variability in future cash flows attributable to a recognized asset or liability or highly probable forecast transactions (cash flow hedges) or (iii) hedges of a net investment in a foreign operation (net investment hedges).

Note 1 Summary of significant accounting policies (continued)

At the time a financial instrument is designated in a hedge relationship, UBS AG formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction and the methods that will be used to assess the effectiveness of the hedging relationship. Accordingly, UBS AG assesses, both at the inception of the hedge and on an ongoing basis, whether the hedging instruments, primarily derivatives, have been "highly effective" in offsetting changes in the fair value or cash flows associated with the designated risk of the hedged items. A hedge is considered highly effective if the following criteria are met: (i) at inception of the hedge and throughout its life, the hedge is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk and (ii) actual results of the hedge are within a range of 80–125%. In the case of hedging forecast transactions, the transaction must have a high probability of occurring and must present an exposure to variations in cash flows that could ultimately affect the reported net profit or loss. UBS AG discontinues hedge accounting when (i) it determines that a hedging instrument is not, or has ceased to be, highly effective as a hedge, (ii) the derivative expires or is sold, terminated or exercised, (iii) the hedged item matures, is sold or repaid or (iv) forecast transactions are no longer deemed highly probable. UBS AG may also discontinue hedge accounting voluntarily.

Hedge ineffectiveness represents the amount by which the changes in the fair value of the hedging instrument differ from changes in the fair value of the hedged item attributable to the hedged risk, or the amount by which changes in the present value of future cash flows of the hedging instrument exceed changes in the present value of expected cash flows of the hedged item. Such ineffectiveness is recorded in current period earnings in *Net trading income*.

Interest from derivatives designated as hedging instruments in effective fair value hedge relationships is presented within *Interest income from loans and deposits* and *Interest expense on debt issued*, within *Net interest income*. Interest from derivatives designated as hedging instruments in effective cash flow hedge relationships that is reclassified from other comprehensive income when the hedged transaction affects profit or loss is presented within *Interest income from derivative instruments designated as cash flow hedges*.

→ **Refer to Note 3 for more information**

Fair value hedges

For qualifying fair value hedges, the change in the fair value of the hedging instrument is recognized in the income statement along with the change in the fair value of the hedged item that is attributable to the hedged risk. In fair value hedges of interest rate risk, the fair value change of the hedged item attributable to the hedged risk is reflected as an adjustment to the carrying value of the hedged item. If the hedge accounting relationship is terminated for reasons other than the derecognition of the hedged item, the adjustment to the carrying value is amortized to the income statement over the remaining term to maturity of the hedged item using the effective interest rate method. For a portfolio hedge of interest rate risk, the equivalent change in fair value is reflected within *Other assets* or *Other liabilities*. If the portfolio hedge relationship is terminated for reasons other than the derecognition of the hedged item, the amount included in *Other assets* or *Other liabilities* is amortized to the income statement over the remaining term to maturity of the hedged items using the straight-line method.

Cash flow hedges

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*. When the hedged forecast cash flows affect profit or loss, the associated gains or losses on the hedging derivatives are reclassified from *Equity* to the income statement.

If a cash flow hedge of forecast transactions is no longer considered effective, or if the hedge relationship is terminated, the cumulative gains or losses on the hedging derivatives previously reported in *Equity* remain there until the committed or forecast transactions occur and affect profit or loss. If the forecast transactions are no longer expected to occur, the deferred gains or losses are reclassified immediately to the income statement.

Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized directly in *Equity* (and presented in the statement of changes in equity and statement of comprehensive income under *Foreign currency translation*), 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 the income statement.

Economic hedges that do not qualify for hedge accounting

Derivative instruments that are transacted as economic hedges, but do not qualify for hedge accounting, are treated in the same way as derivative instruments used for trading purposes (i.e., realized and unrealized gains and losses are recognized in *Net trading income*), except for the forward points on certain short duration foreign exchange contracts, which are reported in *Net interest income*.

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

l. Embedded derivatives

Derivatives may be embedded in other financial instruments (host contracts). For example, they could be represented by the conversion feature embedded in a convertible bond. Such hybrid instruments arise predominantly from the issuance of certain structured debt instruments. An embedded derivative is generally required to be separated from the host contract and accounted for as a standalone derivative instrument at fair value through profit or loss if (i) the host contract is not carried at fair value with changes in fair value reported in the income statement, (ii) the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract and (iii) the terms of the embedded derivative would meet the definition of a standalone derivative, were they contained in a separate contract.

Typically, UBS AG applies the fair value option to hybrid instruments (refer to item 3b in this Note for more information), in which case bifurcation of an embedded derivative component is not required.

m. Financial liabilities

Debt issued

Debt issued is carried at amortized cost, including contingent capital instruments that contain contractual provisions under which the principal amounts would be written down upon either a specified CET1 ratio breach or a determination by 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), such mechanism does not form part of the contractual terms and, therefore, also does not affect the amortized cost accounting treatment applied to these instruments. If the debt were to be written down or converted into equity in a future period, this would result in the full or partial derecognition of the financial liabilities, with the difference between the carrying value of the debt written down or converted into equity and the fair value of any equity shares issued recognized in the income statement.

In cases where, as part of UBS AG's risk management activity, fair value hedge accounting is applied to fixed-rate debt instruments carried at amortized cost, their carrying amount is adjusted for changes in fair value related to the hedged exposure. Refer to item 3k for more information on hedge accounting.

Obligations of UBS AG arising from funding it has received from UBS Group AG or its subsidiaries, which are not within the UBS AG scope of consolidation, are presented as *Due to customers*.

Debt issued and subsequently repurchased in relation to market-making or other activities is treated as redeemed. A gain or loss on redemption (depending on whether the repurchase price of the bond is lower or higher than its carrying value) is recorded in *Other income*. A subsequent sale of own bonds in the market is treated as a reissuance of debt.

Financial liabilities designated at fair value

UBS AG uses the fair value option to designate certain issued debt instruments as financial liabilities designated 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 item 3b in this Note for more information).

n. Own credit

From 1 January 2016 onward, 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* and will not be reclassified to the income statement in future periods.

o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS AG at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS AG once the commitments are communicated to the beneficiary or which are revocable only due to automatic cancelation upon deterioration in a borrower's creditworthiness are considered irrevocable and 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) *other loan commitments*. Other loan commitments are not recorded on the balance sheet, but a provision is recognized through profit or loss if it is probable that a loss has been incurred and a reliable estimate of the amount of the obligation can be made. Any change in the liability relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is classified as a (i) *trading asset*, consistent with the associated *derivative loan commitment*, (ii) *financial asset designated at fair value through profit or loss*, consistent with the *loan commitment designated at fair value through profit or loss* or as a (iii) *loan*, when the associated loan commitment is accounted for as *other loan commitment*.

Note 1 Summary of significant accounting policies (continued)

p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer 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. UBS AG issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss.

Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of the amount initially recognized less cumulative amortization and, to the extent a payment under the guarantee has become probable, the present value of the expected payment. Any change in the liability relating to probable expected payments resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

4) Fee income

UBS AG earns fee income from a diverse range of services it provides to its clients. Fee income can be divided into two broad categories: (i) fees earned from services that are provided over a certain period of time, such as portfolio management and advisory fees, and (ii) fees earned from providing transaction-type services, such as underwriting fees, corporate finance fees and brokerage fees.

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period, with the exception of performance-linked fees or fee components with specific performance criteria. Such fees are recognized when, as of the reporting date, the performance benchmark has been met and when collectibility is reasonably assured.

Fees earned from providing transaction-type services are recognized when the service has been completed and the fee is fixed or determinable, i.e., not subject to refund or adjustment.

Fee income generated from providing a service that does not result in the recognition of a financial instrument is presented within *Net fee and commission income.* Fees generated from the acquisition, issue or disposal of a financial instrument are presented in the income statement in line with the balance sheet classification of that financial instrument.

→ **Refer to Note 4 for more information**

5) Cash and cash equivalents

For the purposes 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 with central and other banks.

6) Share-based and other deferred 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. UBS AG recognizes the fair value of awards granted to its employees. These awards are generally subject to conditions that require employees to complete a specified period of service and, for performance shares, to satisfy specified performance conditions. Compensation expense is recognized, on a per tranche basis, over the service period based on an estimate of the number of instruments expected to vest and is adjusted to reflect actual outcomes. 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 retirement eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. Such awards may remain forfeitable until the legal vesting date if certain non-vesting conditions are not met. For equity-settled awards, forfeiture events resulting from breach of a non-vesting condition do not result in an adjustment to expense.

UBS AG has no obligation to settle the awards and therefore awards over UBS Group AG shares are classified as equity-settled share-based payment transactions. Compensation expense is measured by reference to the fair value of UBS Group AG equity instruments on the date of grant adjusted, when relevant, to take into account the terms and conditions inherent in the award, including dividend rights, transfer restrictions in effect beyond the vesting date, and non-vesting conditions. Fair value is determined at the date of grant and is not remeasured unless its terms are modified such that the fair value immediately after modification exceeds the fair value immediately prior to modification. 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.

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

Other compensation plans
The employees of UBS AG are granted deferred compensation plans that are settled in cash or financial instruments other than UBS AG equity, the amount of which may be fixed or may vary based on the achievement of specified performance conditions or the value of specified underlying assets. Compensation expense is recognized over the period that the employee provides services 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 retirement eligible or who have met certain age and length-of-service criteria, the services are presumed to have been received and compensation expense is recognized immediately on, or prior to, the date of grant. The amount recognized is 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**

7) Pension and other 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**

Defined benefit pension plans
Defined benefit pension 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 assets at the balance sheet date with changes resulting from remeasurements recorded immediately in *Other comprehensive income*. If the fair value of the plan assets is higher than the present value of the defined benefit obligation, the recognition of the resulting net defined benefit 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, past service cost. The projected unit credit method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to build up the final obligation. 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, in addition for the Swiss plan and one of the US defined benefit pension plans, interest credits on retirement savings account balances. Life expectancy is determined by reference to published mortality tables. The discount rate is determined by reference to the rates of return on high-quality fixed-income investments of appropriate currency and term at the measurement date. The assumption for salary increases reflects the long-term expectations for salary growth and takes into account historical salary development by age groups, expected inflation and expected supply and demand in the labor market. A sensitivity analysis for reasonable possible movements in each significant assumption for UBS AG's post-employment obligations is provided within Note 26.

Note 1 Summary of significant accounting policies (continued)

Defined contribution plans
A defined contribution plan is a pension plan under which UBS AG 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 contributions if the plan does not hold sufficient assets to pay employees the benefits relating to employee service in the current and prior periods. UBS AG's contributions are expensed when the employees have rendered services in exchange for such 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.

Other post-employment benefits
UBS AG also provides post-employment medical insurance benefits to certain retirees in the US and the UK. The expected costs of these benefits are recognized over the period of employment using the same accounting methodology used for defined benefit pension plans.

8) 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 which 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) expenses recognized in UBS AG's income statement that are not deductible until the associated cash flows occur. Deferred tax assets are recognized only to the extent that 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 (i) upon the acquisition of a subsidiary, (ii) for unrealized gains or losses on financial instruments that are classified as available for sale, (iii) for changes in fair value of derivative instruments designated as cash flow hedges, (iv) for remeasurements of defined benefit plans, (v) for certain foreign currency translations of foreign operations and (vi) for gains and losses on the sale of treasury shares. Amounts relating to points (ii), (iii), (iv) and (v) are recognized in *Other comprehensive income* within *Equity*.

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 is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

The level of deferred tax asset recognition is influenced by management's assessment of UBS AG's future profitability based on relevant business plan forecasts. Existing assessments are reviewed and, if necessary, revised to reflect changed circumstances. This review is conducted annually, in the second half of each year, but adjustments may be made at other times, if required. In a situation where recent losses have been incurred, convincing evidence that there will be sufficient future profitability is required.

If profit forecast assumptions in future periods deviate from the current outlook, the value of UBS AG's deferred tax assets may be affected. Any increase or decrease in the carrying amount of deferred tax assets would primarily be recognized through the income statement but would not affect cash flows.

Judgment is also required to forecast the expected outcome of uncertain tax positions that may require the interpretation of tax laws and the resolution of any income tax-related appeals or litigation that are incorporated into the estimate of income and deferred tax.

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

9) Investment in associates

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 value of the investment in the associate is below its recoverable amount.

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

10) 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 communication and other similar equipment. Property, equipment and software is carried 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, that is, 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 communication equipment: ≤ 7 years
– other machines and equipment: ≤ 10 years
– software: ≤ 10 years
– leasehold improvements: shorter of the lease term or the economic life of asset (typically ≤ 20 years)

→ **Refer to Note 14 for more information**

11) Goodwill and intangible assets

Goodwill represents the excess of the cost of an acquisition over the fair value of UBS AG's share of net identifiable assets of the acquired entity at the date of the acquisition. Goodwill is not amortized, but at the end of each reporting period or when indicators of impairment exist, UBS AG assesses whether there is any indication that goodwill is impaired. If such indicators exist, UBS AG is required to test the goodwill for impairment. Irrespective of whether there is any indication of impairment, UBS AG tests goodwill for impairment annually. UBS AG considers the segments, as reported in Note 2a, as separate cash-generating units, since this is the level at which the performance of investments is reviewed and assessed by management. The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, to the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount.

Note 1 Summary of significant accounting policies (continued)

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of UBS AG's goodwill may become impaired in the future, giving rise to losses in the income statement. Recognition of any impairment of goodwill would reduce net profit and equity, but would not affect cash flows.

Intangible assets are comprised of 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.

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. Key assumptions used to determine the recoverable amounts of each segment are tested for sensitivity by applying a reasonably possible change to those assumptions. Refer to Note 15 for the discussion of how the reasonably possible changes in those key assumptions may affect the results delivered by UBS AG's model for goodwill impairment testing.

→ **Refer to Notes 2 and 15 for more information**

12) Provisions and contingent liabilities

Provisions are liabilities of uncertain timing or amount, and are recognized 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, employee benefits, real estate and loan commitments and guarantees.

UBS AG recognizes provisions for litigation, regulatory and similar matters when, in the opinion of management after seeking legal advice, it is more likely than not that UBS AG 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 AG, but are nevertheless expected to be, based on UBS AG's experience with similar asserted claims.

Restructuring provisions are recognized when a detailed and formal restructuring plan has been approved and a valid expectation has been raised that the restructuring will be carried out, either through commencement of the plan or announcements to affected employees.

Provisions are recognized for lease contracts if the unavoidable costs of a contract exceed the benefits expected to be received under it (onerous lease contracts). For example, this may occur when a significant portion of a leased property is expected to be vacant for an extended period.

Provisions for employee benefits are recognized mainly in respect of service anniversaries and sabbatical leave.

Provisions are recognized at the best estimate of the consideration required to settle the present obligation at the balance sheet date. Such estimates are based on all available information and are revised over time as more information becomes available. If the effect of the time value of money is material, provisions are discounted and measured at the present value of the expenditure expected to settle or discharge the obligation, using a rate that reflects the current market assessments of the time value of money and the risks specific to the obligation.

Provisions that are similar in nature are aggregated to form a class, while the remaining provisions, including those of less significant amounts, are presented under *Other provisions*. Provisions are presented separately on the balance sheet and, when they are no longer considered uncertain in timing or amount, are reclassified to *Other liabilities – Other*.

When all conditions required to recognize a provision are not met, a contingent liability is disclosed, unless the likelihood of an outflow of resources is remote, in which case no provision is recognized and no contingent liability is reported. Contingent liabilities are also disclosed for possible obligations that arise from past events whose existence will be confirmed only by uncertain future events not wholly within the control of UBS AG. Such disclosures are not made if it is not practicable to do so.

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. Such matters may involve unique fact patterns or novel legal theories, proceedings 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. Determining whether an obligation exists as a result of a past event and estimating the probability, timing and amount of any potential outflows is based on a variety of assumptions, variables, and known and unknown uncertainties.

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.

Statistical or other quantitative analytical tools are of limited use in determining whether to establish or determine the amount of provisions in the case of litigation, regulatory or similar matters. Furthermore, information currently available to management may be incomplete or inaccurate, increasing the risk of erroneous assumptions with regard to the future development of such matters. Management regularly reviews all the available information regarding such matters, including legal advice, which is a significant consideration, 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 20 for more information**

13) 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 and liabilities denominated in foreign currency are translated into the functional currency using the closing exchange rate. Non-monetary items measured at historical cost are translated at the exchange rate on the date of the transaction. Foreign currency translation differences on non-monetary financial assets classified as available for sale are generally recorded directly in *Equity* until the asset is sold or becomes impaired. However, translation differences on available-for-sale monetary financial assets are reported in *Net trading income* on an amortized-cost basis, along with all other foreign currency translation differences on monetary assets and liabilities.

Upon consolidation, assets and liabilities of foreign operations are translated into Swiss francs (CHF), UBS AG's presentation currency, at the closing exchange rate on the balance sheet date, and income and expense items are translated at the average rate for the period. The resulting foreign currency translation differences attributable to shareholders are recognized directly in *Foreign currency translation* within *Equity,* which forms part of *Total equity attributable to shareholders*, whereas the foreign currency translation differences attributable to non-controlling interests are shown within *Equity attributable to non-controlling interests*.

When a foreign operation is disposed or partially disposed of and UBS AG loses control over the foreign operation, the cumulative amount of foreign currency translation differences within *Total equity attributable to shareholders* and *Equity attributable to non-controlling interests* related to that foreign operation is reclassified to the income statement as part of the gain or loss on disposal. When UBS AG disposes of a portion of its interest in a subsidiary that includes a foreign operation but retains control, the related portion of the cumulative currency translation balance is reclassified to *Equity attributable to non-controlling interests*.

→ **Refer to Note 34 for more information**

14) Non-controlling interests and preferred noteholders

Net profit is split into *Net profit attributable to shareholders, Net profit attributable to non-controlling interests* and *Net profit attributable to preferred noteholders.* Similarly, *Equity* is split into *Equity attributable to shareholders, Equity attributable to non-controlling interests* and *Equity attributable to preferred noteholders.*

Note 1 Summary of significant accounting policies (continued)

15) Leasing

UBS AG enters into lease contracts, or contracts that include lease components, predominantly of premises and equipment, and primarily as lessee. 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. UBS AG is not a lessee in any material finance leases.

Lease contracts classified as operating leases where UBS AG is the lessee include non-cancelable long-term leases of office buildings in most UBS AG locations. Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences with control of the physical use of the property. Lease incentives are treated as a reduction of rental expense and are recognized on a consistent basis over the lease term.

Where UBS AG acts as lessor under a finance lease, a receivable is recognized in *Loans* at an amount equal to the present value of the aggregate of the minimum 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 to repayment of the outstanding receivable and interest income to reflect a constant periodic rate of return on UBS AG's net investment using the interest rate implicit in the 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.

Certain arrangements do not take the legal form of a lease but convey a right to use an asset in return for a payment or series of payments. For such arrangements, UBS AG determines at the inception of the arrangement whether the fulfillment of the arrangement is dependent on the use of a specific asset or assets, and if so, the arrangement is accounted for as a lease.

→ **Refer to Notes 10 and 31 for more information**

b) Changes in accounting policies, comparability and other adjustments

Presentation of interest income and expense on derivatives designated as hedging instruments

Effective 1 January 2017, UBS AG refined the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships to align the presentation with interest arising from designated hedged items. As a result of this presentation change:

– *Interest income from loans and deposits* was CHF 530 million lower, while *Interest expense on debt issued* and *Interest expense on loans and deposits* for the year ended 31 December 2017 were lower by CHF 382 million and CHF 148 million, respectively, with no change to *Net interest income.*
– Interest income from derivative instruments designated as cash flow hedges, previously included within *Interest income from loans and deposits,* is now separately disclosed within Note 3.

Prior-period information has not been restated, as the effect was not material.

→ **Refer to Note 3 for more information**

Amendments to IAS 7, Statement of Cash Flows

UBS AG adopted amendments to IAS 7, *Statement of Cash Flows,* in 2017 and now separately discloses the drivers of changes in financial liabilities arising from financing activities, including changes arising from cash flows and non-cash changes, in its statement of cash flows.

→ **Refer to the statement of cash flows for more information**
→ **Refer to the "Balance sheet, liquidity and funding management" section of this report for information on liabilities and funding management**

Amendments to IAS 12, Income Taxes

In 2017, UBS AG adopted amendments to IAS 12, *Income Taxes*, that clarify how to account for deferred tax assets related to debt instruments measured at fair value. The adoption of these amendments did not have a material impact on UBS AG's financial statements.

c) International Financial Reporting Standards and Interpretations to be adopted in 2018 and later and other changes

Effective from 2018

Changes in segment reporting
Effective 1 February 2018, UBS AG integrated its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division, which is managed on an integrated basis, with a single set of key performance indicators, performance targets, operating plan and management structure. Consistent with this, the operating results of Global Wealth Management will be presented and assessed on an integrated basis in internal reporting to management. Consequently, beginning from the first quarter of 2018, Global Wealth Management qualifies as an operating and reportable segment for the purposes of segment reporting and will be presented alongside Personal & Corporate Banking, Asset Management, the Investment Bank, and Corporate Center (with its units Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio).

IFRS 9, Financial Instruments
IFRS 9, *Financial Instruments* is effective from 1 January 2018 and will be applicable from UBS AG's first quarter 2018 reporting. IFRS 9 reflects the classification and measurement, impairment and hedge accounting phases of the IASB's project to replace IAS 39, *Financial Instruments: Recognition and Measurement.* In addition, UBS AG will early adopt the Amendment to IFRS 9, *Prepayment Features with Negative Compensation*, issued in October 2017, which allows it to continue to apply amortized cost accounting to Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs.

Classification and measurement
IFRS 9 requires all financial assets, except equity instruments, to be classified at amortized cost, at fair value through other comprehensive income (OCI) or at fair value through profit or loss, based on the business model for managing the respective financial assets and their contractual cash flow characteristics. If a financial asset meets the criteria to be measured at amortized cost or at fair value through OCI, it can be designated at fair value through profit or loss if doing so would significantly reduce or eliminate an accounting mismatch. Equity instruments that are not held for trading may be accounted for at fair value through OCI, with no subsequent reclassification of realized gains or losses to the income statement under any circumstances, while all other equity instruments will be accounted for at fair value through profit or loss.

For UBS AG, the most significant IFRS 9 classification and measurement changes on transition are due to the following:
– financial assets that will no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because their cash flow characteristics do not satisfy the solely payments of principal and interest criteria (e.g., auction rate securities and certain brokerage receivables);
– lending arrangements that no longer qualify for amortized cost accounting under IFRS 9 will be classified at fair value through profit or loss because the business model within which they are managed does not have an objective to hold financial assets in order to collect the contractual cash flows (e.g., certain Investment Bank lending arrangements);
– equity instruments classified as available for sale under IAS 39 will be classified at fair value through profit or loss under IFRS 9; and
– financial liabilities will be newly designated under IFRS 9 at fair value through profit or loss, from amortized cost accounting, to align with conclusions reached for associated financial assets that will be measured at fair value through profit or loss (e.g., brokerage payables).

IFRS 9 classification and measurement requirements for financial liabilities are unchanged from IAS 39, except that any gain or loss arising on a financial liability designated at fair value through profit or loss that is attributable to changes in the issuer's own credit risk (own credit) is presented in OCI and not recognized in the income statement. UBS AG early adopted the own credit presentation change from 1 January 2016.

Expected credit losses
IFRS 9 introduces an approach for determining impairment based on forward-looking expected credit losses (ECLs), which is intended to result in an earlier recognition of credit losses compared with the existing incurred-loss impairment approach for financial instruments in IAS 39, and the loss-provisioning approach for financial guarantees and loan commitments in IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*. The new impairment model applies to financial assets measured at amortized cost, debt instruments measured at fair value through OCI, lease receivables, and financial guarantee contracts and loan commitments that are not measured at fair value through profit or loss.

Note 1 Summary of significant accounting policies (continued)

Expected credit losses will be recognized on the following basis:
- A maximum of 12-month ECLs are required to be recognized from initial recognition, reflecting the portion of lifetime cash shortfalls that will result if a default occurs in the 12 months after the reporting date (or a shorter period if the expected life is less), weighted by the risk of that default occurring. Respective instruments are referred to as instruments in stage 1.
- Lifetime ECLs are required to be recognized if a significant increase in credit risk (SICR) is detected subsequent to the instrument's initial recognition, reflecting lifetime cash shortfalls that will result from all possible default events over the expected life of a financial instrument, weighted by the risk of default occurring. Respective instruments are referred to as instruments in stage 2. Where an SICR is no longer observed, the instrument will move back to stage 1.
- Lifetime ECLs are always recognized for credit-impaired financial instruments, referred to as instruments in stage 3. The IFRS 9 determination of whether an instrument is credit impaired will follow substantially the same principles used to determine whether an instrument is impaired under IAS 39, i.e., is based on the occurrence of one or more loss events. However, the ECL for credit-impaired financial instruments under IFRS 9 may differ mainly due to additional forward-looking considerations required under IFRS 9. Credit-impaired exposures may include positions for which no loss has occurred or no allowance has been recognized, for example because they are expected to be fully recoverable through the collateral held. Instruments that are no longer credit impaired move back to stage 2 or stage 1.
- Changes in lifetime ECLs since initial recognition are also recognized for instruments that are purchased or originated credit impaired.

The methodology applied will calculate an individual probability-weighted unbiased ECL in line with the complexity, structure and risk profile of relevant portfolios. The following principal factors will be applied: probability of default (PD), loss given default (LGD), exposure at default (EAD) and discounting of cash flows to the reporting date, alongside an evaluation of a range of possible outcomes, forecasts of future economic conditions and information on past events and current conditions.

PDs and LGDs used in the ECL calculation will be point in time (PIT) based and consider a range of scenarios (upside, baseline, mild downside, downside) to capture material non-linearity and asymmetries, and scenario weights will be applied to reflect a likelihood of their occurrence.

UBS AG will measure ECL over the maximum contractual period it is exposed to credit risk, taking into account contractual extension, termination and prepayment options. For certain credit card facilities without a defined contractual end date, which are callable on demand and where the drawn and undrawn portions are managed as one unit, the period over which UBS AG is exposed to credit risk exceeds the contractual notice period and therefore this longer period is used within the ECL calculation.

Qualitative and quantitative criteria are used to determine whether the credit risk on a particular instrument has significantly increased from its initial recognition. UBS AG will assess changes in an instrument's risk of default primarily based on a comparison of the annualized forward-looking and scenario-weighted lifetime PIT-based PDs at inception of the instrument and the reporting date. Additional qualitative information is considered, including internal indicators of credit risk such as days-past-due information, external market indicators of credit risk and general economic conditions, to detect significant increases in credit risk.

IFRS 9 does not provide an explicit definition of default. For the purpose of measuring expected credit losses, UBS AG will apply a definition of default that is consistent with the definition used in capital calculations and by internal credit risk management.

Overall, the level of credit losses is expected to increase under IFRS 9 alongside additional income statement volatility due to the use of forward-looking assumptions and the application of the SICR approach.

Hedge accounting

IFRS 9 also includes an optional revised hedge accounting model, which further aligns the accounting treatment with the risk management practices. As permitted by the standard, UBS AG will not adopt the optional IFRS 9 hedge accounting requirements pending completion of the International Accounting Standards Board's project on macro hedge accounting strategies.

However, new mandatory hedge accounting disclosures will be adopted on 1 January 2018 as required, providing additional information on UBS AG's hedging strategies by hedged risk and hedge type.

Transition

In line with transitional provisions in IFRS 9, UBS will recognize an estimated pre-tax transition impact of CHF 0.7 billion, as well as a tax credit of CHF 0.1 billion, resulting in a net reduction of CHF 0.6 billion in UBS's IFRS consolidated equity. Approximately half of this amount is attributable to the classification and measurement changes, arising predominantly from the change in measurement basis of certain financial assets that no longer qualify for amortized cost accounting due to their cash flow characteristics. The remainder of the reduction results from recognizing expected credit losses on all in-scope transactions, with the majority of the impact driven by the private and commercial mortgage portfolio in Switzerland within the Personal & Corporate Banking division. As permitted by IFRS 9, UBS AG will not restate prior-period data.

Presentation

Presentation of interest income: In line with consequential amendments to IAS 1, *Presentation of Financial Statements,* from 1 January 2018, UBS AG will present interest income calculated using the effective interest method on assets that are subsequently measured at amortized cost and debt instruments that are measured at fair value through OCI separately in the income statement.

Presentation of balance sheet: Effective with UBS AG's first quarter 2018 reporting, UBS AG will make a series of presentational changes to the IFRS balance sheet reflecting the implementation of IFRS 9, alongside consequential changes to improve comparability with prior periods. The primary changes include:

- IAS 39-specific asset categories such as "Financial assets held to maturity" and "Financial assets available for sale" will be superseded by the new categories "Financial assets measured at amortized cost" and "Financial assets measured at fair value through other comprehensive income (FVOCI)."
- A new category "Financial assets at fair value not held for trading" will be created to accommodate in particular financial assets previously designated at fair value, all of which are to be mandatorily classified at fair value through profit or loss given the assets are managed on a fair value basis.
- *Brokerage receivables* and *Brokerage payables designated at fair value* will be presented as separate line items, whereas they are presented within *Other assets* and *Other liabilities*, respectively, as of 31 December 2017.
- *Other assets* and *Other liabilities* will be split between measured at amortized cost, measured at fair value through profit or loss and other non-financial assets and liabilities.
- *Cash collateral on securities borrowed* and *Reverse repurchase agreements* will be combined into a single line, "Receivables from securities financing transactions". Similarly, *Cash collateral on securities lent* and *Repurchase agreements* will be combined into a single line, "Payables from securities financing transactions".
- Financial liabilities designated at fair value will be split into two lines, "Debt issued designated at fair value" and "Other financial liabilities designated at fair value".

The table on the next page illustrates the new balance sheet presentation of assets and liabilities in comparison with our current presentation. The presentation of the components of equity will not change, and therefore for illustration purposes total liabilities and equity are presented in a single line in the table on the next page. To support comparability, we will present prior-period information for periods ending before 1 January 2018 in this revised structure, beginning with the first quarter 2018 financial report. This table does not reflect any of the effects of adoption from the classification and measurement requirements of IFRS 9, *Financial Instruments*, which are only applicable for the periods ending after 1 January 2018. As permitted by the standard, we will not restate prior periods for classification and measurement or ECL changes with the adoption of IFRS 9.

Note 1 Summary of significant accounting policies (continued)

2018 balance sheet presentation changes

CHF million	31.12.17 Presentation in the 2017 financial statements	31.12.17 Revised presentation applicable beginning 2018
Assets		
Cash and balances at central banks	87,775	87,775
Loans and advances to banks (formerly: Due from banks)	13,693	13,693
Receivables from securities financing transactions (new line)		89,633
Cash collateral on securities borrowed (newly included in Receivables from securities financing transactions)	12,393	
Reverse repurchase agreements (newly included in Receivables from securities financing transactions)	77,240	
Cash collateral receivables on derivative instruments	23,434	23,434
Loans and advances to customers (formerly: Loans)	321,718	320,659
Financial assets held to maturity (superseded)	9,166	
Other financial assets measured at amortized cost (new line)		36,935
Total financial assets measured at amortized cost		**572,129**
Financial assets at fair value held for trading (formerly: Trading portfolio assets)	130,807	126,244
of which: assets pledged as collateral that may be sold or repledged by counterparties	*35,363*	*35,363*
Derivative financial instruments (formerly: Positive replacement values)	118,229	118,229
Brokerage receivables (new line, formerly included within Other assets)	n/a	n/a
Financial assets at fair value not held for trading (new line)		58,556
Financial assets designated at fair value	58,556	
Total financial assets measured at fair value through profit or loss		**303,028**
Financial assets available for sale (superseded)	8,665	
Financial assets measured at fair value through other comprehensive income (new line)[1]		**8,665**
Investments in associates	1,018	1,018
Property, equipment and software	7,985	7,985
Goodwill and intangible assets	6,398	6,398
Deferred tax assets	9,783	9,783
Other non-financial assets (new line)		7,358
Total non-financial assets		**32,541**
Other assets (superseded)	29,505	
Total assets	**916,363**	**916,363**
Liabilities		
Amounts due to banks	7,533	7,533
Payables from securities financing transactions (new line)		17,044
Cash collateral on securities lent (newly included in Payables from securities financing transactions)	1,789	
Repurchase agreements (newly included in Payables from securities financing transactions)	15,255	
Cash collateral payables on derivative instruments	30,247	30,247
Customer deposits (formerly: Due to customers)	447,141	447,141
Debt issued measured at amortized cost	104,749	104,749
Other financial liabilities measured at amortized cost (new line)		37,133
Total financial liabilities measured at amortized cost		**643,847**
Financial liabilities at fair value held for trading (formerly: Trading portfolio liabilities)	30,463	30,463
Derivative financial instruments (formerly: Negative replacement values)	116,134	116,134
Brokerage payables designated at fair value (new line, formerly included within Other liabilities)	n/a	n/a
Financial liabilities designated at fair value (superseded)	54,202	
Debt issued designated at fair value (new line)		49,502
Other financial liabilities designated at fair value (new line)		16,223
Total financial liabilities measured at fair value through profit or loss		**212,323**
Provisions	3,084	3,084
Other non-financial liabilities (new line)		6,335
Total non-financial liabilities		**9,419**
Other liabilities (superseded)	54,990	
Total liabilities	**865,588**	**865,588**
Total liabilities and equity	**916,363**	**916,363**

1 Consists of debt instruments.

IFRS 15, Revenue from Contracts with Customers

UBS AG will adopt IFRS 15, *Revenue from Contracts with Customers*, which replaces IAS 18, *Revenue* for periods beginning on 1 January 2018. IFRS 15 establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied. In particular, the standard now specifies that variable consideration is only recognized to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

IFRS 15 also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

UBS AG will adopt the standard on a modified retrospective basis that does not require comparatives to be restated. Instead, the cumulative effect of initially applying the standard will be recognized as an adjustment to the opening balance of retained earnings. The transition adjustment will not be material.

IFRS 15 will result in a deferral of some performance-based fees in Asset Management and research revenues in the Investment Bank. However, the impact on UBS AG's revenues is not expected to be material.

UBS AG will also present certain fee and commission income and expense on a gross basis, rather than net basis, if UBS AG is acting as a principal. *Fee and commission income* will be reported in the income statement separately from *Fee and commission expense*. The supporting note disclosure for fee and commission income will be enhanced to provide more information on the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers.

IAS 28, Investments in Associates and Joint Ventures

In October 2017, the IASB issued an amendment to IAS 28, *Investments in Associates and Joint Ventures* that clarified that IFRS 9 must be applied when accounting for long-term interests in an associate or joint venture to which the equity method of accounting is not applied. The amendment is mandatorily effective for accounting periods beginning on or after 1 January 2019. However, UBS AG will early adopt this amendment from 1 January 2018 to align with the mandatory application date of IFRS 9, and expects that it will have no material impact on its financial statements.

Amendments to IFRS 2, Share-based Payment

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018. The amendments clarify that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. The adoption of these amendments will not have a material impact on UBS AG's financial statements.

IFRIC 22, Foreign Currency Transactions and Advance Consideration

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration* (IFRIC 22), which clarifies that in circumstances when an advance consideration is received or paid before recognizing an associated asset, expense or income, the exchange rate to be used on initial recognition of the related asset, expense or income is the rate determined as of the date of transaction – i.e., the date of initial recognition of the non-monetary asset or non-monetary liability arising from the receipt or payment of advance consideration. UBS AG is required to apply IFRIC 22 from 1 January 2018. The adoption of this IFRS Interpretation will not have a material impact on UBS AG's financial statements.

Effective from 2019

IFRS 16, Leases

In January 2016, the IASB issued IFRS 16, *Leases,* which replaces IAS 17, *Leases* and is mandatorily effective as of 1 January 2019. The standard substantially changes how lessees must account for operating lease commitments, requiring a lease liability with a corresponding right-of-use asset to be recognized on the balance sheet, compared with the current off-balance sheet treatment of such leases. UBS AG expects to report an increase in assets and liabilities from adoption as of 1 January 2019 in line with its disclosure of undiscounted operating lease commitments as set out in Note 31.

Note 1 Summary of significant accounting policies (continued)

IFRIC 23, Uncertainty over Income Tax Treatments
In June 2017, the IASB issued IFRIC Interpretation 23, *Uncertainty over Income Tax Treatments* (IFRIC 23), which addresses how uncertain tax positions should be accounted for under IFRS. Under this interpretation, IFRIC 23 requires that, where acceptance of the tax treatment by the relevant tax authority is considered probable, it should be assumed as an accounting recognition matter that treatment of the item will ultimately be accepted. Therefore, no tax provision would be required in such cases. However, if acceptance of the tax treatment is not considered probable, the entity is required to reflect that uncertainty using an expected value (i.e., a probability-weighted approach) or the single most likely amount. IFRIC 23 is mandatorily effective for accounting periods beginning on or after 1 January 2019 and any resulting change to the tax provisions should be recognized in retained earnings. UBS AG is in the process of assessing the impact of this interpretation, which is not expected to have a material effect on its financial statements.

Amendments to IAS 19, Employee Benefits
In February 2018, the IASB issued amendments to IAS 19, *Employee Benefits*, which address the accounting when a plan amendment, curtailment or settlement occurs during the reporting period. The amendments require entities to use the updated actuarial assumption to determine current service cost and net interest for the remainder of the annual reporting period after such an event. The amendments also clarify how the requirements for accounting for a plan amendment, curtailment or settlement affect the asset ceiling requirements. The amendments are effective prospectively for plan amendments, curtailments or settlements that occur on or after 1 January 2019, with earlier application permitted. UBS AG does not intend to early adopt this amendment.

Annual Improvements to IFRS Standards 2015–2017 Cycle
In December 2017, the IASB issued *Annual Improvements to IFRS Standards 2015–2017 Cycle*, which resulted in amendments to IFRS 3, *Business Combinations*, IFRS 11, *Joint Arrangements*, IAS 12, *Income Taxes* and IAS 23, *Borrowing Costs*. The amendments are mandatorily effective as of 1 January 2019. UBS AG expects that the adoption of these amendments will not have a material impact on its financial statements.

Note 2a Segment reporting

The operational structure of UBS AG as of 31 December 2017 was comprised of Corporate Center and five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank.

Wealth Management

Wealth Management provides comprehensive advice and tailored financial services to wealthy private clients around the world, except those served by Wealth Management Americas. Its clients benefit from the full spectrum of resources that UBS AG as a global firm can offer, including banking and lending solutions, wealth planning, investment management solutions and corporate finance advice. Wealth Management's guided architecture model gives clients access to a wide range of products from the world's leading third-party institutions that complement its own products.

Wealth Management Americas

Wealth Management Americas provides advice-based solutions through financial advisors who deliver a fully integrated set of products and services specifically designed to address the needs of their clients. Its business is primarily domestic US but includes Canada and international clients booked in the US.

Personal & Corporate Banking

Personal & Corporate Banking provides comprehensive financial products and services to private, corporate and institutional clients in Switzerland and is among the leading players in the private and corporate loan market in Switzerland, with a well-collateralized and conservatively managed lending portfolio.

Its business is central to UBS AG's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to help clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for the other business divisions in Switzerland through client referrals. In addition, Personal & Corporate Banking manages a substantial part of UBS AG's Swiss infrastructure and banking products platform, both of which are leveraged across UBS AG.

Asset Management

Asset Management is a large-scale and diversified asset manager, with an onshore presence in 23 countries. It offers investment capabilities and investment styles across all major traditional and alternative asset classes, as well as platform solutions and advisory support, to institutions, wholesale intermediaries and wealth management clients around the world.

Investment Bank

The Investment Bank provides investment advice, financial solutions and capital market access in over 35 countries, with principal offices in all major financial centers. It serves corporate, institutional and wealth management clients across the globe and partners with UBS AG's wealth management, personal and corporate banking and asset management businesses.

The business division is organized into Corporate Client Solutions and Investor Client Services and also includes UBS AG Securities Research.

Corporate Center

Corporate Center provides services to the Group through the reporting units Corporate Center – Services and Group Asset and Liability Management (Group ALM). Corporate Center also includes the Non-core and Legacy Portfolio unit.

Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Human Resources, Group Operations, Group Sourcing and Group Technology), Group Finance (excluding Group ALM), Group Legal, Group Risk Control, Group Communications & Branding, Group Regulatory & Governance, and UBS and Society.

Group ALM manages the structural risks of UBS AG's balance sheet, including interest rate risk in the banking book, currency risk and collateral risk, as well as the risks associated with UBS AG's liquidity and funding portfolios. Group ALM also seeks to optimize UBS AG's financial performance by matching assets and liabilities within the context of UBS AG's liquidity, funding and capital targets and constraints. Group ALM serves all business divisions and other Corporate Center units through three main risk management areas, and its risk management is fully integrated into UBS AG's risk governance framework.

Non-core and Legacy Portfolio manages legacy positions from businesses exited by the Investment Bank, and is overseen by a committee chaired by the Group Chief Risk Officer.

Note 2a Segment reporting (continued)

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center – Services	Corporate Center – Group ALM	Corporate Center – Non-core and Legacy Portfolio	UBS AG
For the year ended 31 December 2017									
Net interest income	2,088	1,562	1,916	(32)	1,194	(354)	83	23	6,480
Non-interest income	5,286	6,676	1,772	2,058	6,891	464	(68)	48	23,127
Allocations from CC – Group ALM	256	115	181	18	(344)	120	(264)	(83)	0
Income[1]	7,629	8,353	3,869	2,044	7,741	231	(249)	(11)	29,606
Credit loss (expense) / recovery	(4)	(4)	(19)	0	(90)	0	0	(11)	(128)
Total operating income	7,626	8,349	3,850	2,044	7,651	231	(249)	(22)	29,479
Personnel expenses	2,355	5,177	833	716	2,950	2,565	34	43	14,673
General and administrative expenses	605	677	294	234	715	6,147	26	113	8,811
Services (to) / from CC and other BDs	2,372	1,281	1,131	512	2,767	(8,274)	(13)	224	0
of which: services from CC – Services	*2,294*	*1,262*	*1,224*	*549*	*2,674*	*(8,338)*	*142*	*194*	*0*
Depreciation and impairment of property, equipment and software	3	2	13	1	10	899	0	0	928
Amortization and impairment of intangible assets[2]	7	41	0	3	12	7	0	0	70
Total operating expenses[3]	5,342	7,178	2,271	1,466	6,453	1,344	47	380	24,481
Operating profit / (loss) before tax	**2,284**	**1,171**	**1,579**	**578**	**1,198**	**(1,113)**	**(296)**	**(403)**	**4,998**
Tax expense / (benefit)									4,077
Net profit / (loss)									**921**
Additional Information									
Total assets	123,003	67,071	135,587	14,270	263,046	19,447	247,739	46,200	916,363
Additions to non-current assets	89	27	15	1	3	1,478	0	0	1,612

1 Impairments of financial assets available for sale for the year ended 31 December 2017 totaled CHF 15 million, of which CHF 13 million was recorded in Asset Management. 2 Refer to Note 15 for more information. 3 Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center – Services	Corporate Center – Group ALM	Corporate Center – Non-core and Legacy Portfolio	UBS AG
For the year ended 31 December 2016									
Net interest income	1,932	1,347	1,892	(33)	1,006	(322)	559	3	6,383
Non-interest income	4,975	6,320	1,768	1,957	6,951	250	(229)	84	22,075
Allocations from CC – Group ALM	389	118	332	7	(260)	36	(512)	(110)	0
Income[1]	7,296	7,785	3,990	1,931	7,697	(36)	(183)	(23)	28,458
Credit loss (expense) / recovery	(5)	(3)	(6)	0	(11)	0	0	(13)	(37)
Total operating income	7,291	7,782	3,984	1,931	7,686	(36)	(183)	(36)	28,421
Personnel expenses	2,348	4,819	843	727	3,081	3,674	31	66	15,591
General and administrative expenses	653	597	286	242	852	4,312	17	731	7,690
Services (to) / from CC and other BDs	2,348	1,235	1,079	505	2,757	(8,156)	(49)	280	0
of which: services from CC – Services	*2,256*	*1,221*	*1,186*	*530*	*2,667*	*(8,196)*	*110*	*225*	*0*
Depreciation and impairment of property, equipment and software	2	2	15	1	21	938	0	0	980
Amortization and impairment of intangible assets[2]	4	50	0	4	12	21	0	0	91
Total operating expenses[3]	5,355	6,702	2,224	1,480	6,724	790	(1)	1,077	24,352
Operating profit / (loss) before tax	**1,936**	**1,081**	**1,761**	**451**	**962**	**(826)**	**(182)**	**(1,113)**	**4,069**
Tax expense / (benefit)									781
Net profit / (loss)									**3,288**
Additional Information									
Total assets	115,539	65,882	139,945	12,026	242,388	23,813	267,275	68,485	935,353
Additions to non-current assets	26	4	23	1	3	1,741	0	0	1,798

1 Impairments of financial assets available for sale for the year ended 31 December 2016 totaled CHF 5 million, of which CHF 3 million was recorded in Asset Management. 2 Refer to Note 15 for more information. 3 Refer to Note 30 for information on restructuring expenses.

Note 2a Segment reporting (continued)

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center – Services	Corporate Center – Group ALM	Corporate Center – Non-core and Legacy Portfolio	UBS AG
For the year ended 31 December 2015									
Net interest income	1,825	1,067	1,890	(34)	1,573	(337)	724	21	6,729
Non-interest income	5,859	6,213	1,603	2,077	7,525	434	383	(101)	23,993
Allocations from CC – Group ALM	471	104	421	15	(211)	145	(832)	(114)	0
Income[1]	8,155	7,384	3,913	2,057	8,889	243	275	(195)	30,721
Credit loss (expense) / recovery	0	(4)	(37)	0	(68)	0	0	(8)	(117)
Total operating income	8,155	7,381	3,876	2,057	8,821	243	275	(203)	30,605
Personnel expenses	2,532	4,579	873	729	3,220	3,875	30	116	15,954
General and administrative expenses	650	848	264	233	882	4,517	21	804	8,219
Services (to) / from CC and other BDs	2,289	1,209	1,077	502	2,816	(8,214)	(57)	379	0
of which: services from CC – Services	*2,209*	*1,193*	*1,180*	*523*	*2,730*	*(8,243)*	*96*	*313*	*0*
Depreciation and impairment of property, equipment and software	5	3	17	2	26	866	0	0	918
Amortization and impairment of intangible assets[2]	3	51	0	8	24	21	0	0	107
Total operating expenses[3]	5,478	6,689	2,231	1,475	6,969	1,065	(6)	1,298	25,198
Operating profit / (loss) before tax	**2,676**	**692**	**1,646**	**583**	**1,852**	**(822)**	**281**	**(1,501)**	**5,407**
Tax expense / (benefit)									(908)
Net profit / (loss)									**6,314**
Additional Information									
Total assets	119,850	60,993	141,174	12,874	253,571	22,866	237,560	94,369	943,256
Additions to non-current assets	6	4	14	1	18	1,844	0	1	1,888

1 Impairments of financial assets available for sale for the year ended 31 December 2015 totaled CHF 1 million, all in Wealth Management. 2 Refer to Note 15 for more information. 3 Refer to Note 30 for information on restructuring expenses.

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 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 Corporate Center – Non-core and Legacy Portfolio, are managed at a global 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 assets are recorded.

For the year ended 31 December 2017

	Total operating income		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	12.0	41	7.2	47
of which: USA	*11.4*	*39*	*6.7*	*44*
Asia Pacific	4.7	16	0.7	5
Europe, Middle East and Africa	6.0	20	1.6	10
Switzerland	6.9	23	5.9	38
Global	0.0	0	0.0	0
Total	29.5	100	15.4	100

For the year ended 31 December 2016

	Total operating income[1]		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.5	40	7.4	47
of which: USA	*11.0*	*39*	*7.0*	*44*
Asia Pacific	4.2	15	0.6	4
Europe, Middle East and Africa	6.1	21	1.8	11
Switzerland	6.9	24	6.0	38
Global	(0.3)	(1)	0.0	0
Total	**28.4**	**100**	**15.8**	**100**

For the year ended 31 December 2015

	Total operating income[1]		Total non-current assets	
	CHF billion	Share %	CHF billion	Share %
Americas	11.2	37	7.1	47
of which: USA	*10.5*	*34*	*6.7*	*44*
Asia Pacific	5.1	17	0.5	3
Europe, Middle East and Africa	6.8	22	1.7	11
Switzerland	7.2	24	5.9	39
Global	0.4	1	0.0	0
Total	**30.6**	**100**	**15.2**	**100**

1 The geographical allocation of Total operating income has been restated to reflect a refinement in the allocation methodology.

Income statement notes

Note 3 Net interest and trading income

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Net interest and trading income[1]			
Net interest income	6,480	6,383	6,729
of which: Wealth Management	*2,344*	*2,331*	*2,326*
of which: Wealth Management Americas	*1,680*	*1,467*	*1,174*
of which: Personal & Corporate Banking	*2,086*	*2,199*	*2,270*
of which: Asset Management	*(14)*	*(24)*	*(17)*
Net trading income	4,974	4,943	5,696
of which: Wealth Management	*694*	*667*	*708*
of which: Wealth Management Americas	*332*	*372*	*362*
of which: Personal & Corporate Banking	*375*	*333*	*343*
of which: Asset Management	*(10)*	*(5)*	*12*
Total net interest and trading income	11,454	11,326	12,425
of which: Investment Bank	*4,283*	*4,275*	*5,186*
of which: Corporate Client Solutions	*1,065*	*822*	*1,001*
of which: Investor Client Services	*3,218*	*3,453*	*4,185*
of which: Corporate Center	*(316)*	*(289)*	*61*
of which: Services	*(47)*	*(92)*	*(1)*
of which: Group ALM	*(199)*	*(134)*	*375*
of which: own credit on financial liabilities designated at fair value			*553*
of which: Non-core and Legacy Portfolio	*(71)*	*(62)*	*(313)*
Net interest income			
Interest income			
Interest income from loans and deposits[2,3,4]	8,475	9,566	8,626
Interest income from securities financing transactions[5]	1,542	1,136	896
Interest income from trading portfolio[6]	2,565	2,465	3,071
Interest income from financial assets and liabilities designated at fair value	548	361	194
Interest income from financial assets available for sale and held to maturity[6]	260	253	391
Interest income from derivative instruments designated as cash flow hedges[2]	818		
Total	14,208	13,782	13,178
Interest expense			
Interest expense on loans and deposits[2,7]	2,464	1,664	774
Interest expense on securities financing transactions[8]	1,444	1,233	976
Interest expense on trading portfolio[9]	1,506	1,614	1,670
Interest expense on financial assets and liabilities designated at fair value	864	841	730
Interest expense on debt issued[2]	1,451	2,046	2,299
Total	7,728	7,399	6,449
Net interest income	6,480	6,383	6,729
Net trading income			
Investment Bank Corporate Client Solutions	597	188	321
Investment Bank Investor Client Services	2,813	3,330	3,494
Other business divisions and Corporate Center	1,564	1,425	1,882
Net trading income	4,974	4,943	5,696
of which: net gains / (losses) from financial assets designated at fair value	*2,527*	*(186)*	*(119)*
of which: net gains / (losses) from financial liabilities designated at fair value[10]	*(3,920)*	*(1,362)*	*3,701*

1 Net interest and trading income presented for business divisions and Corporate Center units includes allocations from Corporate Center – Group ALM. 2 Effective 1 January 2017, the presentation of interest income and interest expense on derivatives designated as hedging instruments in effective hedge relationships was refined. Refer to Note 1b for more information. 3 Includes interest income on impaired loans and advances of CHF 12 million for 2017, CHF 21 million for 2016 and CHF 16 million for 2015. 4 Consists of interest income from balances with central banks, amounts due from banks and loans, and negative interest on amounts due to banks and customers. 5 Includes interest income on securities borrowed and reverse repurchase agreements and negative interest, including fees, on securities lent and repurchase agreements. 6 Includes dividend income. 7 Consists of interest expense on amounts due to banks and customers, and negative interest on balances with central banks, amounts due from banks and loans. 8 Includes interest expense on securities lent and repurchase agreements and negative interest, including fees, on securities borrowed and reverse repurchase agreements. 9 Includes expense related to dividend payment obligations on trading liabilities. 10 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 Net trading income.

Note 4 Net fee and commission income

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Underwriting fees	1,321	994	1,290
of which: equity underwriting fees	*837*	*516*	*836*
of which: debt underwriting fees	*484*	*478*	*455*
M&A and corporate finance fees	683	733	737
Brokerage fees	3,441	3,544	3,930
Investment fund fees	3,219	3,155	3,567
Portfolio management and advisory fees	8,542	8,035	7,858
Other	1,811	1,747	1,678
Total fee and commission income	19,018	18,207	19,060
Brokerage fees paid	660	757	869
Other	1,144	1,003	1,007
Total fee and commission expense	1,804	1,760	1,876
Net fee and commission income	17,214	16,447	17,184
of which: net brokerage fees	*2,780*	*2,786*	*3,060*

Note 5 Other income

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Associates, joint ventures and subsidiaries			
Net gains / (losses) from disposals of subsidiaries[1]	37[2]	(150)	264
Share of net profits of associates and joint ventures	75	106	169
Impairment charges related to associates	(7)		
Total	105	(44)	433
Financial assets available for sale			
Net gains / (losses) from disposals	193	346	252
Impairment charges	(15)	(5)	(1)
Total	178	342	251
Net income from properties (excluding net gains / (losses) from disposals)[3]	23	25	28
Net gains / (losses) from disposals of properties held for sale	0	125	378
Net gains / (losses) from disposals of loans and receivables	15	(3)	26
Income from shared services provided to UBS Group AG or its subsidiaries	385[4]	48	0
Other	234[2]	192	(5)
Total other income	939	685	1,112

1 Includes foreign exchange gains / (losses) reclassified from Other comprehensive income related to disposed foreign subsidiaries and branches. 2 Net gains / (losses) from disposals of subsidiaries and Other include a net gain on sale of subsidiaries and businesses of CHF 153 million in Asset Management. Refer to Note 30 for more information. 3 Includes net rent received from third parties and net operating expenses. 4 The increase in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information.

Note 6 Personnel expenses

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Salaries[1]	5,323	6,136	6,260
Variable compensation – performance awards[2]	2,996	2,963	3,209
of which: guarantees for new hires	*36*	*30*	*38*
Variable compensation – other[2]	227	418	346
of which: replacement payments[3]	*69*	*86*	*76*
of which: forfeiture credits	*(104)*	*(73)*	*(86)*
of which: severance payments[4]	*93*	*217*	*157*
of which: retention plan and other payments[5]	*169*	*188*	*198*
Wealth Management Americas: Financial advisor compensation[2,6]	3,986	3,697	3,552
Contractors	313	420	365
Social security	717	734	817
Pension and other post-employment benefit plans[7]	591	669	807
Other personnel expenses	521	554	597
Total personnel expenses[8]	14,673[9]	15,591	15,954

1 Includes role-based allowances. 2 Refer to Note 27 for more information. 3 Replacement payments are payments made to compensate employees for deferred awards forfeited as a result of joining UBS. 4 Includes legally obligated and standard severance payments. 5 Includes interest expense related to Deferred Contingent Capital Plan awards. 6 Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated based on 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. 7 Refer to Note 26 for more information. 8 Includes net restructuring expenses of CHF 362 million, CHF 731 million and CHF 458 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information. 9 The decrease in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information.

Note 7 General and administrative expenses

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Occupancy	848	921	928
Rent and maintenance of IT and other equipment	415	511	510
Communication and market data services	534	624	610
Administration[1]	3,560	1,069	855
of which: shared services costs charged by UBS Group AG or its subsidiaries	*2,974*[2]	*365*	*223*
Marketing and public relations	332	465	484
Travel and entertainment	374	411	456
Professional fees	1,064	1,225	1,351
Outsourcing of IT and other services	1,147	1,592	1,742
Provisions for litigation, regulatory and similar matters[3]	420	795	1,087
Other	116	78	195
Total general and administrative expenses[4]	8,811[2]	7,690	8,219

1 Administration costs include net expenses related to the UK bank levy of CHF 17 million, CHF 123 million and CHF 166 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. 2017 included a CHF 82 million credit related to prior years. 2 The increase in 2017 in shared services costs charged by UBS Group AG or its subsidiaries and the associated decrease in certain direct cost lines were mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information. 3 Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 20 for more information. Also includes recoveries from third parties of CHF 53 million, CHF 13 million and CHF 10 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. 4 Includes net restructuring expenses of CHF 818 million, CHF 700 million and CHF 760 million for the years ended 31 December 2017, 31 December 2016 and 31 December 2015, respectively. Refer to Note 30 for more information.

Note 8 Income taxes

CHF million	For the year ended 31.12.17	31.12.16	31.12.15
Tax expense / (benefit)			
Swiss			
Current	402	429	230
Deferred	21	635	329
Non-Swiss			
Current	427	350	476
Deferred	3,227	(633)	(1,943)
Total income tax expense / (benefit) recognized in the income statement	4,077	781	(908)

Income tax recognized in the income statement

An income tax expense of CHF 4,077 million was recognized for UBS AG in 2017, which included a net Swiss tax expense of CHF 423 million and a net non-Swiss tax expense of CHF 3,654 million.

The Swiss tax expense included a current tax expense of CHF 402 million related to taxable profits earned by Swiss subsidiaries, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 21 million, which reflected a net decrease in deferred tax assets (DTAs) previously recognized in relation to tax losses carried forward and temporary differences.

The non-Swiss tax expense included a current tax expense of CHF 427 million related to taxable profits earned by non-Swiss subsidiaries and branches, against which no losses were available to offset. In addition, it included a deferred tax expense of CHF 3,227 million, which reflected a net decrease in DTAs previously recognized in relation to tax losses carried forward and temporary differences and mainly related to the write-down of US DTAs resulting from the reduction in the federal corporate tax rate to 21% from 35% after the enactment of the Tax Cuts and Jobs Act (TCJA) during the fourth quarter of 2017.

UBS AG considers the performance of its businesses and the accuracy of historical forecasts and other factors in evaluating the recoverability of its DTAs, including the remaining tax loss carry-forward period, and its assessment of expected future taxable profits in the forecast period used for recognizing DTAs. Estimating future profitability is inherently subjective and is particularly sensitive to future economic, market and other conditions, which are difficult to predict.

CHF million	For the year ended 31.12.17	31.12.16	31.12.15
Operating profit / (loss) before tax	4,998	4,069	5,407
of which: Swiss	*1,878*	*2,607*	*3,665*
of which: non-Swiss	*3,120*	*1,462*	*1,742*
Income taxes at Swiss tax rate of 21%	1,050	854	1,135
Increase / (decrease) resulting from:			
Non-Swiss tax rates differing from Swiss tax rate	224	71	(69)
Tax effects of losses not recognized	168	185	107
Previously unrecognized tax losses now utilized	(358)	(39)	(107)
Non-taxable and lower taxed income	(298)	(343)	(273)
Non-deductible expenses and additional taxable income	573	914	519
Adjustments related to prior years – current tax	(13)	22	29
Adjustments related to prior years – deferred tax	5	2	(48)
Change in deferred tax valuation allowances	(161)	(978)	(2,419)
Adjustments to deferred tax balances arising from changes in tax rates	2,824	19	191
Other items	63	72	26
Income tax expense / (benefit)	4,077	781	(908)

Note 8 Income taxes (continued)

The tax expense of CHF 4,077 million for 2017 was higher than the tax expense of CHF 781 million in 2016, mainly as 2017 included a net write-down of DTAs of CHF 2,865 million resulting from the aforementioned reduction in the US federal corporate tax rate.

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.

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 or losses, an adjustment from the tax expense / benefit that would arise at the Swiss tax rate and the tax expense / benefit that would arise at the applicable local tax rate. If an entity generates a profit, a tax expense arises where the local tax rate is in excess of the Swiss tax rate and a tax benefit arises where the local tax rate is below the Swiss tax rate. Conversely, if an entity incurs a loss, a tax benefit arises where the local tax rate is in excess of the Swiss tax rate and a tax expense arises where the local tax rate is less than the Swiss tax rate.

Tax effects of losses not recognized

This item relates to tax losses of entities arising in the year, which are not recognized as DTAs. Consequently, 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, which 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. Therefore, the tax expense calculated by applying the local rate on those profits is reversed.

Non-taxable and lower taxed income

This item relates to profits for the year, which are either permanently not taxable or are taxable, but at a lower rate of tax than the local tax rate. It also includes any permanent deductions made for tax purposes, which are not reflected in the accounts.

Non-deductible expenses and additional taxable income

This item mainly relates to income for the year, which is imputed for tax purposes for an entity, but is not included in its operating profit. In addition, it includes expenses for the year that are permanently non-deductible.

Adjustments related to prior years – current tax

This item relates to adjustments to current tax expense for prior years, for example, if the tax payable for a year agreed with the tax authorities is expected to differ 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, for example, 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 valuation allowances

This item includes revaluations of 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. The amount in the year mainly relates to the upward revaluation of DTAs.

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. This item primarily relates to the net write-down of DTAs following a reduction in the US federal corporate tax rate to 21% from 35% after the enactment of the TCJA during the fourth quarter of 2017.

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 increases in provisions for uncertain positions in relation to the current year and other items.

Income tax recognized directly in equity

Certain tax expenses and benefits were recognized directly in equity, which included the following items:

– a net tax benefit of CHF 354 million recognized in other comprehensive income (OCI), which included a tax benefit of CHF 160 million related to cash flow hedges (2016: benefit of CHF 170 million), a tax expense of CHF 7 million related to financial assets classified as available for sale (2016: benefit of CHF 28 million), a tax benefit of CHF 196 million related to foreign currency translation gains and losses (2016: expense of CHF 84 million), a tax benefit of CHF 6 million related to defined benefit plans (2016: benefit of CHF 52 million) and a tax expense of CHF 1 million (2016: benefit of CHF 5 million) related to own credit
– a tax benefit of CHF 16 million recognized in share premium (2016: benefit of CHF 25 million)
– the effects of exchange rate changes on tax assets and liabilities denominated in currencies other than Swiss francs, which are included in foreign currency translation movements in OCI.

Deferred tax assets and liabilities

UBS AG has DTAs related to tax loss carry-forwards and other items as shown in the table below. As of 31 December 2017, DTAs of CHF 1,185 million (31 December 2016: CHF 1,689 million) were recognized by entities that incurred losses in either the current or preceding year based on projections of future taxable profits. The valuation allowance reflects DTAs that were not recognized because it was not considered probable that future taxable profits will be available to utilize the related tax loss carry-forwards and deductible temporary differences.

CHF million	31.12.17			31.12.16		
Deferred tax assets[1]	Gross	Valuation allowance	Recognized	Gross	Valuation allowance	Recognized
Tax loss carry-forwards	16,934	(11,191)	5,743	24,627	(16,430)	8,197
Temporary differences	5,016	(975)	4,040	6,335	(1,388)	4,947
of which: related to compensation and benefits	*1,133*	*(222)*	*911*	*1,419*	*(208)*	*1,211*
of which: related to trading assets	*473*	*(58)*	*414*	*935*	*(118)*	*817*
of which: related to investments in subsidiaries and goodwill	*2,327*	*0*	*2,327*	*2,059*	*0*	*2,059*
of which: other	*1,083*	*(695)*	*388*	*1,922*	*(1,062)*	*859*
Total deferred tax assets	21,949	(12,166)	9,783	30,962	(17,818)	13,144
Deferred tax liabilities						
Goodwill and intangible assets			18			24
Other			31			20
Total deferred tax liabilities			49			44

1 Less deferred tax liabilities as applicable.

Note 8 Income taxes (continued)

As of 31 December 2017, tax loss carry-forwards totaling CHF 46,232 million (31 December 2016: CHF 49,477 million), which are not recognized as DTAs, were available to be offset against future taxable profits. These tax losses expire as outlined in the table below.

Unrecognized tax loss carry-forwards

CHF million	31.12.17	31.12.16
Within 1 year	167	0
From 2 to 5 years	103	66
From 6 to 10 years	3,185	909
From 11 to 20 years	26,015	32,603
No expiry	16,762	15,899
Total	46,232	49,477

In general, Swiss tax losses can be carried forward for seven years, US federal tax losses incurred before 31 December 2017 for 20 years and US federal tax losses incurred after 31 December 2017 and also UK and Jersey tax losses for an unlimited period.

UBS AG recognizes deferred tax liabilities on undistributed earnings of subsidiaries, except to the extent that those earnings are indefinitely invested. As of 31 December 2017, no such earnings were considered indefinitely invested.

The Financial Statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits against losses transferred from UBS AG. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position, but the authorities have now advised UBS that they accept that a transfer can occur and have also accepted UBS's proposed methods to calculate the amount of losses to be transferred as adopted on the tax return filing position.

Note 9 Earnings per share (EPS) and shares outstanding

In 2015, UBS AG shares were delisted from the SIX Swiss Exchange and the New York Stock Exchange. As of 31 December 2017, 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.

Balance sheet notes: assets

Note 10 Due from banks and loans (held at amortized cost)

CHF million	31.12.17	31.12.16
By type of exposure		
Due from banks, gross	13,695	13,128
Allowance for credit losses	(3)	(3)
Due from banks, net	13,693	13,125
Loans, gross		
Residential mortgages	144,431	142,197
Commercial mortgages	18,717	19,765
Lombard loans	115,059	104,999
Other loans[1]	40,987	37,160
Finance lease receivables[2]	1,069	986
Securities	2,113	2,494
Subtotal	322,376	307,601
Allowance for credit losses	(658)	(596)
Loans, net	321,718	307,004
Total due from banks and loans, net[3]	335,411	320,129

1 Includes corporate loans. 2 Refer to Note 31 for more information. 3 Refer to Note 25b for more information on collateral and credit enhancements.

Note 11 Allowances and provisions for credit losses

CHF million

By movement	Specific allowances	Collective allowances	Total allowances – due from banks and loans	Allowances – other assets	Provisions[1]	Total 31.12.17	Total 31.12.16
Balance at the beginning of the year	587	12	599	0	54	653	727
Write-offs / usage of provisions	(115)	(2)	(117)	0	0	(117)	(145)
Recoveries	19	1	19	0	0	20	22
Increase / (decrease) recognized in the income statement	145	3	148	0	(21)	128	37
Foreign currency translation	(7)	0	(7)	0	0	(7)	0
Other	19	0	19	18	0	37	12
Balance at the end of the year	648	13	661	19	33	713	653

1 Represents provisions for loan commitments and guarantees. Refer to Note 20 for more information. Refer to the "Treasury management" section of this report for the maximum irrevocable amount of loan commitments and guarantees.

By balance sheet line	Specific allowances	Collective allowances	Total allowances	Allowances – other assets	Provisions[1]	Total 31.12.17	Total 31.12.16
Due from banks	3	0	3			3	3
Loans	645	13	658			658	596
Other assets				19		19	0
Provisions					33	33	54
Balance at the end of the year	648	13	661	19	33	713	653

1 Represents provisions for loan commitments and guarantees.

Derivatives: overview

A derivative is a financial instrument for which the value is derived from one or more variables (underlyings). Underlyings may be indices, foreign currency exchange or interest rates, or the value of shares, commodities, bonds or other financial instruments. A derivative commonly requires little or no initial net investment by either counterparty to the trade.

The majority of derivative contracts are negotiated with respect to notional amounts, tenor, price and settlement mechanisms, as is customary with other financial instruments.

Over-the-counter (OTC) derivative contracts are usually traded under a standardized International Swaps and Derivatives Association (ISDA) master agreement between UBS and its counterparties. Terms are negotiated directly with counterparties and the contracts have industry-standard settlement mechanisms prescribed by ISDA. Recent rules, introduced by regulators in various jurisdictions, require or will soon require 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.

The industry continues to promote the use of central counterparties (CCPs) to clear OTC trades. The trend toward CCP clearing and settlement will generally facilitate the reduction of systemic credit exposures.

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.

For presentation purposes, UBS AG's derivative contracts are subject to IFRS netting provisions. Derivative instruments are measured at fair value and generally classified as *Positive replacement values* and *Negative replacement values* on the balance sheet. However, ETD that are economically settled on a daily basis and OTC derivatives that are either legally settled or in substance net settled on a daily basis are classified as *Cash collateral receivables on derivative instruments* or *Cash collateral payables on derivative instruments*. Changes in the replacement values of derivatives are recorded in *Net trading income,* except for interest on derivatives designated as hedging instruments in effective hedge accounting relationships and forward points on certain short duration foreign exchange contracts that are recorded in *Net interest income*.

→ **Refer to Note 1a items 3j and 3k for more information**

→ **Refer to Note 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements**

UBS AG uses various derivative instruments for both trading and hedging purposes. Derivative product types as well as valuation principles and techniques applied by UBS AG are described in Note 22. *Positive replacement values* represent the estimated amount UBS AG would receive if the derivative contract were sold on the balance sheet date. *Negative replacement values* indicate the estimated amount UBS AG would pay to transfer its obligations in respect of the underlying contract were it required or entitled to do so on the balance sheet date.

Derivatives embedded in other financial instruments are not included in the "Derivative instruments" table within this Note. Bifurcated embedded derivatives are presented on the same balance sheet line as the host contract. In cases where UBS applies the fair value option to hybrid instruments, bifurcation of an embedded derivative component is not required and as such this component is also not included in the "Derivative instruments" table.

→ **Refer to Notes 18 and 22 for more information**

Risks of derivative instruments

Derivative instruments are transacted in many trading portfolios, which generally include several types of instruments, not just derivatives. The market risk of derivatives is predominantly managed and controlled as an integral part of the market risk of these portfolios. UBS AG's approach to market risk is described in the audited portions of "Market risk" in the "Risk management and control" section of this report.

Derivative instruments are also transacted with many different counterparties, most of whom are also counterparties for other types of business. The credit risk of derivatives is managed and controlled in the context of UBS AG's overall credit exposure to its counterparties. UBS AG's approach to credit risk is described in the audited portions of "Credit risk" in the "Risk management and control" section of this report. It should be noted that, although the positive replacement values shown on the balance sheet can be an important component of UBS AG's credit exposure, 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 24 for more information on the values of positive and negative replacement values after consideration of netting potential allowed under enforceable netting arrangements**

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments[1]

	31.12.17					31.12.16				
CHF billion	PRV[2]	Notional values related to PRV[3]	NRV[4]	Notional values related to NRV[3]	Other notional values[3,5]	PRV[2]	Notional values related to PRV[3]	NRV[4]	Notional values related to NRV[3]	Other notional values[3,5]
Interest rate contracts										
Over-the-counter (OTC) contracts										
Forward contracts[6]	0.1	22.1	0.3	8.2	2,321.1	0.1	29.6	0.1	21.9	2,242.8
Swaps	35.4	539.2	28.2	453.7	7,530.2	45.2	599.3	38.3	552.6	7,064.2
Options	8.5	558.1	9.8	547.2		12.6	478.1	13.9	480.6	
Exchange-traded contracts										
Futures					455.6					326.4
Options	0.0	22.7	0.0	34.4	155.4	0.0	45.4	0.0	4.5	96.2
Agency transactions[7]	0.0		0.0			0.2		0.2		
Total	44.0	1,142.1	38.4	1,043.6	10,462.2	58.0	1,152.4	52.5	1,059.6	9,729.6
Credit derivative contracts										
Over-the-counter (OTC) contracts										
Credit default swaps	2.7	85.2	3.0	94.4	1.2	3.7	116.9	3.9	135.2	
Total return swaps	0.2	2.2	0.8	3.9		0.2	3.3	0.9	4.3	
Options and warrants	0.0	4.3	0.0	0.1		0.0	2.9	0.0	0.1	
Total	2.8	91.8	3.8	98.3	1.2	3.9	123.1	4.8	139.6	
Foreign exchange contracts										
Over-the-counter (OTC) contracts										
Forward contracts	17.2	681.4	17.8	691.6		21.8	715.6	19.0	650.9	
Interest and currency swaps	23.8	1,275.5	21.8	1,098.4		43.2	1,220.8	42.0	1,115.0	
Options	6.1	427.0	5.8	397.6		11.1	530.3	11.0	513.7	
Exchange-traded contracts										
Futures					0.4					6.1
Options	0.0	4.7	0.1	5.6		0.0	2.9	0.1	6.0	
Agency transactions[7]	0.0		0.0			0.0		0.0		
Total	47.1	2,388.5	45.5	2,193.3	0.4	76.1	2,469.6	72.1	2,285.6	6.1
Equity / index contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Swaps	3.4	71.2	5.5	100.4		3.6	76.5	4.8	69.0	
Options	5.8	76.6	8.2	125.0		3.7	49.6	5.8	92.8	
Exchange-traded contracts										
Futures					51.9					33.0
Options	6.9	232.6	6.9	261.2	31.0	3.8	142.5	4.6	155.8	21.6
Agency transactions[7]	6.2		6.1			6.9		6.9		
Total	22.2	380.3	26.7	486.6	82.9	18.0	268.6	22.1	317.6	54.5

Table continues on the next page.

Note 12 Derivative instruments and hedge accounting (continued)

Derivative instruments[1] (continued)

Table continued from the previous page.

Derivative instruments (continued)[1]

	31.12.17					31.12.16				
CHF billion	PRV[2]	Notional values related to PRV[3]	NRV[4]	Notional values related to NRV[3]	Other notional values[3,5]	PRV[2]	Notional values related to PRV[3]	NRV[4]	Notional values related to NRV[3]	Other notional values[3,5]
Commodity contracts										
Over-the-counter (OTC) contracts										
Forward contracts	0.1	2.9	0.1	3.8		0.3	4.8	0.1	2.7	
Swaps	0.2	8.5	0.4	12.8		0.4	10.9	0.5	13.4	
Options	0.3	11.3	0.1	7.9		0.5	14.1	0.2	9.9	
Exchange-traded contracts										
Futures					8.2					9.1
Forward contracts	0.2	9.4	0.0	7.9		0.1	5.9	0.0	4.6	
Options	0.0	1.0	0.1	4.4	0.3	0.0	3.2	0.1	5.3	0.0
Agency transactions[7]	0.9		0.9			0.9		0.9		
Total	1.7	33.1	1.6	36.9	8.4	2.3	39.0	2.0	35.9	9.1
Unsettled purchases of non-derivative financial instruments[8]	0.1	12.0	0.1	10.9		0.1	18.4	0.1	9.7	
Unsettled sales of non-derivative financial instruments[8]	0.1	14.8	0.1	8.7		0.1	13.0	0.2	11.5	
Total derivative instruments, based on IFRS netting[9]	118.2	4,062.6	116.1	3,878.3	10,555.0	158.4	4,084.0	153.8	3,859.6	9,799.3

1 Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The replacement values and related notional values of these derivatives were not material for the periods presented. 2 PRV: positive replacement value. 3 In cases where replacement values are presented on a net basis on the balance sheet, the respective notional values of the netted replacement values are still presented on a gross basis. 4 NRV: negative replacement value. 5 Other notional values relate to derivatives that are cleared through either a central clearing 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 the periods presented. 6 Negative replacement values as of 31 December 2017 include CHF 0.0 billion related to derivative loan commitments (31 December 2016: CHF 0.1 billion). No notional amounts related to these replacement values are included in the table. The maximum irrevocable amount related to these commitments was CHF 5.3 billion as of 31 December 2017 (31 December 2016: CHF 14.3 billion). 7 Notional values of exchange-traded agency transactions and OTC-cleared transactions entered into on behalf of clients are not disclosed due to their significantly different risk profile. 8 Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. 9 Refer to Note 24 for more information on netting arrangements.

The notional amount of a derivative is generally the quantity of the underlying instrument on which the derivative contract is based and is the reference against which changes in the value of the derivative are measured. Notional values in themselves are generally not a direct indication of the values that are exchanged between parties, and are therefore not a direct measure of risk or financial exposure but are viewed as an indication of the scale of the different types of derivatives entered into by UBS AG.

On a notional value basis, approximately 54% of OTC interest rate contracts held as of 31 December 2017 (31 December 2016: 52%) mature within one year, 28% (31 December 2016: 29%) within one to five years and 18% (31 December 2016: 19%) after five years. Notional values of interest rate contracts cleared with a clearing house that qualify for IFRS balance sheet netting or are legally settled on a daily basis are presented under *Other notional values* and are categorized into maturity buckets on the basis of contractual maturities of the cleared underlying derivative contracts.

Derivatives transacted for trading purposes

Most of UBS AG's derivative transactions relate to sales and trading activities. 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. Trading activities include market-making to directly support the facilitation and execution of client activity. Market-making involves quoting bid and offer prices to other market participants with the intention of generating revenues based on spread and volume.

Credit derivatives

UBS is an active dealer in the fixed income market, including credit default swaps (CDS) and related products, with respect to a large number of issuers' securities. The primary objectives of these activities are market-making, primarily on behalf of clients, and ongoing hedging of trading book exposures.

Note 12 Derivative instruments and hedge accounting (continued)

Market-making activity, which is undertaken within the Investment Bank, consists of buying and selling single-name CDS, index CDS, loan CDS and related referenced cash instruments to facilitate client trading activity. UBS also actively utilizes CDS to economically hedge specific counterparty credit risks in its accrual and traded loan portfolios (including off-balance sheet loan commitments) with the aim of reducing concentrations in individual names, sectors or specific portfolios.

In addition, UBS actively utilizes CDS to economically hedge specific counterparty credit risks in its OTC derivative portfolios, including financial instruments that are designated at fair value through profit or loss.

The tables below provide more information on credit protection bought and sold, including replacement and notional value information by instrument type and counterparty type. The value of protection bought and sold is not, in isolation, a measure of UBS's credit risk. Counterparty relationships are viewed in terms of the total outstanding credit risk, which relates to other instruments in addition to CDS, and in connection with collateral arrangements in place. On a notional value basis, approximately 23% of credit protection bought and sold as of 31 December 2017 matures within one year (31 December 2016: 29%), approximately 65% within one to five years (31 December 2016: 61%) and approximately 12% after five years (31 December 2016: 10%).

Credit derivatives by type of instrument

	Protection bought			Protection sold		
CHF billion	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	0.6	1.1	61.3	1.1	0.6	55.7
Multi-name index-linked credit default swaps	0.2	0.9	31.8	0.9	0.2	31.9
Multi-name other credit default swaps	0.0	0.0	0.1	0.0	0.0	0.0
Total rate of return swaps	0.0	0.8	4.4	0.1	0.0	1.7
Options and warrants	0.0	0.0	4.3	0.0	0.0	0.1
Total 31 December 2017	0.8	2.9	101.9	2.0	0.9	89.4
of which: credit derivatives related to economic hedges	*0.7*	*2.4*	*81.5*	*1.6*	*0.8*	*70.5*
of which: credit derivatives related to market-making	*0.0*	*0.5*	*20.3*	*0.5*	*0.0*	*18.9*

	Protection bought			Protection sold		
CHF billion	PRV	NRV	Notional values	PRV	NRV	Notional values
Single-name credit default swaps	1.6	1.3	91.4	1.3	1.4	81.3
Multi-name index-linked credit default swaps	0.2	0.8	38.4	0.5	0.4	38.3
Multi-name other credit default swaps	0.0	0.0	1.5	0.0	0.0	1.1
Total rate of return swaps	0.1	0.7	5.5	0.0	0.2	2.1
Options and warrants	0.0	0.0	2.9	0.0	0.0	0.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9
of which: credit derivatives related to economic hedges	*1.4*	*2.4*	*111.7*	*1.5*	*1.5*	*96.2*
of which: credit derivatives related to market-making	*0.5*	*0.3*	*28.0*	*0.4*	*0.5*	*26.7*

Note 12 Derivative instruments and hedge accounting (continued)

Credit derivatives by counterparty

	Protection bought			Protection sold		
CHF billion	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.2	0.2	16.2	0.2	0.1	12.3
Banks	0.3	0.7	37.0	0.5	0.4	31.6
Central clearing counterparties	0.1	1.1	41.5	1.0	0.1	40.6
Other	0.3	0.9	7.2	0.3	0.2	4.9
Total 31 December 2017	0.8	2.9	101.9	2.0	0.9	89.4

	Protection bought			Protection sold		
CHF billion	PRV	NRV	Notional values	PRV	NRV	Notional values
Broker-dealers	0.4	0.2	20.9	0.2	0.3	16.1
Banks	0.9	1.0	60.8	0.8	1.0	52.6
Central clearing counterparties	0.3	0.9	47.2	0.8	0.4	47.1
Other	0.4	0.8	10.9	0.2	0.3	7.1
Total 31 December 2016	2.0	2.8	139.7	1.9	2.0	122.9

UBS's CDS trades are documented using industry standard forms of documentation or equivalent terms documented in a bespoke agreement. The agreements that govern CDS generally do not contain recourse provisions that would enable UBS to recover from third parties any amounts paid out by UBS.

The types of credit events that would require UBS to perform under a CDS contract are subject to agreement between the parties at the time of the transaction. However, nearly all transactions are traded with reference to credit events that are applicable under certain market conventions based on the type of reference entity to which the transaction relates. Applicable credit events according to market conventions include bankruptcy, failure to pay, restructuring, obligation acceleration and repudiation / moratorium.

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's credit ratings as of 31 December 2017, CHF 0.1 billion, CHF 0.3 billion and CHF 1.2 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's liquidity requirements, UBS considers additional collateral or termination payments that would be required in the event of a reduction in UBS's long-term credit ratings, and a corresponding reduction in UBS's short-term ratings.

Derivatives transacted for hedging purposes

UBS AG enters into derivative transactions for the purposes of hedging risks inherent in assets, liabilities and forecast transactions. The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and whether the hedge qualifies as such for accounting purposes.

Derivative transactions that qualify and are designated as hedges for accounting purposes are described under the corresponding headings in this Note (fair value hedges, cash flow hedges and hedges of net investments in foreign operations).

UBS AG has also executed various hedging strategies utilizing derivatives for which hedge accounting has not been applied. These economic hedges include interest rate swaps and other interest rate derivatives (e.g., futures) for day-to-day economic interest rate risk management purposes. In addition, UBS AG has used equity futures, options and, to a lesser extent, swaps in a variety of equity trading strategies to offset underlying equity and equity volatility exposure. UBS AG has also entered into CDS that provide economic hedges for credit risk exposures (refer to "Credit derivatives" in this Note).

UBS AG's accounting policies for derivatives designated and accounted for as hedging instruments or economic hedges that do not qualify for hedge accounting are described in Note 1a item 3k, where terms used in the following sections are explained.

Note 12 Derivative instruments and hedge accounting (continued)

Fair value hedges: interest rate risk related to debt instruments

UBS AG's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate debt instruments, such as non-structured fixed-rate bonds, covered bonds and subordinated debt, due to movements in market interest rates. The fair values of outstanding interest rate derivatives designated as fair value hedges were assets of CHF 47 million and liabilities of CHF 2 million as of 31 December 2017 and assets of CHF 152 million and liabilities of CHF 1 million as of 31 December 2016.

Fair value hedges of interest rate risk

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(20)	140	554
Gains / (losses) on hedged items attributable to the hedged risk	1	(144)	(552)
Net gains / (losses) representing ineffective portions of fair value hedges	(19)	(4)	2

Fair value hedges: portfolio interest rate risk related to loans

UBS AG also applies fair value hedge accounting to mortgage loan portfolio interest rate risk. The change in fair value of the hedged items is recorded separately from the hedged item and is included within *Other assets* on the balance sheet. The fair values of outstanding interest rate derivatives designated for these hedges as of 31 December 2017 were liabilities of CHF 32 million (31 December 2016: liabilities of CHF 44 million).

Fair value hedges of portfolio interest rate risk

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Gains / (losses) on hedging instruments	(11)	(128)	(176)
Gains / (losses) on hedged items attributable to the hedged risk	4	116	147
Net gains / (losses) representing ineffective portions of fair value hedges	(7)	(12)	(29)

Cash flow hedges of forecast transactions

UBS AG is exposed to variability in future interest 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. 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 11 years. The table on the following page shows forecast principal balances on which expected interest cash flows arise as of 31 December 2017. Amounts shown represent, by time bucket, average assets and liabilities subject to forecast cash flows designated as hedged items in cash flow hedge accounting relationships.

As of 31 December 2017, the fair values of outstanding derivatives designated as cash flow hedges of forecast transactions were CHF 30 million assets and CHF 2 million liabilities (31 December 2016: CHF 68 million assets and CHF 5 million liabilities).

Other comprehensive income from cash flow hedges, net of tax was negative CHF 621 million, compared with negative CHF 666 million in 2016 and negative CHF 518 million in 2015. This result included the reclassification of a pre-tax net gain from *Other comprehensive income* to the income statement of CHF 826 million in 2017, compared with a pre-tax net gain of CHF 1,082 million in 2016 and a pre-tax net gain of CHF 1,199 million in 2015, partly offset by a pre-tax net fair value gain associated with the effective portion of derivative instruments designated as cash flow hedges recognized in comprehensive income of CHF 45 million in 2017, compared with a pre-tax net gain of CHF 246 million in 2016 and a pre-tax net gain of CHF 550 million in 2015.

As of 31 December 2017, the cumulative net gains associated with the effective portion of derivative instruments designated as cash flow hedges reported in *Equity* were CHF 351 million (31 December 2016: CHF 972 million).

In 2017, a gain of CHF 8 million was recognized in *Net trading income* due to hedge ineffectiveness, compared with a gain of CHF 11 million in 2016 and a gain of CHF 150 million in 2015.

Note 12 Derivative instruments and hedge accounting (continued)

Principal balances subject to cash flow forecasts

CHF billion	Within 1 year	1–3 years	3–5 years	5–10 years	Over 10 years
Assets	52	74	49	49	0
Liabilities	3	4	2	2	0
Net balance	50	70	47	47	0

Hedges of net investments in foreign operations

UBS AG applies hedge accounting for certain net investments in foreign operations. As of 31 December 2017, the positive replacement values and negative replacement values of foreign exchange (FX) derivatives (mainly FX swaps) designated as hedging instruments in net investment hedge accounting relationships were CHF 78 million and CHF 130 million, respectively (31 December 2016: positive replacement values of CHF 122 million and negative replacement values of CHF 79 million). As of 31 December 2017, the underlying hedged structural exposures in several currencies amounted to CHF 8.2 billion (31 December 2016: CHF 7.5 billion).

Hedges of structural FX exposures in currencies other than the US dollar may be comprised of two jointly designated derivatives as the foreign currency risk may be hedged against the US dollar first and then converted into Swiss francs, the presentation currency of UBS AG, as part of a separate FX derivative transaction. The aggregated notional amount of designated hedging derivatives as of 31 December 2017 was CHF 13 billion in total (31 December 2016: CHF 12.5 billion), including CHF 8.1 billion notional values related to US dollar versus Swiss franc swaps and CHF 5.0 billion notional values related to derivatives hedging foreign currencies (other than the US dollar) versus the US dollar. The effective portion of gains and losses of these FX swaps is transferred directly to OCI to offset foreign currency translation (FCT) gains and losses on the net investments in foreign branches and subsidiaries. As such, these FX swaps hedge the structural FX exposure resulting in the accumulation of FCT on the level of individual foreign branches and subsidiaries and hence on the total FCT OCI of UBS AG.

UBS designates certain non-derivative foreign currency financial assets and liabilities of foreign branches or subsidiaries as hedging instruments in net investment hedge accounting arrangements. The FX translation difference recorded in FCT OCI of the non-derivative hedging instrument of one foreign entity offsets the structural FX exposure of another foreign entity. Therefore, the aggregated FCT OCI of UBS AG is unchanged from this hedge designation. As of 31 December 2017, the nominal amount of non-derivative financial assets and liabilities designated as hedging instruments in such net investment hedges was CHF 1.4 billion and CHF 1.4 billion, respectively (31 December 2016: CHF 1.5 billion non-derivative financial assets and CHF 1.5 billion non-derivative financial liabilities).

Ineffectiveness of hedges of net investments in foreign operations was not material in 2017, 2016 and 2015.

Undiscounted cash flows

The table below provides undiscounted cash flow information for derivative instruments designated in hedge accounting relationships.

Derivatives designated in hedge accounting relationships (undiscounted cash flows)

CHF billion	On demand	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[1]							
FX swaps / forwards							
Cash inflows	0	8	4	0	0	0	12
Cash outflows	0	8	4	0	0	0	12
Net cash flows	0	0	0	0	0	0	0

1 Undiscounted cash inflows and cash outflows of interest rate swaps as of 31 December 2017 were not material as the majority of interest rate swaps designated in hedge accounting relationships are legally settled on a daily basis.

Note 13 Financial assets available for sale and held to maturity

a) Financial assets available for sale

CHF million	31.12.17	31.12.16
Financial assets available for sale by issuer type[1]		
Debt instruments		
Government and government agencies	7,000	11,650
of which: USA	*6,569*	*7,779*
Banks	299	1,845
Corporates and other	821	1,554
Total debt instruments	8,120	15,048
Equity instruments	546	628
Total financial assets available for sale	8,665	15,676
Unrealized gains – before tax	216	309
Unrealized (losses) – before tax	(105)	(117)
Net unrealized gains / (losses) – before tax	111	193
Net unrealized gains / (losses) – after tax	8	96

1 Refer to Note 22c for more information on product type and fair value hierarchy categorization.

b) Financial assets held to maturity

CHF million	31.12.17	31.12.16
Financial assets held to maturity by issuer type		
Debt instruments		
Government and government agencies	7,476	7,416
of which: USA	*4,833*	*4,688*
of which: Germany	*1,682*	*1,708*
of which: France	*669*	*867*
Banks	1,689	1,873
Total financial assets held to maturity	9,166	9,289

Note 14 Property, equipment and software

At historical cost less accumulated depreciation

CHF million	Own-used properties	Leasehold improvements	IT hardware and communication	Internally generated software	Purchased software	Other machines and equipment	Projects in progress	31.12.17	31.12.16
Historical cost									
Balance at the beginning of the year	7,732	3,440	1,512	3,037	408	853	1,123	18,106	17,823
Additions	44	15	101	1	43	13	1,291	1,508	1,770
Disposals / write-offs[1]	(672)	(303)	(645)	(355)	(174)	(59)	(32)	(2,239)	(1,102)
Reclassifications	(17)	117	46	1,196	(5)	22	(1,406)	(46)[6]	(214)
Foreign currency translation	(2)	(43)	3	(12)	1	(15)	(1)	(70)	(171)
Balance at the end of the year	7,085	3,226	1,018	3,867	272	815	975	17,259	18,106
Accumulated depreciation									
Balance at the beginning of the year	4,300	2,124	1,021	1,542	233	589	0	9,809	10,140
Depreciation	153	191	133	328	48	59	0	912	954
Impairment[2]	(2)	8	2	6	1	1	0	15	26
Disposals / write-offs[1]	(373)	(298)	(432)	(155)	(100)	(55)	0	(1,413)	(1,090)
Reclassifications	(9)	4	0	0	(1)	0	0	(7)[6]	(147)
Foreign currency translation	(2)	(36)	5	(3)	3	(10)	0	(43)	(74)
Balance at the end of the year	4,066	1,993	729	1,719	183	583	0	9,274	9,809
Net book value									
Net book value at the beginning of the year	3,432	1,316	492	1,495	175	264	1,123	8,297	7,683
Net book value at the end of the year[3,4]	**3,019**	**1,233**	**289**	**2,148**	**89**	**232**	**975[5]**	**7,985**	**8,297**

1 Mainly comprises CHF 819 million of assets on a net book value basis relating to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. Refer to Note 30 for more information. Also includes write-offs of fully depreciated assets. 2 Impairment charges recorded in 2017 relate to assets for which the recoverable amount was determined based on value-in-use. Recoverable amounts for these impaired assets were not material as of 31 December 2017. 3 As of 31 December 2017, contractual commitments to purchase property in the future amounted to approximately CHF 0.3 billion (31 December 2016: approximately CHF 0.3 billion). 4 Includes CHF 22 million related to leased assets, mainly IT hardware and communication. 5 Consists of CHF 754 million related to Internally generated software, CHF 188 million related to Own-used properties and CHF 33 million related to Leasehold improvements. 6 Reflects reclassifications to Properties held for sale (CHF 40 million on a net basis) of properties sold in 2017.

Note 15 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 the segments, as reported in Note 2a, as separate cash-generating units (CGUs). The impairment test is performed for each segment to which goodwill is allocated by comparing the recoverable amount, based on its value-in-use, with the carrying amount of the respective segment. An impairment charge is recognized if the carrying amount exceeds the recoverable amount. As of 31 December 2017, total goodwill recognized on the balance sheet was CHF 6.2 billion, of which CHF 1.3 billion, CHF 3.4 billion and CHF 1.4 billion was carried by Wealth Management, Wealth Management Americas and Asset Management, respectively. Based on the impairment testing methodology described below, UBS AG concluded that the goodwill balances as of 31 December 2017 allocated to these segments remain recoverable and thus were 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 segment 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 the perpetual growth implied by the long-term growth rate. 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 segment is determined by reference to the Group's equity attribution framework. Within this framework, which is described in the "Capital management" section of this report, we attribute equity to the businesses on the basis of their risk-weighted assets and leverage ratio denominator, their goodwill and intangible assets as well as equity directly associated with activity that Group ALM manages centrally on behalf of the business divisions. The framework is primarily used for purposes of measuring the performance of the businesses and includes certain management assumptions. Attributed equity equals the capital that a segment requires to conduct its business and is considered an appropriate starting point from which to determine the carrying value of the segments. 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 management" section of this report for more information on 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 BoD.

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. The discount rates were unchanged between 2016 and 2017.

Key assumptions used to determine the recoverable amounts of each segment 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 that would be material to the consolidated financial statements or to the reported financial performance of any of the business divisions.

If the estimated earnings and other assumptions in future periods deviate from the current outlook, the value of goodwill 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 total capital ratios.

Note 15 Goodwill and intangible assets (continued)

Discount and growth rates

	Discount rates		Growth rates	
In %	31.12.17	31.12.16	31.12.17	31.12.16
Wealth Management	9.0	9.0	1.7	1.7
Wealth Management Americas	9.0	9.0	2.4	2.4
Asset Management	9.0	9.0	2.4	2.4
Investment Bank	11.0	11.0	2.4	2.4

	Goodwill	Intangible assets				
CHF million	Total	Infrastructure	Customer relationships, contractual rights and other	Total	31.12.17	31.12.16
Historical cost						
Balance at the beginning of the year	6,311	773	739	1,512	7,823	7,821
Additions	37		64	64	101	24
Disposals	(27)		(34)	(34)	(61)	(3)
Write-offs				0	0	(75)
Foreign currency translation	(139)	(33)	(2)	(35)	(174)	57
Balance at the end of the year	6,182	741	766	1,507	7,689	7,823
Accumulated amortization and impairment						
Balance at the beginning of the year		626	641	1,267	1,267	1,253
Amortization		37	32	70	70	91
Impairment[1]			0	0	0	0
Disposals			(15)	(15)	(15)	(1)
Write-offs				0	0	(75)
Foreign currency translation		(27)	(3)	(29)	(29)	(1)
Balance at the end of the year		637	655	1,292	1,292	1,267
Net book value at the end of the year	6,182	104	111	215	6,398	6,556

1 Impairment charges recorded in 2017 and 2016 relate to assets for which the recoverable amount was determined based on value-in-use (recoverable amount of the impaired assets: CHF 0 million for 2017 and CHF 3 million for 2016).

The table below presents goodwill and intangible assets by segment for the year ended 31 December 2017.

CHF million	Wealth Management	Wealth Management Americas	Investment Bank	Asset Management	Corporate Center – Services	Total
Goodwill						
Balance at the beginning of the year	1,303	3,571	36	1,401		6,311
Additions	37					37
Disposals	(2)			(25)		(27)
Foreign currency translation	8	(151)	(2)	6		(139)
Balance at the end of the year	1,346	3,420	34	1,382		6,182
Intangible assets						
Balance at the beginning of the year	40	152	41	4	9	245
Additions / transfers	47	17				64
Disposals	(19)					(19)
Amortization	(7)	(41)	(12)	(3)	(7)	(70)
Impairment		0				0
Foreign currency translation	2	(6)	(1)	0		(5)
Balance at the end of the year	63	121	28	1	2	215

Note 15 Goodwill and intangible assets (continued)

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

CHF million	Intangible assets
Estimated, aggregated amortization expenses for:	
2018	63
2019	49
2020	42
2021	11
2022	11
Thereafter	35
Not amortized due to indefinite useful life	5
Total	215

Note 16 Other assets

CHF million	31.12.17	31.12.16
Prime brokerage receivables[1]	19,080	9,828
Recruitment loans to financial advisors	2,553	3,087
Other loans to financial advisors	565	471
Bail deposit[2]	1,337	1,213
Accrued interest income	578	526
Accrued income – other	781	822
Prepaid expenses	819	1,008
Settlement and clearing accounts	716	516
VAT and other tax receivables	292	261
Properties and other non-current assets held for sale	95	111
Assets of disposal group held for sale[3]	0	5,137
Other	2,688	2,433
Total other assets	29,505	25,412

1 Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage receivables are mainly comprised of margin lending receivables. 2 Refer to Note 20b item 1 for more information. 3 Refer to Note 30 for more information.

Balance sheet notes: liabilities

Note 17 Due to banks and customers

CHF million	31.12.17	31.12.16
Due to banks	7,533	10,645
Due to customers	447,141	450,199
of which: demand deposits	*190,341*	*195,756*
of which: retail savings / deposits	*161,828*	*170,729*
of which: time deposits [1]	*83,773*	*77,531*
of which: fiduciary deposits	*11,200*	*6,184*
Total due to banks and customers	454,675	460,844

1 Includes Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG of CHF 35 billion as of 31 December 2017 (31 December 2016: CHF 25 billion).

Note 18 Financial liabilities designated at fair value

CHF million	31.12.17	31.12.16
Issued debt instruments		
Equity-linked[1]	34,162	29,831
Rates-linked	5,811	10,150
Credit-linked	2,937	4,101
Fixed-rate	3,921	2,972
Other	2,671	2,875
Total issued debt instruments	49,502	49,930
of which: issued by UBS AG with original maturity greater than one year [2,3]	*37,266*	*36,347*
Over-the-counter debt instruments		
Equity-linked[1]	1,350	1,992
Other	2,967	2,671
Total over-the-counter debt instruments	4,317	4,663
of which: issued by UBS AG with original maturity greater than one year [2,4]	*3,049*	*4,210*
Repurchase agreements	375	395
Loan commitments and guarantees[5]	9	29
Total	54,202	55,017
of which: life-to-date own credit (gain) / loss	*195*	*(141)*

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. 3 More than 99% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 99% of the balance was unsecured). 4 More than 40% of the balance as of 31 December 2017 was unsecured (31 December 2016: more than 35% of the balance was unsecured). 5 Loan commitments recognized as Financial liabilities designated at fair value until drawn and recognized as Loans. See Note 1a item 3o for more information.

As of 31 December 2017 and 31 December 2016, the contractual redemption amount at maturity of financial liabilities designated at fair value through profit or loss was not materially different from the carrying value.

The table on the following page shows the residual contractual maturity of the carrying value of financial liabilities 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 these financial liabilities designated at fair value have not been included in the table on the following page as a majority of these liabilities are structured products, and therefore the future interest payments are highly dependent upon the embedded derivative and prevailing market conditions at the time each interest payment is made.

→ **Refer to Note 25d for maturity information on an undiscounted cash flow basis**

Note 18 Financial liabilities designated at fair value (continued)

Contractual maturity of carrying value

CHF million	2018	2019	2020	2021	2022	2023–2027	Thereafter	Total 31.12.17	Total 31.12.16
UBS AG[1]									
Non-subordinated debt									
Fixed-rate	3,339	1,350	872	401	571	511	3,610	10,653	9,505
Floating-rate	16,428	5,660	4,418	1,297	1,883	4,983	6,497	41,167	42,757
Subtotal	19,767	7,010	5,290	1,697	2,455	5,494	10,107	51,820	52,262
Other subsidiaries[2]									
Non-subordinated debt									
Fixed-rate	90	797	52	74	7	345	136	1,502	1,768
Floating-rate	330	18	194	0	48	27	263	879	987
Subtotal	420	816	246	74	55	372	399	2,382	2,755
Total	20,187	7,826	5,536	1,772	2,510	5,866	10,506	54,202	55,017

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

Note 19 Debt issued held at amortized cost

CHF million	31.12.17	31.12.16
Certificates of deposit	23,831	20,207
Commercial paper	23,532	1,653
Other short-term debt	3,590	4,318
Short-term debt[1]	50,953	26,178
Senior fixed-rate bonds	32,268	27,008
of which: issued by UBS AG with original maturity greater than one year[2]	*32,256*	*26,850*
Covered bonds	4,112	5,836
Subordinated debt	8,985	11,554
of which: low-trigger loss-absorbing tier 2 capital instruments	*8,286*	*10,429*
of which: non-Basel III-compliant tier 2 capital instruments	*700*	*1,125*
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,345	8,302
Other long-term debt	87	121
of which: issued by UBS AG with original maturity greater than one year[2]	*66*	*94*
Long-term debt[3]	53,796	52,820
Total debt issued held at amortized cost[4]	104,749	78,998

1 Debt with an original 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. 100% of the balance as of 31 December 2017 was unsecured (31 December 2016: 100% of the balance was unsecured). 3 Debt with 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 certain cases, UBS AG applies hedge accounting for interest rate risk as discussed in Note 1a item 3k and Note 12. As a result of applying hedge accounting, the life-to-date adjustment to the carrying value of debt issued was an increase of CHF 480 million as of 31 December 2017 and an increase of CHF 821 million as of 31 December 2016, reflecting changes in fair value due to interest rate movements.

Note 19 Debt issued held at amortized cost (continued)

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 2017 pay a fixed rate of interest.

The table below shows the residual contractual maturity of the carrying value 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 25d for maturity information on an undiscounted cash flow basis**

Contractual maturity of carrying value

CHF million, except where indicated	2018	2019	2020	2021	2022	2023–2027	Thereafter	Total 31.12.17	Total 31.12.16
UBS AG[1]									
Non-subordinated debt									
Fixed-rate	38,470	3,975	7,987	4,162	1,643	0	3	56,239	42,999
Interest rates (range in %)	0–6.6	2.4–4.0	0–4.9	0.1–1.4	4.0–4.0				
Floating-rate	21,158	4,818	3,926	0	0	0	1,223	31,125	15,937
Subordinated debt									
Fixed-rate	0	0	0	0	1,912	7,073	0	8,985	11,554
Interest rates (range in %)					7.6–7.6	4.8–8.8			
Subtotal	59,628	8,793	11,913	4,162	3,555	7,073	1,225	96,349	70,490
Other subsidiaries[2]									
Non-subordinated debt									
Fixed-rate	805	747	725	1,000	835	3,384	903	8,398	8,507
Interest rates (range in %)	0.4–3.8	0.6–2.9	0.1–2.8	0.1–2.4	0.1–3.4	0.1–2.8	0.2–2.7		
Floating-rate	1	0	1	0	0	0	0	1	1
Subtotal	806	746	726	1,000	835	3,384	903	8,400	8,507
Total	60,434	9,540	12,639	5,162	4,389	10,457	2,128	104,749	78,998

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

Note 20 Provisions and contingent liabilities

a) Provisions

CHF million	Operational risks[1]	Litigation, regulatory and similar matters[2]	Restruc-turing	Loan com-mitments and guarantees	Real estate	Employee benefits[5]	Other	Total 31.12.17	Total 31.12.16
Balance at the beginning of the year	50	3,261	498	54	138	77	91	4,169	4,163
Additions from acquired companies	0	0	0	0	0	0	7	7	0
Increase in provisions recognized in the income statement	15	682	174	11	3	11	45	941	1,430
Release of provisions recognized in the income statement	(7)	(209)	(74)	(32)	(2)	(18)	(20)	(362)	(288)
Provisions used in conformity with designated purpose	(13)	(1,230)	(280)	0	(12)	(1)	(34)	(1,571)	(1,152)
Capitalized reinstatement costs	0	0	0	0	4	0	0	4	(1)
Reclassifications	0	0	(21)	0	0	(14)	0	(36)	7
Foreign currency translation / unwind of discount	(3)	(59)	(2)	0	(5)	1	1	(68)	10
Balance at the end of the year	43	2,444	294[3]	33	125[4]	55	89	3,084	4,169

1 Comprises provisions for losses resulting from security risks and transaction processing risks. 2 Comprises provisions for losses resulting from legal, liability and compliance risks. 3 Primarily consists of personnel-related restructuring provisions of CHF 54 million as of 31 December 2017 (31 December 2016: CHF 150 million) and provisions for onerous lease contracts of CHF 235 million as of 31 December 2017 (31 December 2016: CHF 348 million). 4 Consists of reinstatement costs for leasehold improvements of CHF 86 million as of 31 December 2017 (31 December 2016: CHF 85 million) and provisions for onerous lease contracts of CHF 39 million as of 31 December 2017 (31 December 2016: CHF 53 million). 5 Includes provisions for sabbatical and anniversary awards as well as provisions for severance that are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 20b. 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.

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 20a 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 us 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 we therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe 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) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our 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 we 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 is subject to probation through January 2020. A guilty plea to, or conviction of, a crime could have material consequences for UBS. 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 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 our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit[1]

CHF million	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	Total 31.12.17	Total 31.12.16
Balance at the beginning of the year	292	425	78	5	616	259	0	1,585	3,261	2,983
Increase in provisions recognized in the income statement	30	158	3	6	8	248	0	229	682	856
Release of provisions recognized in the income statement	(4)	(12)	(1)	(9)[2]	(49)	(6)	0	(129)	(209)	(48)
Provisions used in conformity with designated purpose	(135)	(207)	(2)	(1)	(216)	(262)	0	(406)	(1,230)	(554)
Foreign currency translation / unwind of discount	24	(17)	2	0	(15)	1	0	(55)	(59)	25
Balance at the end of the year	207	348	79	1	345	240	0	1,224	2,444	3,261

1 Provisions, if any, for the matters described in this Note are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 7) and Corporate Center – Non-core and Legacy Portfolio (item 2). Provisions, if any, for the matters described in items 1 and 6 of this Note are allocated between 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, Corporate Center – Services and Corporate Center – Non-core and Legacy Portfolio. 2 In 2017, a release of CHF 5 million was recognized in Provisions for litigation, regulatory and similar matters, with a corresponding increase in Other provisions.

Note 20 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.

Since 2013, UBS (France) S.A. and UBS AG and certain former employees have been under investigation in France for alleged complicity in having illicitly solicited clients on French territory and regarding the laundering of proceeds of tax fraud and of 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.

In February 2016, the investigating judges notified UBS AG and UBS (France) S.A. that they have closed their investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). In March 2017, the investigating judges issued the trial order ("*ordonnance de renvoi*") that charges UBS AG and UBS (France) S.A., as well as various former employees, with illicit solicitation of clients on French territory and with participation in the laundering of the proceeds of tax fraud, and which transfers the case to court. The trial schedule has not yet been announced. In October 2017, the Investigation Chamber of the Court of Appeals decided that UBS (France) S.A. shall not be constituted as a civil party in the guilty plea proceedings against the former UBS (France) S.A. Head of Front Office. UBS (France) S.A. has appealed this decision to the French Supreme Court ("*Cour de cassation*").

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 and of banking, financial solicitation by unauthorized persons and serious tax fraud.

In 2015, UBS received inquiries from the US Attorney's Office for the Eastern District of New York and from the US Securities and Exchange Commission (SEC), which are investigating potential sales to US persons of bearer bonds and other unregistered securities in possible violation of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and the registration requirements of the US securities laws. UBS is cooperating with the authorities in these investigations. In 2018, UBS was informed by the US Attorney's Office and the SEC that they have closed their investigations and that they will not take any action.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 December 2017 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. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

UBS was not a significant originator of US residential loans. A branch of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008, and securitized less than half of these loans.

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: When UBS acted as an RMBS sponsor or mortgage seller, it generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, UBS was in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. In 2012, certain RMBS trusts filed an action (Trustee Suit) in the US District Court for the Southern District of New York (SDNY) seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion. Approximately 9,000 loans were at issue in a bench trial in the SDNY in 2016, following which the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. In October 2017, UBS and certain holders of the RMBS in the Trustee Suit entered into an agreement under which UBS has agreed to pay an aggregate of USD 543 million into the relevant RMBS trusts, plus certain attorneys' fees. A portion of these settlement costs will be borne by other parties that indemnified UBS. The agreement is subject to the trustee for the RMBS trusts becoming a party thereto by 9 March 2018. The trustee for the RMBS trusts has evaluated the proposed settlement under the agreement between UBS and the RMBS holders and UBS has been in discussions with the trustee about the terms on which it would become a party to a settlement. Giving effect to a settlement of the Trustee Suit, 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.

Mortgage-related regulatory matters: In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and subsequently provided a revised list of transactions. UBS has provided information in response to this subpoena. UBS has also received and responded to subpoenas from the New York State Attorney General (NYAG) and other state attorneys general relating to UBS's RMBS business. In 2017, the NYAG identified a number of transactions that are the focus of its inquiry. In addition, UBS responded to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US Attorney's Office for Connecticut and the DOJ) and the SEC relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. UBS is cooperating with the authorities in these matters.

Our balance sheet at 31 December 2017 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 (CSSF). 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 aggregating 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).

Note 20 Provisions and contingent liabilities (continued)

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 fraudulent conveyances and preference payments. In 2016, the Bankruptcy Court dismissed the remaining claims against the UBS entities. The BMIS Trustee appealed. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to those made by the BMIS Trustee, and seeking unspecified damages. These claims have either been voluntarily withdrawn or dismissed on the basis that the courts did not have jurisdiction to hear the claims against the UBS entities. In 2016, the plaintiff in one of those claims appealed the dismissal. In February 2018, the United States Court of Appeals for the Second Circuit affirmed the dismissal of the plaintiff's claim.

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) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of USD 2.4 billion, of which claims with aggregate claimed damages of USD 1.4 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims are 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. Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management and the co-manager of certain of the funds, seeking damages for investor losses in the funds during the period from May 2008 through May 2014. In 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendant's motion for summary judgment based on a forum selection clause in the loan agreements. The Puerto Rico Supreme Court reversed that decision and remanded the case back to the trial court for reconsideration. On reconsideration the trial court granted defendant's motion and dismissed the action.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

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.

Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain closed-end funds and certain members of UBS PR senior management, seeking damages for investor losses in the funds during the period from January 2008 through May 2012. In 2016, the court denied plaintiffs' motion for class certification. In March 2017, the US Court of Appeals for the First Circuit denied plaintiffs' petition seeking permission to bring an interlocutory appeal challenging the denial of their motion for class certification.

Beginning in 2015, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments, in 2016, the Commonwealth defaulted on payments on its general obligation debt (GO Bonds), and in 2017 the Commonwealth defaulted on payments on its debt backed by the Commonwealth's Sales and Use Tax (COFINA Bonds) as well as on bonds issued by the Commonwealth's Employee Retirement System (ERS Bonds). The funds hold significant amounts of both COFINA and ERS Bonds and the defaults on interest payments are expected to adversely affect dividends from the funds. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. 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 is authorized to impose, and has imposed, a stay on exercise of creditors' rights. In May and June 2017, the oversight board placed the GO, COFINA and ERS Bonds, among others, into a bankruptcy-like proceeding under the supervision of a Federal District Judge as authorized by the oversight board's enabling statute. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 December 2017 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: Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our precious metals and related structured products businesses. Numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. In 2014 and 2015, UBS reached settlements with the UK Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission (CFTC) in connection with their foreign exchange investigations, FINMA issued an order concluding its formal proceedings relating to UBS's foreign exchange and precious metals businesses, and the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking issued a Cease and Desist Order and assessed monetary penalties against UBS AG. In addition, the DOJ's Criminal Division (Criminal Division) terminated the 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates and UBS AG pleaded guilty to one count of wire fraud, paid a fine and is subject to probation through January 2020. In January 2018, UBS reached a settlement with the CFTC in connection with the CFTC's precious metals investigations. As part of that settlement, UBS paid a USD 15 million civil monetary penalty. UBS has ongoing obligations to cooperate with these authorities and to undertake certain remediation. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) and by authorities in other jurisdictions in connection with potential competition law violations relating to foreign exchange and precious metals businesses. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions related to foreign exchange and precious metals and grants of conditional immunity or leniency. Investigations relating to foreign exchange and precious metals 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. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

Note 20 Provisions and contingent liabilities (continued)

A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal. The appeals court heard oral argument in June 2017.

In 2015, a putative class action was filed in federal court against UBS and numerous other banks on behalf of a putative class of persons and businesses in the US who directly purchased foreign currency from the defendants and their co-conspirators for their own end use. That action was transferred to federal court in New York. 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 2016, a putative class action was filed in federal court in New York against UBS and numerous other banks on behalf of a putative class of persons and entities who had indirectly purchased foreign exchange instruments from a defendant or co-conspirator in the US. The complaint asserts claims under federal and state antitrust laws. In response to defendants' motion to dismiss, plaintiffs agreed to dismiss their complaint. In April and June 2017, two new putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of different proposed classes of indirect purchasers of currency, and a consolidated complaint was filed in June 2017.

In 2015, UBS was added to putative class actions pending against other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases sought to amend their complaints to add new allegations about UBS, which the court granted. The plaintiffs filed amended complaints in June 2017. In March 2017, the court in New York granted UBS's motion to dismiss the platinum and palladium action. In May 2017, plaintiffs in the platinum and palladium action filed an amended complaint that did not allege claims against UBS.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office (SFO), the Monetary Authority of Singapore (MAS), the Hong Kong Monetary Authority (HKMA), FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted or are continuing to conduct investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. In 2012, UBS reached settlements relating to benchmark interest rates with the FSA, the CFTC and the Criminal Division of the DOJ, and FINMA issued an order in its proceedings with respect to UBS relating to benchmark interest rates. In addition, UBS entered into settlements with the European Commission (EC) and with the Swiss Competition Commission (WEKO) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation 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 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. Refer to Note 20b in the "Consolidated financial statements" section of the Annual Report 2016 for more information on regulatory actions relating to benchmark rates and grants of conditional immunity or leniency. Investigations by certain governmental authorities remain ongoing notwithstanding these resolutions.

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 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. All of the complaints allege manipulation, through various means, of various benchmark interest rates, including USD LIBOR, Euroyen TIBOR, Yen LIBOR, EURIBOR, CHF LIBOR, GBP LIBOR, USD and SGD SIBOR and SOR, Australian BBSW and USD ISDAFIX, and seek unspecified compensatory and other damages under varying legal theories.

In 2013, the US district court in the USD LIBOR action dismissed the federal antitrust and racketeering claims of certain USD LIBOR plaintiffs and a portion of their claims brought under the CEA and state common law. Certain plaintiffs appealed the decision to the Second Circuit, which, in 2016, vacated the district court's ruling finding no antitrust injury and remanded the case back to the district court for a further determination on whether plaintiffs have antitrust standing. In December 2016, the district court again dismissed plaintiffs' antitrust claims, this time for lack of personal jurisdiction over UBS and other foreign banks. Certain plaintiffs appealed that decision to the Second Circuit in 2017. In 2018, the district court denied certain plaintiffs' motions for class certification. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims. In 2015, the same court dismissed plaintiff's federal racketeering claims and affirmed its previous dismissal of plaintiff's antitrust claims. In 2017, the court also dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds, as did the court in the CHF LIBOR action. Also in 2017, the courts in the EURIBOR and the SIBOR and SOR lawsuits dismissed the cases as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs in the CHF LIBOR and SIBOR and SOR actions have filed amended complaints following the dismissals, which UBS and other defendants have moved to dismiss. UBS and other defendants in other lawsuits have also moved to dismiss the GBP LIBOR and Australian BBSW actions. In 2016, UBS entered into an agreement with representatives of a class of bondholders to settle their USD LIBOR class action. The agreement has received preliminary court approval and remains subject to final approval. Since 2014, putative class actions have been filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX. The court has given preliminary approval of a settlement agreement under which UBS would pay USD 14 million to settle the case in its entirety.

Government bonds: Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY, and a consolidated complaint was filed in November 2017. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other 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 2017 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.

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 has 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 2017 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.

7. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. The SFC has previously indicated that it intended to take enforcement action against UBS and certain employees in relation to certain of these offerings. In March 2018, the SFC issued a decision notice in relation to one of the offerings under investigation. The notice provides for a fine of HKD 119 million and a suspension of UBS Securities Hong Kong Limited's ability to act as a sponsor for Hong Kong listed initial public offerings for 18 months. UBS intends to appeal the decision.

Note 21 Other liabilities

CHF million	31.12.17	31.12.16
Prime brokerage payables[1]	29,646	31,973
Amounts due under unit-linked investment contracts	11,523	9,286
Compensation-related liabilities	4,909	5,256
of which: accrued expenses	*2,372*	*2,367*
of which: other deferred compensation plans	*1,613*	*1,623*
of which: net defined benefit pension and post-employment liabilities[2]	*925*	*1,266*
Third-party interest in consolidated investment funds	269	751
Settlement and clearing accounts	1,380	1,011
Current and deferred tax liabilities[3]	844	911
VAT and other tax payables	378	487
Deferred income	150	168
Accrued interest expenses	1,533	1,571
Other accrued expenses	2,105	2,427
Liabilities of disposal group held for sale[4]	0	5,213
Other	2,252	1,390
Total other liabilities	54,990	60,443

1 Prime brokerage services include clearance, settlement, custody, financing and portfolio reporting services for corporate clients trading across multiple asset classes. Prime brokerage payables are mainly comprised of client securities financing and deposits. 2 Refer to Note 26 for more information. 3 Refer to Note 8 for more information. 4 Refer to Note 30 for more information.

Additional information

Note 22 Fair value measurement

This Note provides fair value measurement information for both financial and non-financial instruments and is structured as follows:
a) Valuation principles
b) Valuation governance
c) Fair value hierarchy
d) Valuation adjustments
e) Transfers between Level 1 and Level 2
f) Level 3 instruments: valuation techniques and inputs
g) Level 3 instruments: sensitivity to changes in unobservable input assumptions
h) Level 3 instruments: movements during the period
i) Financial instruments not measured at fair value

a) Valuation principles

Fair value is defined as the price 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 most advantageous market, in the absence of a principal market) as of the measurement date. In measuring fair value, UBS AG uses various valuation approaches and applies a hierarchy for prices and inputs that maximizes the use of observable market data, if available.

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.

If available, fair values are determined using quoted prices in active markets for identical assets or liabilities. An active market is one in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing data on an ongoing basis. Assets and liabilities that are quoted and traded in an active market are valued at the currently quoted price multiplied by the number of units of the instrument held.

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 techniques involve the use of estimates, the extent of which depends on the complexity of the instrument and the availability of market-based data. 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 an asset or liability's classification within the fair value hierarchy.

Many cash instruments and over-the-counter (OTC) derivative contracts have bid and offer prices that can be observed in the marketplace. Bid prices reflect the highest price that a party is willing to pay for an asset. Offer prices represent the lowest price that a party is willing to accept for an asset. In general, long positions are measured at a bid price and short positions at an offer price, reflecting the prices at which the instruments could be transferred under normal market conditions. Offsetting positions in the same financial instrument are marked at the mid-price within the bid-offer spread.

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.

For 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. This initial recognition amount may differ from the fair value obtained using the valuation technique. Any such difference is deferred and not recognized in the income statement and referred to as deferred day-1 profit or loss.

→ **Refer to Note 22d for more information**

Note 22 Fair value measurement (continued)

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 risk and finance control functions. Responsibility for the ongoing measurement of financial and non-financial instruments at fair value resides with the business divisions. In carrying out their valuation responsibilities, the businesses are required to consider the availability and quality of external market data and to provide justification and rationale for their fair value estimates.

Fair value estimates are validated by 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. Controls and a governance framework are in place and are intended to ensure 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 22d for more information**

Note 22 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 the different product types, valuation techniques used in measuring their fair value, including significant valuation inputs and assumptions used, and the factors determining their classification within the fair value hierarchy.

Determination of fair values from quoted market prices or valuation techniques[1]

	31.12.17				31.12.16			
CHF million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets measured at fair value on a recurring basis								
Financial assets held for trading[2]	108,963	15,309	1,972	126,244	76,046	14,377	1,689	92,112
of which:								
Government bills / bonds	*11,935*	*918*	*0*	*12,854*	*10,500*	*1,319*	*0*	*11,820*
Corporate and municipal bonds	*37*	*8,072*	*552*	*8,662*	*58*	*6,722*	*591*	*7,371*
Loans	*0*	*3,346*	*501*	*3,847*	*0*	*1,356*	*681*	*2,037*
Investment fund units	*7,223*	*1,839*	*571*	*9,632*	*6,114*	*3,521*	*63*	*9,698*
Asset-backed securities	*0*	*194*	*174*	*368*	*0*	*470*	*215*	*685*
Equity instruments	*79,276*	*186*	*105*	*79,566*	*50,916*	*397*	*65*	*51,378*
Financial assets for unit-linked investment contracts	*10,492*	*755*	*69*	*11,316*	*8,459*	*591*	*74*	*9,123*
Positive replacement values	458	116,222	1,549	118,229	434	155,428	2,549	158,411
of which:								
Interest rate contracts	*1*	*43,913*	*135*	*44,049*	*8*	*57,703*	*278*	*57,988*
Credit derivative contracts	*0*	*2,266*	*550*	*2,816*	*0*	*2,562*	*1,313*	*3,875*
Foreign exchange contracts	*207*	*46,749*	*189*	*47,145*	*263*	*75,607*	*222*	*76,092*
Equity / index contracts	*16*	*21,541*	*675*	*22,232*	*1*	*17,274*	*729*	*18,003*
Commodity contracts	*0*	*1,727*	*0*	*1,727*	*0*	*2,269*	*8*	*2,277*
Financial assets designated at fair value	23,032	34,104	1,419	58,556	39,641	23,304	2,079	65,024
of which:								
Government bills / bonds	*22,062*	*3,900*	*0*	*25,961*	*39,439*	*4,361*	*0*	*43,799*
Corporate and municipal bonds	*765*	*20,702*	*0*	*21,467*	*15*	*16,860*	*0*	*16,875*
Loans (including structured loans)	*0*	*9,385*	*758*	*10,143*	*0*	*2,043*	*1,195*	*3,238*
Structured reverse repurchase and securities borrowing agreements	*0*	*118*	*173*	*291*	*0*	*40*	*644*	*684*
Other	*205*	*0*	*489*	*694*	*187*	*0*	*240*	*427*
Financial assets available for sale	3,000	5,157	507	8,665	6,299	8,891	486	15,676
of which:								
Government bills / bonds	*2,733*	*133*	*0*	*2,866*	*5,444*	*450*	*0*	*5,894*
Corporate and municipal bonds	*121*	*1,060*	*9*	*1,189*	*646*	*4,939*	*12*	*5,596*
Investment fund units	*0*	*70*	*115*	*185*	*0*	*51*	*126*	*177*
Asset-backed securities	*0*	*3,880*	*0*	*3,880*	*0*	*3,381*	*0*	*3,381*
Equity instruments	*146*	*16*	*384*	*546*	*204*	*71*	*336*	*611*
Non-financial assets								
Precious metals and other physical commodities	4,563	0	0	4,563	4,583	0	0	4,583
Assets measured at fair value on a non-recurring basis								
Other assets[3]	0	54	42	95	5,060	131	56	5,248
Total assets measured at fair value	140,017	170,848	5,489	316,353	132,064	202,132	6,860	341,056

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Note 22 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)[1]

	31.12.17				31.12.16			
CHF million	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Liabilities measured at fair value on a recurring basis								
Trading portfolio liabilities	26,037	4,309	117	30,463	18,808	3,898	119	22,825
of which:								
Government bills / bonds	*5,153*	*256*	*0*	*5,409*	*5,573*	*648*	*0*	*6,221*
Corporate and municipal bonds	*50*	*3,453*	*35*	*3,538*	*12*	*2,927*	*37*	*2,976*
Investment fund units	*541*	*263*	*16*	*820*	*484*	*91*	*20*	*595*
Equity instruments	*20,293*	*336*	*66*	*20,695*	*12,740*	*227*	*62*	*13,028*
Negative replacement values	398	112,929	2,807	116,134	539	149,255	4,016	153,810
of which:								
Interest rate contracts	*5*	*38,196*	*186*	*38,387*	*12*	*51,990*	*475*	*52,476*
Credit derivative contracts	*0*	*3,196*	*601*	*3,797*	*0*	*3,269*	*1,538*	*4,807*
Foreign exchange contracts	*213*	*45,151*	*122*	*45,486*	*274*	*71,668*	*148*	*72,089*
Equity / index contracts	*42*	*24,803*	*1,896*	*26,741*	*1*	*20,254*	*1,854*	*22,109*
Commodity contracts	*0*	*1,561*	*1*	*1,562*	*0*	*2,040*	*1*	*2,041*
Financial liabilities designated at fair value	0	41,376	12,826	54,202	2	44,007	11,008	55,017
of which:								
Issued debt instruments	*0*	*38,617*	*10,885*	*49,502*	*0*	*40,242*	*9,688*	*49,930*
Over-the-counter debt instruments	*0*	*2,385*	*1,930*	*4,315*	*2*	*3,611*	*1,050*	*4,663*
Structured repurchase agreements	*0*	*372*	*4*	*376*	*0*	*130*	*266*	*395*
Loan commitments and guarantees	*0*	*2*	*7*	*9*	*0*	*25*	*5*	*29*
Other liabilities – amounts due under unit-linked investment contracts	0	11,523	0	11,523	0	9,286	0	9,286
Liabilities measured at fair value on a non-recurring basis								
Other liabilities[3]	0	1	0	1	0	5,213	0	5,213
Total liabilities measured at fair value	26,435	170,139	15,750	212,324	19,349	211,660	15,143	246,152

1 Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The fair value of these derivatives was not material for the periods presented. 2 Financial assets held for trading exclude precious metals and other physical commodities. 3 Other assets and other liabilities primarily consist of assets held for sale as well as assets and liabilities of a disposal group held for sale, which are measured at the lower of their net carrying amount or fair value less costs to sell.

Valuation techniques

Valuation techniques are used to value positions for which a market price is not available from market sources. This includes certain less liquid debt and equity instruments, certain exchange-traded derivatives and all derivatives transacted in the OTC market. 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 and instruments not traded in an active market, 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 22f for more information. The discount curves used by UBS AG incorporate the funding and credit characteristics of the instruments to which they are applied.

Financial instruments excluding derivatives: product description, valuation and classification in the fair value hierarchy

Government bills and bonds

Product description: government bills and bonds include fixed-rate, floating-rate and inflation-linked bills and bonds issued by sovereign governments.

Valuation: these instruments are generally valued using prices obtained directly from the market. Instruments that cannot be 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: government bills and bonds are 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.

Corporate and municipal bonds

Product description: corporate bonds include senior, junior and subordinated debt issued by corporate entities. Municipal bonds are issued by state and local governments. While most instruments are standard fixed- or floating-rate securities, some may have more complex coupon or embedded option features.

Valuation: corporate and municipal bonds are 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 where no directly comparable price is available, issuances may be priced using a convertible bond model.

Fair value hierarchy: corporate and municipal bonds are 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 and also cannot be referenced to other securities issued by the same issuer. Therefore, such instruments are measured based on price levels for similar issuers adjusted for relative tenor and issuer quality.

Note 22 Fair value measurement (continued)

Traded loans and loans designated at fair value

Product description: these instruments include fixed-rate loans, corporate loans, recently originated commercial real estate loans and contingent lending transactions.

Valuation: loans are 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 using 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. The valuation of the contingent lending transactions is dependent on actuarial mortality levels and actuarial life insurance policy lapse rates. Mortality and lapse rate assumptions are based on external actuarial estimations for large homogeneous pools, and contingencies are derived from a range relative to the actuarially expected amount.

Fair value hierarchy: instruments with suitably deep and liquid pricing information are classified as Level 2, while any positions requiring the use of valuation techniques, or for which the price sources have insufficient trading depth, are classified as Level 3.

Investment fund units

Product description: investment fund units are pools of assets, generally equity instruments and bonds, broken down to redeemable units.

Valuation: investment fund units are 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 (NAV), taking into account any restrictions imposed upon redemption.

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 NAV is not available or that are not redeemable at the measurement date or shortly thereafter are classified as Level 3.

Asset-backed securities (ABS)

Product description: ABS include residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), other asset-backed securities (ABS) and collateralized debt obligations (CDO) and are instruments generally issued through the process of securitization of underlying interest-bearing assets.

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. Inputs to discounted expected cash flow techniques include asset prepayment rates, discount margin or discount yields, asset default rates and asset loss on default severity.

Fair value hierarchy: RMBS, CMBS and 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.

Equity instruments

Product description: equity instruments include stocks and shares, private equity positions and units held in hedge funds.

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 for units held in hedge funds is measured based on their published NAV, taking into account any restrictions imposed upon redemption.

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. Units held in hedge funds are classified as Level 2, except for positions for which published NAV is not available or that are not redeemable at the measurement date or shortly thereafter, in which case such positions are classified as Level 3.

Financial assets for unit-linked investment contracts

Product description: unit-linked investment contracts allow investors to invest in a pool of assets through issued investment units.

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. However, instruments for which prices are not readily available are classified as Level 3.

Structured (reverse) repurchase agreements

Product description: structured (reverse) repurchase agreements are securities purchased under resale agreements and securities sold under repurchase agreements.

Valuation: these instruments are valued using discounted expected cash flow techniques. The discount rate applied is based on funding curves that are specific to the collateral eligibility terms for the contract in question.

Fair value hierarchy: collateral terms for these positions are often not standard and therefore funding spread levels used for valuation purposes cannot be observed in the market. As a result, these positions are classified as Level 2 and Level 3.

Financial liabilities designated at fair value

Product description: debt instruments, primarily comprised of equity-, rates- and credit-linked issued notes, which are held at fair value under the fair value option. These instruments are tailored specifically to the holder's risk or investment appetite with structured coupons or payoffs.

Valuation: the risk management and the valuation approaches for these instruments are closely aligned with the equivalent derivatives business and the underlying risk, and the valuation techniques used for this component are the same as the relevant valuation techniques described below. For example, equity-linked notes should be referenced to equity / index contracts and credit-linked notes should be referenced to credit derivative contacts.

Fair value hierarchy: observability is closely aligned with the equivalent derivatives business and the underlying risk.

→ **Refer to Note 18 for more information on financial liabilities designated at fair value**

→ **Refer to Note 22d for more information on own credit adjustments related to financial liabilities designated at fair value**

Amounts due under unit-linked investment contracts

Product description: the financial liability represents the amounts due to unit holders.

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: product description, 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 22d, the fair value of uncollateralized and partially collateralized derivatives is then adjusted by CVA, DVA and FVA as applicable, to reflect an estimation of the effect of counterparty credit risk, UBS's own credit risk and funding costs and benefits.

Interest rate contracts

Product description: interest rate swap contracts include interest rate swaps, basis swaps, cross-currency swaps, inflation swaps and interest rate forwards, often referred to as forward-rate agreements (FRA). Interest rate option contracts include caps and floors, swaptions, swaps with complex payoff profiles and other more complex interest rate options.

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, FRA 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. The volatility and correlation inputs within the models are implied from market data based on market-observed prices for standard option instruments trading within the market. Option models used to value more exotic products have a number of model parameter inputs that require calibration to enable the exotic model to price standard option instruments to the price levels observed in the market. When the maturity of the 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 as well as more exotic products. In most cases, there are active and observable markets for the standard market instruments that form the inputs for yield curve models as well as the financial instruments from which volatility and correlation inputs are derived. Exotic options for which appropriate volatility or correlation input levels cannot be implied from observable market data are classified as Level 3. Interest rate swap or option contracts are classified as Level 3 when the term exceeds standard market observable quotes.

Note 22 Fair value measurement (continued)

Credit derivative contracts

Product description: a credit derivative is a financial instrument that transfers credit risk related to a single underlying entity, a portfolio of underlying entities or a pool of securitized referenced assets. Credit derivative products include credit default swaps (CDS) on single names, indices, bespoke portfolios and securitized products, plus first to default swaps and certain total return swaps (TRS).

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. Correlation is an additional input for certain portfolio credit derivatives. Asset-backed credit derivatives are valued using a similar valuation technique to the underlying security with an adjustment to reflect the funding differences between cash and synthetic form. Inputs include prepayment rates, default rates, loss severity, discount margin / rate.

Fair value hierarchy classification: single entity and portfolio credit derivative contracts are classified as Level 2 when credit spreads, recovery rates and correlations 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.

Foreign exchange contracts

Product description: this includes open spot and forward foreign exchange (FX) contracts and OTC FX option contracts. OTC FX option contracts include standard call and put options, options with multiple exercise dates, path-dependent options, options with averaging features, options with discontinuous payoff characteristics, options on a number of underlying FX rates and multi-dimensional FX option contracts, which have a dependency on multiple FX pairs.

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. Inputs to the option valuation models include spot FX rates, FX forward points, FX volatilities, interest rate yield curves, interest rate volatilities and correlations. The inputs for volatility and correlation are implied through the calibration of observed prices for standard option contracts trading within the market. 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 both 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. The inputs used to value these OTC FX option contracts are calculated using consensus pricing services without an underlying principal market, historical asset prices or by extrapolation.

Equity / index contracts

Product description: equity / index contracts are equity forward contracts and equity option contracts. Equity option contracts include market standard single or basket stock or index call and put options as well as equity option contracts with more complex features.

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 using 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

Product description: commodity derivative contracts include forward, swap and option contracts on individual commodities and on commodity indices.

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.

→ **Refer to Note 12 for more information on derivative instruments**

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. Valuation adjustments are an important component of fair value for assets and liabilities that are measured using valuation techniques. Such adjustments are applied to reflect uncertainties within the fair value measurement process, to adjust for an identified model simplification or to incorporate an aspect of fair value that requires an overall portfolio assessment rather than an evaluation based on an individual instrument level characteristic.

Day-1 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. These day-1 profit or loss reserves are reflected, where appropriate, as valuation adjustments.

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss related to financial instruments other than financial assets available for sale is released into *Net trading income* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss related to financial assets available for sale is released into *Other comprehensive income* when pricing of equivalent products or the underlying parameters become observable and is released into *Other income* when the assets are sold.

Deferred day-1 profit or loss

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Balance at the beginning of the year	371	421	480
Profit / (loss) deferred on new transactions	242	254	268
(Profit) / loss recognized in the income statement	(274)	(290)	(321)
(Profit) / loss recognized in other comprehensive income		(23)	
Foreign currency translation	(10)	9	(6)
Balance at the end of the year	329	371	421

Note 22 Fair value measurement (continued)

Own credit

In addition to considering the valuation of the derivative risk component, the valuation of financial liabilities designated at fair value also requires consideration of the funded component and specifically 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 not to include an own credit component.

The own credit presentation requirements of IFRS 9, *Financial Instruments,* were adopted as of 1 January 2016. From this date onward, changes in the fair value of financial liabilities designated at fair value through profit or loss related to own credit have been recognized in *Other comprehensive income* directly within *Retained earnings.* As UBS AG does not hedge changes in own credit arising on financial liabilities designated at fair value, presenting own credit within *Other comprehensive income* does not create or increase an accounting mismatch in the income statement. The unrealized and any realized own credit recognized in *Other comprehensive income* will not be reclassified to the income statement in future periods. Comparative period information was not restated.

Own credit is estimated using an own credit adjustment (OCA) curve, which incorporates observable market data, including market-observed secondary prices for UBS senior debt, UBS credit default swap (CDS) spreads and senior debt curves of peers. The table below summarizes the effects of own credit adjustments related to financial liabilities designated at fair value. The change in unrealized own credit for the period ended 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 18 for more information on financial liabilities designated at fair value**

Own credit adjustments on financial liabilities designated at fair value

	For the year ended		
	Included in Other comprehensive income		Included in Net trading income
CHF million	31.12.17	31.12.16	31.12.15
Recognized during the year:			
Realized gain / (loss)	21	18	
Unrealized gain / (loss)	(333)	(138)	553
Total gain / (loss), before tax	(312)	(120)	

	As of		
CHF million	31.12.17	31.12.16	31.12.15
Recognized on the balance sheet as of the end of the year:			
Unrealized life-to-date gain / (loss)	(195)	141	287

Credit valuation adjustments

In order to measure the fair value of OTC derivative instruments, including funded derivative instruments that are classified as *Financial assets designated at fair value,* credit valuation adjustments (CVA) 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 to that counterparty, and is dependent on the expected future value of exposures, default probabilities and recovery rates, applicable collateral or netting arrangements, break clauses and other contractual factors.

Funding valuation adjustments

Funding valuation adjustments (FVA) 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.

An FVA is also applied to collateralized derivative assets in cases where the collateral cannot be sold or repledged.

Debit valuation adjustments

A debit valuation adjustment (DVA) is estimated to incorporate own credit in the valuation of derivatives, effectively consistent with the CVA framework. DVA is 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 AG 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 AG 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), CHF million	31.12.17	31.12.16
Credit valuation adjustments[1]	(113)	(216)
Funding valuation adjustments	(49)	(106)
Debit valuation adjustments	2	5
Other valuation adjustments	(715)	(713)
of which: liquidity	*(465)*	*(439)*
of which: model uncertainty	*(250)*	*(274)*

1 Amounts do not include reserves against defaulted counterparties.

e) Transfers between Level 1 and Level 2

The amounts provided below reflect transfers between Level 1 and Level 2 for instruments that were held for the entire reporting period.

Assets totaling approximately CHF 0.8 billion, which were mainly comprised of financial assets designated at fair value, largely corporate and municipal bonds, and financial assets held for trading, predominantly investment fund units as well as corporate and municipal bonds, were transferred from Level 2 to Level 1 during 2017, generally due to increased levels of trading activity observed within the market. Transfers of financial liabilities from Level 2 to Level 1 during 2017 were not significant.

Assets totaling approximately CHF 0.3 billion, which were mainly comprised of financial assets available for sale, largely government bonds, and financial assets held for trading, predominantly investment fund units and equity instruments, were transferred from Level 1 to Level 2 during 2017, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 during 2017 were not significant.

Note 22 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 significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs. Several inputs disclosed in prior periods are not disclosed in the table below because they are not considered significant to the respective valuation technique as of 31 December 2017.

The range of values represents the highest- and lowest-level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input, but rather the different underlying characteristics of the relevant assets and liabilities. 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. Further, the ranges of unobservable inputs may differ across other financial institutions due to 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				31.12.17			31.12.16			
CHF billion	31.12.17	31.12.16	31.12.17	31.12.16	Valuation technique(s)	Significant unobservable input(s)[1]	low	high	weighted average[2]	low	high	weighted average[2]	unit[1]
Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale													
Corporate and municipal bonds	*0.6*	*0.6*	*0.0*	*0.0*	Relative value to market comparable	Bond price equivalent	0	133	92	0	128	88	points
Traded loans, loans designated at fair value, loan commitments and guarantees	*1.7*	*2.0*	*0.0*	*0.0*	Relative value to market comparable	Loan price equivalent	50	102	98	39	103	94	points
					Discounted expected cash flows	Credit spread	23	124		71	554		basis points
					Market comparable and securitization model	Discount margin	0	14	2	0	16	2	%
Investment fund units[3]	*0.7*	*0.2*	*0.0*	*0.0*	Relative value to market comparable	Net asset value							
Equity instruments[3]	*0.5*	*0.4*	*0.1*	*0.1*	Relative value to market comparable	Price							
Structured (reverse) repurchase agreements	*0.2*	*0.6*	*0.0*	*0.3*	Discounted expected cash flows	Funding spread	15	195		15	195		basis points
Issued and over-the-counter debt instruments[4]			*12.8*	*10.7*									
Replacement values													
Interest rate contracts	*0.1*	*0.3*	*0.2*	*0.5*	Option model	Volatility of interest rates	26	229		26	176		%
Credit derivative contracts	*0.5*	*1.3*	*0.6*	*1.5*	Discounted expected cash flows	Credit spreads	6	550		0	791		basis points
						Bond price equivalent	2	102		3	100		points
Equity / index contracts	*0.7*	*0.7*	*1.9*	*1.9*	Option model	Equity dividend yields	0	13		0	15		%
						Volatility of equity stocks, equity and other indices	0	172		0	150		%
						Equity-to-FX correlation	(39)	70		(45)	82		%
						Equity-to-equity correlation	(50)	97		12	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 The range of inputs is not disclosed due to the dispersion of values given the diverse nature of the investments. 4 Valuation techniques, significant unobservable inputs and the respective input ranges for issued debt instruments and over-the-counter debt instruments are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table.

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, including information to facilitate an understanding of factors that give rise to the input ranges shown. Relationships between observable and unobservable inputs have not been included in the summary below.

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). Bond prices are expressed as points of the nominal, where 100 represents a fair value equal to the nominal value (i.e., par).

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 that 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 in measuring 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 CDS 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 (DM)

The DM spread represents the discount rates used 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.

Note 22 Fair value measurement (continued)

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. The minimum level of volatility is 0% and there is no theoretical maximum. 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.

The volatility of interest rates reflects the range of unobservable volatilities across different currencies and related underlying interest rate 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. The volatility of equity stocks, equity and other indices reflects the range of underlying stock volatilities.

Correlation

Correlation measures the inter relationship 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 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, due to the range of different payoff features within such instruments.

Equity-to-FX correlation is important for equity options based on a currency different 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. The closer the correlation is to 100%, the more related one equity is to another. For example, equities with a very high correlation could be from different parts of the same corporate structure.

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 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 data presented represent an estimation of valuation uncertainty based on reasonably possible alternative values for Level 3 inputs at the balance sheet date and do 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. Further, direct inter relationships between the Level 3 parameters discussed below are not a significant element of the valuation uncertainty.

Sensitivity data are 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.

Note 22 Fair value measurement (continued)

Sensitivity data are determined at a product or parameter level and then aggregated assuming no diversification benefit. The calculated sensitivity is applied to both the outright position and any related Level 3 hedge. The main interdependencies across different Level 3 products to a single unobservable input parameter have been included in the basis of netting exposures within the calculation. Aggregation without allowing for diversification involves the simple summation of individual results with the total sensitivity, therefore representing the effect of all unobservable inputs that, if moved to a reasonably possible favorable or unfavorable level at the same time, would result in a significant change in the valuation. 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. UBS AG believes that, while there are diversification benefits within the portfolios representing these sensitivity numbers, they are not significant to this analysis.

Sensitivity of fair value measurements to changes in unobservable input assumptions[1]

	31.12.17		31.12.16	
CHF million	Favorable changes[2]	Unfavorable changes[2]	Favorable changes[2]	Unfavorable changes[2]
Traded loans, loans designated at fair value, loan commitments and guarantees	79	(11)	80	(8)
Asset-backed securities	19	(15)	23	(29)
Equity instruments	79	(53)	85	(66)
Interest rate derivative contracts, net	13	(26)	30	(30)
Credit derivative contracts, net	64	(99)	128	(174)
Foreign exchange derivative contracts, net	12	(6)	18	(9)
Equity / index derivative contracts, net	190	(193)	142	(143)
Structured (reverse) repurchase agreements	34	(34)	43	(46)
Other	13	(13)	12	(12)
Total	502	(450)	560	(517)

1 Effective 31 December 2017, the sensitivity of issued and over-the-counter debt instruments is reported with the equivalent derivative or structured financing instrument. Prior-period information has been restated to reflect this change in presentation. 2 Of the total favorable changes, CHF 78 million as of 31 December 2017 (31 December 2016: CHF 75 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 51 million as of 31 December 2017 (31 December 2016: CHF 55 million) related to financial assets available for sale.

h) Level 3 instruments: movements during the period

Significant changes in Level 3 instruments

The table on the following pages presents additional information about 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 include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within 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.

Assets transferred into and out of Level 3 totaled CHF 1.4 billion and CHF 1.1 billion, respectively. Transfers into Level 3 were primarily comprised of investment fund units and equity / index contracts, due to decreased observability of the respective net asset value and equity volatility inputs. Transfers out of Level 3 were primarily comprised of credit derivative and equity / index contracts, reflecting increased observability of the respective credit spread and equity volatility inputs.

Liabilities transferred into and out of Level 3 totaled CHF 1.8 billion and CHF 3.2 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and equity / index contracts, due to decreased observability of the respective equity volatility inputs used to determine the fair value of the options embedded in these structures. Transfers out of Level 3 were primarily comprised of equity-linked issued debt instruments and credit derivative contracts resulting from changes in the availability of the observable equity volatility and credit spread inputs used to determine the fair value of the options embedded in these structures.

Note 22 Fair value measurement (continued)

Movements of Level 3 instruments

		Total gains / (losses) included in comprehensive income								
CHF billion	**Balance as of 31 December 2015**	Net interest income, net trading income and other income	*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
Financial assets held for trading	2.1	0.1	*0.0*	0.9	(6.8)	4.1	0.0	1.7	(0.3)	(0.1)
of which:										
Corporate and municipal bonds	*0.7*	*0.2*	*0.1*	*0.6*	*(0.8)*	*0.0*	*0.0*	*0.1*	*(0.1)*	*(0.1)*
Loans	*0.8*	*(0.1)*	*(0.1)*	*0.1*	*(5.2)*	*4.1*	*0.0*	*1.1*	*(0.2)*	*0.0*
Other	*0.6*	*0.0*	*0.0*	*0.2*	*(0.8)*	*0.0*	*0.0*	*0.5*	*0.0*	*0.0*
Financial assets designated at fair value	3.3	(0.4)	*(0.1)*	0.1	0.0	0.7	(1.9)	0.5	(0.1)	0.0
of which:										
Loans (including structured loans)	*1.7*	*(0.4)*	*(0.1)*	*0.0*	*0.0*	*0.6*	*(1.0)*	*0.4*	*(0.1)*	*0.0*
Structured reverse repurchase and securities borrowing agreements	*1.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.9)*	*0.0*	*0.0*	*0.0*
Other	*0.1*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Financial assets available for sale	0.7	0.0	*0.0*	0.1	(0.1)	0.0	0.0	0.0	(0.1)	0.0
Positive replacement values	2.9	(0.4)	*(0.5)*	0.0	0.0	1.0	(1.9)	1.3	(0.4)	0.0
of which:										
Credit derivative contracts	*1.3*	*(0.2)*	*(0.1)*	*0.0*	*0.0*	*0.6*	*(0.7)*	*0.4*	*(0.1)*	*0.0*
Equity / index contracts	*1.0*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.4*	*(0.6)*	*0.2*	*(0.2)*	*0.0*
Other	*0.6*	*(0.1)*	*(0.3)*	*0.0*	*0.0*	*0.1*	*(0.6)*	*0.7*	*(0.1)*	*0.0*
Negative replacement values	3.3	0.6	*0.5*	0.0	0.0	1.5	(2.1)	1.2	(0.6)	0.0
of which:										
Credit derivative contracts	*1.3*	*0.5*	*0.6*	*0.0*	*0.0*	*0.2*	*(0.7)*	*0.3*	*(0.1)*	*0.0*
Equity / index contracts	*1.4*	*0.3*	*0.1*	*0.0*	*0.0*	*1.0*	*(0.8)*	*0.2*	*(0.3)*	*0.0*
Other	*0.6*	*(0.2)*	*(0.2)*	*0.0*	*0.0*	*0.3*	*(0.6)*	*0.7*	*(0.2)*	*0.0*
Financial liabilities designated at fair value	10.7	1.0	*0.6*	0.0	0.0	5.0	(3.5)	0.9	(2.9)	(0.1)
of which:										
Issued debt instruments	*9.3*	*0.9*	*0.6*	*0.0*	*0.0*	*4.1*	*(2.5)*	*0.8*	*(2.9)*	*(0.1)*
Over-the-counter debt instruments	*0.8*	*0.1*	*0.0*	*0.0*	*0.0*	*0.8*	*(0.6)*	*0.1*	*0.0*	*0.0*
Structured repurchase agreements	*0.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.4)*	*0.0*	*0.0*	*0.0*

1 Total Level 3 assets as of 31 December 2017 were CHF 5.5 billion (31 December 2016: CHF 6.9 billion). Total Level 3 liabilities as of 31 December 2017 were CHF 15.7 billion (31 December 2016: CHF 15.1 billion).

Balance as of 31 December 2016	Total gains / (losses) included in comprehensive income: Net interest income, net trading income and other income	*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 2017[1]
1.7	(0.1)	*0.0*	0.7	(3.8)	2.7	0.0	0.9	(0.2)	0.0	2.0
0.6	*0.1*	*0.1*	*0.4*	*(0.7)*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.6*
0.7	*0.0*	*(0.1)*	*0.1*	*(2.8)*	*2.7*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.5*
0.4	*(0.1)*	*0.0*	*0.2*	*(0.3)*	*0.0*	*0.0*	*0.8*	*0.0*	*0.0*	*0.9*
2.1	0.2	*0.2*	0.0	0.0	0.4	(1.2)	0.1	(0.1)	0.0	1.4
1.2	*0.2*	*0.2*	*0.0*	*0.0*	*0.1*	*(0.6)*	*0.0*	*(0.1)*	*0.0*	*0.8*
0.6	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.6)*	*0.0*	*0.0*	*0.0*	*0.2*
0.2	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.2*	*0.0*	*0.1*	*0.0*	*0.0*	*0.5*
0.5	0.0	*0.0*	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.5
2.5	(0.3)	*(0.4)*	0.0	0.0	0.9	(1.2)	0.4	(0.8)	0.0	1.5
1.3	*(0.2)*	*(0.2)*	*0.0*	*0.0*	*0.0*	*(0.3)*	*0.0*	*(0.4)*	*0.0*	*0.5*
0.7	*(0.1)*	*(0.1)*	*0.0*	*0.0*	*0.9*	*(0.7)*	*0.3*	*(0.4)*	*0.0*	*0.7*
0.5	*0.0*	*(0.1)*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.1*	*(0.1)*	*0.0*	*0.3*
4.0	0.2	*0.1*	0.0	0.0	0.7	(1.4)	0.5	(1.3)	0.1	2.8
1.5	*0.0*	*(0.2)*	*0.0*	*0.0*	*0.1*	*(0.4)*	*0.2*	*(0.8)*	*0.0*	*0.6*
1.9	*0.3*	*0.2*	*0.0*	*0.0*	*0.6*	*(0.6)*	*0.2*	*(0.5)*	*0.0*	*1.9*
0.6	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.4)*	*0.1*	*(0.1)*	*0.0*	*0.3*
11.0	1.4	*0.9*	0.0	0.0	6.7	(5.7)	1.3	(1.8)	(0.1)	12.8
9.7	*1.4*	*0.9*	*0.0*	*0.0*	*5.2*	*(4.9)*	*1.2*	*(1.6)*	*(0.1)*	*10.9*
1.1	*0.0*	*0.0*	*0.0*	*0.0*	*1.5*	*(0.7)*	*0.1*	*0.0*	*0.0*	*1.9*
0.3	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*(0.2)*	*0.0*	*0.0*

Note 22 Fair value measurement (continued)

i) 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

	31.12.17					31.12.16				
	Carrying value	Fair value				Carrying value	Fair value			
CHF billion	Total	Total	Level 1	Level 2	Level 3	Total	Total	Level 1	Level 2	Level 3
Assets										
Cash and balances with central banks	87.8	87.8	87.8	0.0	0.0	107.8	107.8	107.8	0.0	0.0
Due from banks	13.7	13.7	13.1	0.6	0.0	13.1	13.1	12.5	0.7	0.0
Cash collateral on securities borrowed	12.4	12.4	0.0	12.4	0.0	15.1	15.1	0.0	15.1	0.0
Reverse repurchase agreements	77.2	77.2	0.0	74.8	2.5	66.2	66.2	0.0	62.5	3.7
Cash collateral receivables on derivative instruments	23.4	23.4	0.0	23.4	0.0	26.7	26.7	0.0	26.7	0.0
Loans	321.7	323.1	0.0	178.9	144.3	307.0	310.4	0.0	170.0	140.4
Financial assets held to maturity	9.2	9.0	6.3	2.7	0.0	9.3	9.1	6.3	2.8	0.0
Other assets	28.0	28.0	0.0	28.0	0.0	18.5	18.5	0.0	18.5	0.0
Liabilities										
Due to banks	7.5	7.5	6.5	1.1	0.0	10.6	10.6	8.8	1.9	0.0
Cash collateral on securities lent	1.8	1.8	0.0	1.8	0.0	2.8	2.8	0.0	2.8	0.0
Repurchase agreements	15.3	15.3	0.0	15.3	0.0	6.6	6.6	0.0	6.6	0.0
Cash collateral payables on derivative instruments	30.2	30.2	0.0	30.2	0.0	35.5	35.5	0.0	35.5	0.0
Due to customers	447.1	448.8	0.0	448.8	0.0	450.2	450.6	0.0	450.6	0.0
Debt issued	104.8	107.0	0.0	102.7	4.3	79.0	81.1	0.0	78.5	2.6
Other liabilities	37.1	37.1	0.0	37.1	0.0	39.0	39.0	0.0	39.0	0.0

The fair values included in the table above were 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 estimation, 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. The following financial instruments not measured at fair value had remaining maturities of three months or less as of 31 December 2017: 100% of cash and balances with central banks, 95% of amounts due from banks, 100% of cash collateral on securities borrowed, 81% of reverse repurchase agreements, 100% of cash collateral receivables on derivative instruments, 51% of loans, 0% of financial assets held to maturity, 86% of amounts due to banks, 100% of cash collateral on securities lent, 96% of repurchase agreements, 100% of cash collateral payables on derivative instruments, 99% of amounts due to customers and 13% of debt issued.
- The fair value estimates for repurchase and reverse repurchase agreements with variable and fixed interest rates, for all maturities, include the valuation of the interest rate component of these instruments. Credit and debit valuation adjustments have not been included in the valuation due to the short-term nature of these instruments.

Note 23 Restricted and transferred financial assets

This Note provides information on 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 CHF 12,457 million as of 31 December 2017 (31 December 2016: CHF 14,137 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 value of the liabilities associated with these other restricted financial assets is generally equal to the carrying value of the assets, with the exception of assets held to comply with local asset maintenance requirements, for which the associated liabilities are greater.

UBS AG and its subsidiaries are, in certain cases, subject to regulatory requirements that affect the transfer of dividends and capital within UBS AG. Certain regulated subsidiaries are required to maintain capital and / or liquidity to comply with local regulations and may be subject to prudential limitations by regulators that limit the amount of funds that they can distribute or otherwise transfer. Supervisory authorities generally have discretion to impose higher requirements or to otherwise limit the activities of subsidiaries. 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 that affects UBS Americas Holding LLC, and may limit the ability of the entity to engage in new activities or take capital actions based on the results of those tests. 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 "Financial and regulatory key figures for our significant regulated subsidiaries and sub-groups" in the "Significant regulated subsidiary and sub-group information" section of this report for financial information on significant regulated subsidiaries of the group**

Restricted financial assets

CHF million	31.12.17	31.12.16
Financial assets pledged as collateral		
Trading portfolio assets	46,257	36,549
of which: assets pledged as collateral that may be sold or repledged by counterparties	*35,363*	*30,260*
Loans[1]	17,631	19,887
Financial assets designated at fair value	170	776
of which: assets pledged as collateral that may be sold or repledged by counterparties	*170*	*636*
Total financial assets pledged as collateral[2]	64,059	57,213
Other restricted financial assets		
Due from banks	3,280	2,625
Reverse repurchase agreements	0	658
Trading portfolio assets	12,273	12,129
Cash collateral receivables on derivative instruments	3,822	4,329
Loans	1,256	958
Financial assets designated at fair value	2,225	0
Financial assets available for sale	246	247
Other	95	5,195
Total other restricted financial assets	23,196	26,141
Total financial assets pledged and other restricted financial assets	87,255	83,354

1 All related to mortgage loans that serve as collateral for existing liabilities against Swiss central mortgage institutions and for existing covered bond issuances. Of these pledged mortgage loans, approximately CHF 2.1 billion for 31 December 2017 (31 December 2016: approximately CHF 1.9 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 2017: CHF 2.5 billion; 31 December 2016: CHF 4.7 billion).

Note 23 Restricted and transferred financial assets (continued)

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

CHF million	31.12.17		31.12.16	
	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet	Carrying value of transferred assets	Carrying value of associated liabilities recognized on-balance sheet
Trading portfolio assets that may be sold or repledged by counterparties	35,363	12,942	30,260	11,260
relating to securities lending and repurchase agreements in exchange for cash received	*13,145*	*12,942*	*11,410*	*11,260*
relating to securities lending agreements in exchange for securities received	*21,137*	*0*	*17,341*	*0*
relating to other financial asset transfers	*1,081*	*0*	*1,509*	*0*
Financial assets designated at fair value that may be sold or repledged by counterparties	170	169	636	630
Total financial assets transferred	35,533	13,111	30,896	11,890

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 3e for more information on repurchase agreements and securities lending agreements**

As of 31 December 2017, approximately one-third of the transferred financial assets were trading portfolio assets 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 value below the carrying value 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 value 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 2017 and as of 31 December 2016.

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.

Purchased and retained interests in securitization vehicles

In cases where UBS AG has transferred assets into a securitization vehicle and retained or purchased interests therein, UBS AG has a continuing involvement in those transferred assets.

As of 31 December 2017, the majority of the retained continuing involvement related to securitization positions held in the trading portfolio, primarily collateralized debt obligations, US commercial mortgage-backed securities and residential mortgage-backed securities. The fair value and carrying amount of UBS AG's continuing involvement related to these purchased and retained interests was CHF 8 million as of 31 December 2017, and UBS AG recognized gains of CHF 4 million in 2017 related to these positions. As of 31 December 2017, life-to-date losses of CHF 1,170 million were recorded related to the positions held as of 31 December 2017.

As of 31 December 2016, the fair value and carrying amount of UBS AG's continuing involvement related to purchased and retained interests in securitization vehicles was CHF 5 million, and UBS AG recognized gains of CHF 11 million in 2016 related to these positions. As of 31 December 2016, life-to-date losses of CHF 1,173 million were recorded related to the positions held as of 31 December 2016.

The maximum exposure to loss related to purchased and retained interests in securitization structures was CHF 14 million as of 31 December 2017 compared with CHF 28 million as of 31 December 2016.

Undiscounted cash outflows of CHF 7 million may be payable to the transferee in future periods as a consequence of holding the purchased and retained interests. The earliest period in which payment may be required is less than one month.

d) Off-balance sheet assets received

The table below presents assets received from third parties that can be sold or repledged, 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

CHF million	31.12.17	31.12.16
Fair value of assets received that can be sold or repledged	469,132	429,327
received as collateral under reverse repurchase, securities borrowing and lending arrangements, derivative transactions and other transactions [1]	*462,460*	*423,524*
received in unsecured borrowings	*6,672*	*5,803*
Thereof sold or repledged[2]	337,514	316,324
in connection with financing activities	*293,295*	*277,341*
to satisfy commitments under short sale transactions	*30,463*	*22,825*
in connection with derivative and other transactions [1]	*13,756*	*16,158*

1 Includes securities received as initial margin from its clients that UBS AG is required to remit to CCPs, brokers and deposit banks through its exchange-traded derivative (ETD) clearing and execution services.
2 Does not include off-balance sheet securities (31 December 2017: CHF 28.1 billion; 31 December 2016: CHF 30.9 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 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 (OTC) derivatives and exchange-traded derivatives (ETD). 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 counterparty to the transaction is unable to fulfill its 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. Further, related amounts for financial liabilities and collateral received that are not offset on the balance sheet are shown to arrive at financial assets after consideration of netting potential.

UBS AG engages in a variety of counterparty credit 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 UBS AG's actual credit exposure.

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

	Assets subject to netting arrangements						Assets not subject to netting arrangements[4]	Total assets	
	Netting recognized on the balance sheet			Netting potential not recognized on the balance sheet[3]					
As of 31.12.17, CHF 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
Cash collateral on securities borrowed	3.7	0.0	3.7	(0.6)	(3.1)	0.0	8.7	8.7	12.4
Reverse repurchase agreements	140.5	(76.8)	63.7	(6.9)	(56.8)	0.0	13.5	13.5	77.2
Positive replacement values	114.3	(2.1)	112.2	(83.5)	(20.7)	8.0	6.0	14.0	118.2
Cash collateral receivables on derivative instruments[1]	21.6	(1.0)	20.6	(11.7)	(0.7)	8.1	2.9	11.0	23.4
Financial assets designated at fair value	0.4	0.0	0.4	0.0	(0.2)	0.2	58.1	58.4	58.6
Total assets	280.5	(79.9)	200.6	(102.7)	(81.6)	16.4	89.2	105.6	289.9
As of 31.12.16, CHF billion									
Cash collateral on securities borrowed	4.2	0.0	4.2	(0.9)	(3.3)	0.0	10.9	10.9	15.1
Reverse repurchase agreements	128.4	(71.5)	56.9	(2.1)	(54.8)	0.0	9.3	9.3	66.2
Positive replacement values	152.3	(2.5)	149.8	(113.1)	(26.7)	10.0	8.6	18.6	158.4
Cash collateral receivables on derivative instruments[1]	37.2	(15.1)	22.1	(14.2)	(1.0)	7.0	4.5	11.5	26.7
Financial assets designated at fair value	1.7	0.0	1.7	0.0	(0.6)	1.1	63.3	64.4	65.0
Total assets	323.8	(89.1)	234.7	(130.3)	(86.3)	18.1	96.7	114.8	331.5

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 ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. 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. 3 For the purpose of this disclosure, the amounts of financial instruments and cash collateral presented have been capped by the relevant netting agreement 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 24 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. Further, related amounts for financial assets and collateral pledged that are not offset on the balance sheet are shown 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 31.12.17, CHF 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
Cash collateral on securities lent	1.7	0.0	1.7	(0.6)	(1.2)	0.0	0.1	0.1	1.8
Repurchase agreements	88.4	(76.8)	11.6	(6.9)	(4.7)	0.0	3.6	3.6	15.3
Negative replacement values	111.4	(2.1)	109.4	(83.5)	(15.0)	10.9	6.8	17.7	116.1
Cash collateral payables on derivative instruments[1]	29.5	(1.0)	28.4	(16.3)	(1.2)	11.0	1.8	12.8	30.2
Financial liabilities designated at fair value	1.9	0.0	1.9	0.0	(0.1)	1.8	52.3	54.1	54.2
Total liabilities	233.0	(79.9)	153.0	(107.3)	(22.1)	23.7	64.6	88.3	217.6
As of 31.12.16, CHF billion									
Cash collateral on securities lent	2.6	0.0	2.6	(0.9)	(1.7)	0.0	0.2	0.2	2.8
Repurchase agreements	76.7	(71.5)	5.2	(2.1)	(3.1)	0.0	1.4	1.4	6.6
Negative replacement values	146.3	(2.5)	143.9	(113.1)	(16.6)	14.2	10.0	24.2	153.8
Cash collateral payables on derivative instruments[1]	48.5	(15.1)	33.4	(20.8)	(1.4)	11.2	2.1	13.3	35.5
Financial liabilities designated at fair value	2.8	0.0	2.8	0.0	(0.2)	2.6	52.2	54.8	55.0
Total liabilities	**276.9**	**(89.1)**	**187.9**	**(137.0)**	**(22.9)**	**28.0**	**65.9**	**93.9**	**253.7**

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 ETD that are economically settled on a daily basis. Effective 3 January 2017, interest rate swaps and credit derivatives transacted with the Chicago Mercantile Exchange (CME) were legally converted from the previous collateral model to a settlement model resulting in a derecognition of the associated assets and liabilities. Previously, UBS applied IAS 32 netting principles to offset the fair value of CME interest rate swaps with the associated variation margin. Gross cash collateral receivables and payables on derivative instruments and corresponding IAS 32 netting, decreased by approximately CHF 11.4 billion as of 31 December 2017, with no change to net cash collateral receivables and payables on derivative instruments recognized and presented on the balance sheet. 2 The logic of the table results in amounts presented in the "Netting with gross assets" column corresponding directly to the amounts presented in the "Netting with gross liabilities" column 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 by the relevant netting agreement 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 25 Measurement categories, credit risk and maturity analysis of financial instruments

a) Measurement categories of financial assets and liabilities

The table below provides information about the carrying amounts of individual classes of financial instruments within the measurement categories of financial assets and liabilities as defined in IAS 39, *Financial Instruments: Recognition and Measurement*. Only those assets and liabilities that are financial instruments as defined in IAS 32, *Financial Instruments: Presentation* are included in the table below, which causes certain balances to differ from those presented on the balance sheet.

→ **Refer to Note 22 for more information on how the fair value of financial instruments is determined**

Measurement categories of financial assets and financial liabilities

CHF million	31.12.17	31.12.16
Financial assets[1]		
Held for trading		
Trading portfolio assets	126,244	92,112
Due to customers[2]	7	12
Debt issued[2]	10	38
Positive replacement values	118,229	158,411
Total	244,489	250,572
Fair value through profit or loss		
Financial assets designated at fair value	58,556	65,024
Other assets	122	131
Total	58,678	65,155
Financial assets at amortized cost		
Cash and balances with central banks	87,775	107,767
Due from banks	13,693	13,125
Cash collateral on securities borrowed	12,393	15,111
Reverse repurchase agreements	77,240	66,246
Cash collateral receivables on derivative instruments	23,434	26,664
Loans[3]	321,718	307,004
Financial assets held to maturity	9,166	9,289
Other assets	27,986	18,519
Total	573,405	563,727
Available for sale		
Financial assets available for sale	8,665	15,676
Total financial assets	885,237	895,131
Financial liabilities		
Held for trading		
Trading portfolio liabilities	30,463	22,825
Negative replacement values	116,134	153,810
Total	146,598	176,635
Fair value through profit or loss		
Financial liabilities designated at fair value	54,202	55,017
Amounts due under unit-linked investment contracts	11,523	9,286
Other liabilities	122	131
Total	65,847	64,434
Financial liabilities at amortized cost		
Due to banks	7,533	10,645
Cash collateral on securities lent	1,789	2,818
Repurchase agreements	15,255	6,612
Cash collateral payables on derivative instruments	30,247	35,472
Due to customers	447,148	450,211
Debt issued	104,759	79,036
Other liabilities	37,064	38,992
Total	643,795	623,786
Total financial liabilities	856,240	864,855

1 As of 31 December 2017, CHF 134 billion of Loans, CHF 0 billion of Due from banks, CHF 2 billion of Reverse repurchase agreements, CHF 7 billion of Financial assets available for sale, CHF 24 billion of Financial assets designated at fair value and CHF 7 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. As of 31 December 2016, CHF 126 billion of Loans, CHF 0 billion of Due from banks, CHF 1 billion of Reverse repurchase agreements, CHF 10 billion of Financial assets available for sale, CHF 29 billion of Financial assets designated at fair value and CHF 8 billion of Financial assets held to maturity are expected to be recovered or settled after 12 months. 2 Represents the embedded derivative component of structured financial instruments for which the fair value option has not been applied and that is presented within Due to customers and Debt issued on the balance sheet. 3 Includes finance lease receivables of CHF 1.1 billion as of 31 December 2017 (31 December 2016: CHF 1.0 billion). Refer to Notes 10 and 31 for more information.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

b) Maximum exposure to credit risk

The tables on the following pages provide UBS AG's maximum exposure to credit risk by class of financial instrument 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 section "Risk management and control" 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

	31.12.17								
		Collateral				Credit enhancements			
CHF billion	Maximum exposure to credit risk	Cash collateral received	Collateral-ized by securities	Secured by real estate	Other collateral[1]	Netting	Credit derivative contracts	Guarantees	Exposure to credit risk after collateral and credit enhancements
Financial assets measured at amortized cost on the balance sheet									
Balances with central banks	87.1								87.1
Due from banks[2]	13.7		0.1						13.6
Cash collateral on securities borrowed	12.4		12.2						0.2
Reverse repurchase agreements	77.2		72.8		4.2				0.2
Cash collateral receivables on derivative instruments[3,4]	23.4					12.5			11.0
Loans[5]	321.7	17.9	111.4	160.1	15.9		0.0	1.3	15.1
Financial assets held to maturity	9.2								9.2
Other assets	25.8		19.5						6.3
Total financial assets measured at amortized cost	570.6	17.9	216.0	160.1	20.1	12.5	0.0	1.3	142.7
Financial assets measured at fair value on the balance sheet									
Positive replacement values[4]	118.2		4.0			100.2			14.0
Trading portfolio assets – debt instruments[6,7]	25.7								25.7
Financial assets designated at fair value – debt instruments[8]	58.4		9.8						48.5
Financial assets available for sale – debt instruments[8]	7.9								7.9
Total financial assets measured at fair value	210.2	0.0	13.8	0.0	0.0	100.2	0.0	0.0	96.2
Total maximum exposure to credit risk reflected on the balance sheet	780.8	17.9	229.8	160.1	20.1	112.7	0.0	1.3	238.9
Guarantees[9]	18.8	1.0	2.1	0.2	1.2			3.0	11.3
Loan commitments[9]	39.1		2.8	1.1	9.5		1.0	1.4	23.3
Forward starting transactions, reverse repurchase and securities borrowing agreements	12.7		12.4						0.2
Total maximum exposure to credit risk not reflected on the balance sheet	70.6	1.0	17.4	1.2	10.7	0.0	1.0	4.4	34.8
Total	851.4	18.9	247.1	161.3	30.8	112.7	1.1	5.8	273.7

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

Maximum exposure to credit risk (continued)

	31.12.16								
		Collateral				Credit enhancements			
CHF billion	Maximum exposure to credit risk	Cash collateral received	Collateral-ized by securities	Secured by real estate	Other collateral[1]	Netting	Credit derivative contracts	Guarantees	Exposure to credit risk after collateral and credit enhancements
Financial assets measured at amortized cost on the balance sheet									
Balances with central banks	107.1								107.1
Due from banks[2]	13.1								13.1
Cash collateral on securities borrowed	15.1		14.8						0.3
Reverse repurchase agreements	66.2		62.5		3.2				0.5
Cash collateral receivables on derivative instruments[3,4]	26.7					15.1			11.5
Loans[5]	307.0	17.9	99.6	158.2	14.6		0.1	1.8	14.8
Financial assets held to maturity	9.3								9.3
Other assets	18.6		10.0						8.7
Total financial assets measured at amortized cost	563.2	17.9	186.9	158.2	17.7	15.1	0.1	1.8	165.3
Financial assets measured at fair value on the balance sheet									
Positive replacement values[4]	158.4		5.3			134.5			18.6
Trading portfolio assets – debt instruments[6,7]	21.9								21.9
Financial assets designated at fair value – debt instruments[8]	64.8		2.6				0.6		61.6
Financial assets available for sale – debt instruments[8]	14.9								14.9
Total financial assets measured at fair value	260.0	0.0	7.9	0.0	0.0	134.5	0.6	0.0	117.0
Total maximum exposure to credit risk reflected on the balance sheet	823.2	17.9	194.9	158.2	17.7	149.6	0.7	1.8	282.3
Guarantees[9]	16.7	1.4	2.0	0.2	1.2		0.1	3.0	8.8
Loan commitments[9]	54.4	0.1	3.9	1.0	9.5		4.8	2.0	33.1
Forward starting transactions, reverse repurchase and securities borrowing agreements	10.2		10.2						0.0
Total maximum exposure to credit risk not reflected on the balance sheet	81.3	1.5	16.1	1.1	10.6	0.0	4.9	5.1	41.9
Total	904.5	19.4	210.9	159.4	28.4	149.6	5.7	6.8	324.3

1 Includes but is not limited to life insurance contracts, inventory, accounts receivable, mortgage loans, patents and copyrights. 2 Due from banks includes amounts held with third-party banks on behalf of clients. The credit risk associated with these balances may be borne by those clients. 3 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. 4 The amount shown in the netting column represents the netting potential not recognized on the balance sheet. Refer to Note 24 for more information. 5 Collateral arrangements generally incorporate a range of collateral, including cash, securities, property and other collateral. In 2017, we further aligned our collateral allocation processes within Wealth Management Americas to prioritize collateral mainly according to its liquidity profile. This change resulted in increases in loans secured by cash and decreases in loans secured by securities of CHF 4.5 billion. 6 These positions are generally managed under the market risk framework. For the purpose of this disclosure, collateral and credit enhancements were not considered. 7 Does not include debt instruments held for unit-linked investment contracts and investment fund units. 8 Does not include investment fund units. Financial assets designated at fair value collateralized by securities consisted of structured loans and reverse repurchase and securities borrowing agreements. 9 The amount shown in the "Guarantees" column largely relates to sub-participations. Refer to the "Treasury management" section of this report for more information.

Maximum exposure to credit risk for financial assets designated at fair value

The maximum exposure to credit risk of loans, but not structured loans, designated at fair value is generally mitigated by credit derivatives or similar instruments. As of 31 December 2017, the credit risk of such loans with a total notional amount of CHF 4 million (31 December 2016: CHF 609 million) was mitigated by credit derivatives for which the notional amount and fair value were not material (31 December 2016: notional amount was CHF 578 million, fair value was negative CHF 7 million).

Changes in the fair value of loans designated at fair value attributable to changes in credit risk were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

Similarly, changes in the fair value of credit derivatives mitigating the credit risk of loans designated at fair value were not material for the years ended 31 December 2017 and 31 December 2016 and from inception until 31 December 2017 and 31 December 2016.

→ **Refer to Note 22 for more information on financial assets designated at fair value**

c) Financial assets subject to credit risk by rating category

Financial assets subject to credit risk by rating category

CHF billion	31.12.17						
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	86.6	0.5					87.1
Due from banks	0.6	10.6	1.4	0.9	0.3		13.7
Cash collateral on securities borrowed and reverse repurchase agreements	24.3	36.4	16.8	10.4	1.8		89.6
Positive replacement values	17.0	75.3	19.4	6.2	0.3		118.2
Cash collateral receivables on derivative instruments	6.5	9.7	5.6	1.6	0.1		23.4
Trading portfolio assets – debt instruments[2]	10.3	7.4	3.0	2.1	3.0		25.7
Loans	3.2	163.6	65.7	70.0	17.6	1.5	321.7
Financial assets designated at fair value – debt instruments[3]	33.8	14.2	1.5	0.8	8.0		58.4
Financial assets available for sale – debt instruments[3]	6.8	1.0		0.1			7.9
Financial assets held to maturity	8.5	0.7					9.2
Other assets	0.1	0.4	8.4	15.9	0.8	0.3	25.8
Guarantees, commitments and forward starting transactions							
Guarantees	2.0	9.1	4.1	2.7	0.8	0.2	18.8
Loan commitments	1.9	15.4	9.4	5.8	6.5		39.1
Forward starting transactions, reverse repurchase and securities borrowing agreements		12.7					12.7
Total	201.7	356.8	135.2	116.5	39.1	2.0	851.4

CHF billion	31.12.16						
Rating category[1]	0–1	2–3	4–5	6–8	9–13	Defaulted	Total
Balances with central banks	106.2	0.9					107.1
Due from banks	0.6	9.7	2.0	0.5	0.3		13.1
Cash collateral on securities borrowed and reverse repurchase agreements	29.2	24.5	20.1	6.9	0.7		81.4
Positive replacement values	19.6	96.9	34.2	7.4	0.4		158.4
Cash collateral receivables on derivative instruments	6.4	12.2	6.4	1.6	0.2		26.7
Trading portfolio assets – debt instruments[2]	9.0	6.9	2.9	1.7	1.3		21.9
Loans	31.7	127.8	63.2	63.6	19.1	1.6	307.0
Financial assets designated at fair value – debt instruments[3]	48.4	12.6	1.0	1.6	1.3		64.8
Financial assets available for sale – debt instruments[3]	12.7	1.8	0.2	0.1			14.9
Financial assets held to maturity	8.4	0.9					9.3
Other assets	0.1	2.1	6.2	7.7	2.2	0.3	18.6
Guarantees, commitments and forward starting transactions							
Guarantees	2.0	6.4	3.7	3.6	0.7	0.3	16.7
Loan commitments	2.4	19.5	17.1	8.7	6.5	0.1	54.4
Forward starting transactions, reverse repurchase and securities borrowing agreements	0.6	9.4	0.3				10.2
Total	**277.4**	**331.6**	**157.2**	**103.5**	**32.7**	**2.2**	**904.5**

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 on rating categories. 2 Does not include debt instruments held for unit-linked investment contracts and investment fund units. 3 Does not include investment fund units.

Note 25 Measurement categories, credit risk and maturity analysis of financial instruments (continued)

d) Maturity analysis of financial liabilities

The contractual maturities for non-derivative and non-trading financial liabilities as of 31 December 2017 are based on the earliest date on which UBS could be contractually required to pay. The total amounts that contractually mature in each time band are also shown for 31 December 2016. 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[1]

CHF 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[2]						
Due to banks	6.1	0.4	1.0	0.1	0.0	7.5
Cash collateral on securities lent	1.7	0.2				1.9
Repurchase agreements	11.9	2.8	0.6	0.0	0.0	15.3
Trading portfolio liabilities[3,4]	30.5					30.5
Negative replacement values[3]	116.1					116.1
Cash collateral payables on derivative instruments	30.2					30.2
Due to customers	394.8	11.4	5.8	22.2	19.1	453.3
Financial liabilities designated at fair value[5]	18.4	10.3	11.6	8.8	7.1	56.3
Debt issued	4.1	14.5	44.5	34.8	12.5	110.3
Other liabilities	47.4					47.4
Total 31.12.17	**661.2**	**39.6**	**63.4**	**65.9**	**38.7**	**868.9**
Total 31.12.16	706.7	39.2	40.2	45.9	45.6	877.7
Guarantees, commitments and forward starting transactions[6]						
Loan commitments	38.2	0.2	0.2	0.1		38.7
Guarantees	18.8	0.0				18.9
Forward starting transactions						
Reverse repurchase agreements	12.7					12.7
Securities borrowing agreements	0.0					0.0
Total 31.12.17	**69.7**	**0.2**	**0.2**	**0.1**	**0.0**	**70.2**
Total 31.12.16	81.0	0.2	0.2	0.0	0.0	81.4

1 Non-financial liabilities such as deferred income, deferred tax liabilities, provisions and liabilities on employee compensation plans are not included in this analysis. 2 Except for trading portfolio liabilities and negative replacement values (see footnote 3), the amounts presented generally represent undiscounted cash flows of future interest and principal payments. 3 Carrying value 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. Refer to Note 12 for undiscounted cash flows of derivatives designated in hedge accounting relationships. 4 Contractual maturities of trading portfolio liabilities are: CHF 29.5 billion due within one month (2016: CHF 21.8 billion), CHF 0.8 billion due between one month and one year (2016: CHF 1.0 billion) and CHF 0.1 billion due between 1 and 5 years (2016: CHF 0.1 billion). 5 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. 6 Comprises the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

e) Reclassification of financial assets

In 2008 and 2009, certain financial assets were reclassified from *Trading portfolio assets* to *Loans*. On their reclassification date, these assets had fair values of CHF 26 billion and CHF 0.6 billion, respectively.

The reclassification of financial assets reflected UBS's change in intent and ability to hold these financial assets for the foreseeable future rather than for trading in the near term. The financial assets were reclassified using their fair value on the date of the reclassification, which became their new cost basis at that date.

As of 31 December 2017, the carrying value of the remaining reclassified financial assets, which were entirely comprised of municipal auction rate securities, was CHF 0.1 billion (31 December 2016: CHF 0.2 billion), which was approximately equal to the fair value of these assets.

The overall effect on operating profit before tax from reclassified financial assets for the year ended 31 December 2017 was a profit of CHF 1 million (2016: CHF 1 million). If the financial assets had not been reclassified, the impact on operating profit before tax for the year ended 31 December 2017 would have been a loss of CHF 4 million.

Note 26 Pension and other post-employment benefit plans

The table below provides information about expenses for pension and other post-employment benefit plans. These expenses are part of *Personnel expenses*.

Income statement – expenses related to pension and other post-employment benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Net periodic expenses for defined benefit plans	359	433	568
of which: related to major pension plans[1]	*347*	*412*	*546*
of which: Swiss plan[2]	*302*	*381*	*515*
of which: UK plan	*14*	*(2)*	*18*
of which: US and German plans	*31*	*33*	*12*
of which: related to post-employment medical insurance plans[3]	*3*	*4*	*4*
of which: UK plan	*1*	*1*	*1*
of which: US plans	*2*	*3*	*2*
of which: related to remaining plans and other expenses[4]	*8*	*17*	*19*
Expenses for defined contribution plans[5]	232	236	239
of which: UK plans	*64*	*77*	*86*
of which: US plan	*108*	*106*	*100*
of which: remaining plans	*59*	*53*	*53*
Total pension and other post-employment benefit plan expenses[6]	591	669	807

1 Refer to Note 26a for more information. 2 The decrease in net periodic pension expenses for the Swiss pension plan in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. 3 Refer to Note 26b for more information. 4 Other expenses include differences between actual and estimated performance award accruals and net accrued pension expenses related to restructuring. 5 Refer to Note 26c for more information. 6 Refer to Note 6.

The table below provides information relating to amounts recognized in *Other comprehensive income* for defined benefit plans.

Other comprehensive income – gains / (losses) on defined benefit plans

CHF million	31.12.17	31.12.16	31.12.15
Major pension plans[1]	266	(837)	339
of which: Swiss plan	*(56)*	*(105)*	*58*
of which: UK plan	*295*	*(610)*	*317*
of which: US and German plans	*28*	*(122)*	*(35)*
Post-employment medical insurance plans[2]	1	(13)	(3)
of which: UK plan	*1*	*(6)*	*6*
of which: US plans	*0*	*(7)*	*(9)*
Remaining plans	31	(26)	(14)
Gains / (losses) recognized in other comprehensive income, before tax	299	(876)	322
Tax (expense) / benefit relating to defined benefit plans recognized in other comprehensive income	6	52	(19)
Gains / (losses) recognized in other comprehensive income, net of tax[3]	305	(824)	304

1 Refer to Note 26a for more information. 2 Refer to Note 26b for more information. 3 Refer to the "Statement of comprehensive income."

Note 26 Pension and other post-employment benefit plans (continued)

UBS AG recognizes assets and liabilities with respect to defined benefit plans within *Other assets* and *Other liabilities*.

As of 31 December 2017 and 31 December 2016, the Swiss pension plan was in a surplus situation. However, a surplus is only recognized on the balance sheet to the extent that it does not exceed the estimated future economic benefit. Since the estimated future economic benefit was zero as of 31 December 2017 and 31 December 2016, no net defined benefit pension asset was recognized on the balance sheet.

The table below provides information on UBS AG's liabilities with respect to defined benefit plans.

Balance sheet – net defined benefit pension and post-employment liability

CHF million	31.12.17	31.12.16
Major pension plans[1]	805	1,140
of which: Swiss plan	*0*	*0*
of which: UK plan	*268*	*529*
of which: US and German plans[2]	*536*	*611*
Post-employment medical insurance plans[3]	86	91
of which: UK plan	*26*	*26*
of which: US plans	*59*	*65*
Remaining plans	34	34
Total net defined benefit pension and post-employment liability[4]	925	1,266

1 Refer to Note 26a for more information. 2 Of the total liability as of 31 December 2017, CHF 149 million related to US plans and CHF 388 million related to German plans (31 December 2016: CHF 265 million related to US plans and CHF 346 million related to German plans). 3 Refer to Note 26b for more information. 4 Refer to Note 21.

a) Defined benefit pension plans

UBS AG has established defined benefit pension plans for its employees in various jurisdictions, with the major plans located in Switzerland, the UK, the US and Germany.

The overall investment policy and strategy for UBS AG's defined benefit pension plans is guided by the objective of achieving an investment return that, together with contributions, ensures that there will be sufficient assets to pay pension benefits as they fall due while also mitigating various risks. For the plans with assets, i.e. funded plans, the investment strategies are managed under local laws and regulations in each jurisdiction. The asset allocation is determined by the governance body with reference to the prevailing current and expected economic and market conditions and in consideration of specific asset class risk in the risk profile. Within this framework, UBS AG ensures that the fiduciaries consider how the asset investment strategy correlates with the maturity profile of the plan liabilities and the respective potential effect on the funded status of the plans, including potential short-term liquidity requirements.

The defined benefit obligations (DBOs) for all of UBS AG's defined benefit pension plans are directly affected by changes in yields of high-quality corporate bonds quoted in an active market in the currency of the respective pension plan, as the applicable discount rate used to determine the DBO is based on these yields. For the funded plans, the pension assets are invested in a diversified portfolio of financial assets, including real estate, bonds, investment funds and cash, across geographic regions to ensure a balance of risk and return. Under IAS 19, volatility arises in each pension 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 DBO. Specific asset-liability matching strategies for each pension plan are independently determined by the responsible governance body. The net asset / liability volatility for each plan is dependent on the specific financial assets chosen by each plan's governance body. For certain pension plans, a liability-driven investment approach is applied to a portion of the plan assets to reduce potential volatility.

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, any OCI impacts from remeasurements 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.

Contributions to the pension plan are paid by both the employer and the employees. The Swiss pension plan allows employees to choose the level of contributions paid by them. Employee contributions are calculated as a percentage of the contributory salary and are deducted monthly. The percentages deducted from salary depend on age and choice of contribution category and vary between 1% and 13.5% of contributory base salary and between 0% and 9% of contributory variable compensation. Depending on the age of the employee, UBS AG pays a contribution that ranges between 6.5% and 27.5% of contributory base salary and between 3.6% and 9% of contributory variable compensation. UBS AG also pays risk contributions that are used to finance benefits paid out in the event of death and disability, as well as to finance bridging pensions.

The plan benefits include retirement, disability and survivor benefits. The pension plan offers to members at the normal retirement age of 64 a choice between a lifetime pension with or without full restitution and a partial or full lump sum payment. Members can draw early retirement benefits starting from the age of 58. Employees have the possibility to make additional purchases of benefits to fund early retirement benefits (Plan 58+).

The pension amount payable is a result of the conversion rate applied on the accumulated balance of the individual plan participant's pension account at the retirement date. The accumulated balance of each individual plan participant's pension account 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 pension account of each individual plan participant, as well as the interest accrued on the accumulated balance. The interest rate accrued is defined annually by the Pension Foundation Board.

Although the Swiss pension plan is based on a defined contribution promise under Swiss pension law, it is accounted for as a defined benefit plan under IAS 19, primarily because of the obligation to accrue interest on the pension accounts and the payment of lifetime pension benefits.

Note 26 Pension and other post-employment benefit plans (continued)

The Swiss pension plan is governed by a Pension Foundation Board. The responsibilities of this board are defined by Swiss pension law and by the plan rules. An actuarial valuation under Swiss pension law is performed regularly. According to Swiss pension law, a temporary limited underfunding is permitted. However, should an underfunded situation 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 pension 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 2017, the Swiss pension plan had a technical funding ratio under Swiss pension law of 131.9% (31 December 2016: 125.4%).

The investment strategy of the Swiss plan is implemented on the basis of a multi-level investment and risk management process and complies with Swiss pension law, including the rules and regulations relating to diversification of plan assets. These rules, among others, specify restrictions to 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 2017, the Swiss pension plan was in a surplus situation on an International Financial Reporting Standards (IFRS) measurement basis, as the fair value of plan assets exceeded the DBO by CHF 1,940 million (31 December 2016: surplus of CHF 1,749 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. The maximum future economic benefit is highly variable based on changes in the discount rate. Both as of 31 December 2017 and 31 December 2016, the estimated future economic benefit was zero and hence no net defined benefit asset was recognized on the balance sheet. As of 31 December 2017, the difference between the pension plan surplus and the estimated future economic benefit, i.e., the asset ceiling effect, was CHF 1,940 million (31 December 2016: CHF 1,749 million). CHF 999 million out of the total movement of CHF 1,008 million was recognized in *Other comprehensive income* and CHF 9 million related to interest expense on the asset ceiling effect was recognized in the income statement. As of 31 December 2016, CHF 452 million out of the total movement of CHF 466 million was recognized in *Other comprehensive income* and CHF 14 million related to interest expense on the asset ceiling effect was recognized in the income statement.

The employer contributions expected to be made to the Swiss pension plan in 2018 are estimated to be CHF 294 million.

→ **Refer to Note 35 for information on changes to the Swiss pension plan that will take effect from the start of 2019**

Non-Swiss pension plans

UBS AG locations outside of Switzerland offer various defined benefit pension plans in accordance with local regulations and practices. The non-Swiss locations with major defined benefit pension plans are the UK, the US and Germany. Defined benefit pension plans in other locations are not material to the financial results of UBS AG and hence not separately disclosed.

The non-Swiss plans provide benefits in the event of retirement, death or disability. The level of benefits provided depends on the specific rate of benefit accrual and the level of employee compensation. UBS AG's general principle is to ensure that the plans are adequately funded on the basis of actuarial valuations. Local pension regulations and tax requirements are the primary drivers for determining when contributions are required.

UK pension plan

The UK plan is a career-average revalued earnings scheme, and benefits increase automatically based on UK price inflation. Normal retirement age for participants in the UK plan is 60. The UK plan is closed to new entrants and pension plan participants are no longer accruing benefits for current or future service. Employees instead participate in the UK defined contribution plan.

The governance responsibility for the UK plan lies jointly with the Pension Trustee Board, which is required under local pension laws, 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 2017 and 2016, UBS AG did not make any deficit-funding contributions.

The plan assets are invested in a diversified portfolio of financial assets. A liability-driven investment approach is applied, as a portion of the plan assets is invested in inflation-indexed bonds that provide a partial hedge against price inflation. If price inflation increases, the DBO will likely increase more significantly than the change in the fair value of plan assets, which would result in an increase in the net defined benefit liability. Plan rules and local pension legislation cap the level of inflationary increase that can be applied to plan benefits.

As the plan is obligated to provide guaranteed lifetime pension benefits to plan participants upon retirement, increases in life expectancy will result in an increase in the plan's liabilities. The sensitivity to changes in life expectancy is particularly high in the UK plan as the pension benefits are indexed to price inflation.

As of 31 December 2017, the UK plan was in a deficit situation on an IFRS measurement basis as the DBO exceeded the fair value of plan assets by CHF 268 million (31 December 2016: deficit of CHF 529 million).

No employer contributions are currently scheduled to be made to the UK defined benefit pension plan in 2018, subject to periodic review.

US pension plans

There are two distinct major defined benefit pension plans in the US. Normal retirement age for participants in both US plans is 65. The plans are closed to new entrants, who instead can participate in defined contribution plans.

One of the major defined benefit pension plans is a contribution-based plan in which each participant accrues a percentage of salary in a pension account. The pension 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 major defined benefit pension 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 commencing early or at retirement age.

As required under local state 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. In determining the contribution strategy, UBS AG considers local statutory funding rules and the cost of any premiums that must be paid to the Pension Benefit Guaranty Corporation for having an underfunded plan. In 2017, the contributions made by UBS AG were CHF 89 million (2016: CHF 172 million).

The plan assets for both plans are invested in a diversified portfolio of financial assets. Each pension plan's fiduciaries are responsible for the investment decisions with respect to the plan assets. Both US plans apply a liability-driven investment approach to support the volatility management in the net asset / liability position. Derivative instruments may also be employed to manage volatility.

The employer contributions expected to be made to the US defined benefit pension plans in 2018 are estimated to be CHF 8 million.

German pension plans

There are two different defined benefit pension plans in Germany, and both are contribution-based plans. No plan assets are set aside to fund these plans, and benefits are directly paid by UBS AG. Normal retirement age for the participants in the German plans is 65. Within the larger of the two pension plans, each participant accrues a percentage of salary in a pension 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. For this plan, the accumulated account balance is credited on an annual basis with a guaranteed interest rate of 4% for amounts accrued after 2009. Both German plans are regulated under German pension law, under which the responsibility to pay pension benefits when they are due rests entirely with UBS AG. For the German plans, 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 2018 are estimated to be CHF 10 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 pension plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Note 26 Pension and other post-employment benefit plans (continued)

Defined benefit pension plans

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Defined benefit obligation at the beginning of the year	22,865	22,636	3,704	3,350	1,755	1,619	28,325	27,605
Current service cost	324	471	0	0	9	9	333	480
Interest expense	117	240	100	116	61	62	279	419
Plan participant contributions	155	210	0	0	0	0	155	210
Remeasurements	51	477	(82)	922	80	125	49	1,524
of which: actuarial (gains) / losses due to changes in demographic assumptions	*4*	*(659)*	*(80)*	*(63)*	*(5)*	*3*	*(81)*	*(719)*
of which: actuarial (gains) / losses due to changes in financial assumptions	*138*	*698*	*47*	*1,022*	*84*	*107*	*269*	*1,827*
of which: experience (gains) / losses [1]	*(90)*	*438*	*(49)*	*(37)*	*2*	*15*	*(138)*	*416*
Curtailments	(27)	(96)	0	0	0	0	(27)	(96)
Benefit payments	(767)	(1,074)	(251)	(135)	(107)	(98)	(1,126)	(1,307)
Other movements[2]	(8,682)	0	0	0	0	19	(8,682)	19
Foreign currency translation	0	0	179	(549)	(29)	20	150	(529)
Defined benefit obligation at the end of the year	14,035	22,865	3,650	3,704	1,770	1,755	19,454	28,325
of which: amounts owed to active members	*6,437*	*10,419*	*176*	*290*	*248*	*258*	*6,861*	*10,967*
of which: amounts owed to deferred members	*0*	*0*	*1,881*	*2,210*	*628*	*584*	*2,510*	*2,794*
of which: amounts owed to retirees	*7,598*	*12,446*	*1,593*	*1,204*	*893*	*913*	*10,083*	*14,563*
Fair value of plan assets at the beginning of the year	24,614	23,919	3,175	3,400	1,144	997	28,934	28,316
Return on plan assets excluding amounts included in interest income	994	824	213	312	108	2	1,314	1,139
Interest income	128	258	86	118	44	44	257	420
Employer contributions	351	486	0	0	97	179	448	665
Plan participant contributions	155	210	0	0	0	0	155	210
Benefit payments	(767)	(1,074)	(251)	(135)	(107)	(98)	(1,126)	(1,307)
Administration expenses, taxes and premiums paid	(7)	(10)	0	0	(4)	(6)	(12)	(16)
Other movements[2]	(9,492)	0	0	0	0	0	(9,492)	0
Foreign currency translation	0	0	159	(520)	(48)	26	111	(494)
Fair value of plan assets at the end of the year	15,975	24,614	3,381	3,175	1,234	1,144	20,590	28,934
Asset ceiling effect at the beginning of the year	1,749	1,283	0	0	0	0	1,749	1,283
Interest expense on asset ceiling effect	9	14	0	0	0	0	9	14
Asset ceiling effect excluding interest expense on asset ceiling effect	999	452	0	0	0	0	999	452
Other movements[2]	(817)	0	0	0	0	0	(817)	0
Asset ceiling effect at the end of the year	1,940	1,749	0	0	0	0	1,940	1,749
Net defined benefit asset / (liability)	0	0	(268)	(529)	(536)	(611)	(805)	(1,140)
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	(529)	50	(611)	(622)	(1,140)	(572)
Net periodic expenses recognized in net profit	(302)	(381)	(14)	2	(31)	(33)	(347)	(412)
Gains / (losses) recognized in other comprehensive income	(56)	(105)	295	(610)	28	(122)	266	(837)
Employer contributions	351	486	0	0	97	179	448	665
Other movements	8	0	0	0	0	(19)	8	(19)
Foreign currency translation	0	0	(20)	29	(20)	6	(39)	35
Net asset / (liability) recognized on the balance sheet at the end of the year	0	0	(268)	(529)	(536)	(611)	(805)	(1,140)
Funded and unfunded plans								
Defined benefit obligation from funded plans	14,035	22,865	3,650	3,704	1,291	1,316	18,975	27,885
Defined benefit obligation from unfunded plans	0	0	0	0	479	440	479	440
Plan assets	15,975	24,614	3,381	3,175	1,234	1,144	20,590	28,934
Surplus / (deficit)	1,940	1,749	(268)	(529)	(536)	(611)	1,135	609
Asset ceiling effect	1,940	1,749	0	0	0	0	1,940	1,749
Net defined benefit asset / (liability)	0	0	(268)	(529)	(536)	(611)	(805)	(1,140)

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 Primarily reflects the transfer of employees from UBS AG to UBS Business Solutions AG.

Note 26 Pension and other post-employment benefit plans (continued)

Analysis of amounts recognized in net profit

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Current service cost	324	471	0	0	9	9	333	480
Interest expense related to defined benefit obligation	117	240	100	116	61	62	279	419
Interest income related to plan assets	(128)	(258)	(86)	(118)	(44)	(44)	(257)	(420)
Interest expense on asset ceiling effect	9	14	0	0	0	0	9	14
Administration expenses, taxes and premiums paid	7	10	0	0	4	6	12	16
Curtailments	(27)	(96)	0	0	0	0	(27)	(96)
Net periodic expenses recognized in net profit	302	381	14	(2)	31	33	347	412

Analysis of amounts recognized in other comprehensive income (OCI)

CHF million	Swiss plan		UK plan		US and German plans		Total	
For the year ended	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Remeasurement of defined benefit obligation	(51)	(477)	82	(922)	(80)	(125)	(49)	(1,524)
Return on plan assets excluding amounts included in interest income	994	824	213	312	108	2	1,314	1,139
Asset ceiling effect excluding interest expense on asset ceiling effect	(999)	(452)	0	0	0	0	(999)	(452)
Total gains / (losses) recognized in other comprehensive income, before tax	(56)	(105)	295	(610)	28	(122)	266	(837)

The table below provides information on the duration of the DBO and the timing for expected benefit payments.

	Swiss plan[1]		UK plan		US and German plans[2]	
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Duration of the defined benefit obligation (in years)	15.1	15.1	20.0	22.6	10.6	10.6
Maturity analysis of benefits expected to be paid						
CHF million						
Benefits expected to be paid within 12 months	689	1,140	81	72	105	103
Benefits expected to be paid between 1 and 3 years	1,389	2,204	177	164	212	213
Benefits expected to be paid between 3 and 6 years	2,085	3,394	328	315	321	328
Benefits expected to be paid between 6 and 11 years	3,326	5,439	699	710	558	562
Benefits expected to be paid between 11 and 16 years	3,090	5,041	786	856	501	514
Benefits expected to be paid in more than 16 years	10,453	17,162	4,216	6,064	865	958

1 The decrease in benefits expected to be paid in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. 2 The duration of the defined benefit obligation represents a weighted average across US and German plans.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each pension plan's DBO considers different actuarial assumptions. Changes in those assumptions lead to volatility in the DBO. The following principal actuarial assumptions are applied:

- 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 pension plan. Consequently, a decrease in the yield of high-quality corporate bonds increases the DBO. Conversely, an increase in the yield of high-quality corporate bonds decreases the DBO.
- Rate of salary increase: an increase in the salary of plan participants generally increases the DBO, specifically for the Swiss and German plans. For the UK plan, as the plan is closed for future service, UBS AG employees no longer accrue future service benefits and thus salary increases have no effect on the DBO. For the US plans, only a small percentage of the total population continues to accrue benefits for future service and therefore the effect of a salary increase on the DBO is minimal.
- Rate of pension increase: for the Swiss plan, there is no automatic indexing of pensions. Any increase would be decided by the Pension Foundation Board. For the US plans, there is also no automatic indexing of pensions. For the UK plan, pensions are automatically indexed to price inflation as per plan rules and local pension legislation. The German plans are also automatically indexed and a portion of the pensions are directly increased by price inflation. An increase in price inflation in the UK and Germany increases the respective plan's DBO.
- Rate of interest credit on retirement savings: the Swiss plan and one of the US plans have retirement saving balances that are increased annually by an interest credit rate. For these plans, an increase in the interest credit rate increases the respective plan's DBO.
- Life expectancy: for most of UBS AG's defined benefit pension plans, the respective plan is obligated to provide guaranteed lifetime pension benefits. The DBO for all plans is calculated using an underlying best estimate of the life expectancy of plan participants. An increase in the life expectancy of plan participants increases the plan's DBO.

The actuarial assumptions used for the pension plans are based on the economic conditions prevailing in the jurisdiction in which they are offered.

→ **Refer to Note 1a item 7 for a description of the accounting policy for defined benefit pension plans**

Changes in actuarial assumptions

UBS AG regularly reviews the actuarial assumptions used in calculating its DBO to determine their continuing relevance.

Swiss pension plan

In 2017, a net loss of CHF 51 million was recognized in *Other comprehensive income* (OCI) related to the remeasurement of the DBO. This was primarily due to a market-driven decrease in the discount rate, which resulted in an OCI loss of CHF 164 million. This effect was partly offset by experience gains of CHF 90 million, reflecting differences between the previous actuarial assumptions and what actually occurred, and by market-driven changes to the assumed rate of interest credit on retirement savings, which resulted in a gain of CHF 26 million. Changes in other assumptions were not significant.

In 2016, UBS AG continued to enhance its methodology for estimating the discount rate by improving the construction of the yield curve from Swiss high-quality corporate bonds. Furthermore, UBS AG refined its approach for estimating the life expectancy, the rate of employee disability and the rate of salary increases. These changes in estimates decreased the DBO of the Swiss pension plan by CHF 319 million, of which changes in demographic assumptions decreased the DBO by CHF 659 million and changes in financial assumptions increased the DBO by CHF 339 million. However, the effect from these changes in estimates was more than offset by experience losses and market-driven changes in the discount rate, resulting in a total upward remeasurement of the Swiss plan DBO of CHF 477 million recognized in OCI.

UK pension plan

In 2017, a net gain of CHF 82 million was recognized in OCI related to the remeasurement of the DBO for the UK plan. This was primarily driven by changes in the life expectancy assumption, which resulted in a gain of CHF 80 million. In addition, market-driven changes in the inflation rate assumption resulted in a gain of CHF 60 million and experience gains were CHF 49 million. These gains were partly offset by a market-driven decrease in the discount rate, which resulted in a loss of CHF 105 million.

In 2016, a net loss of CHF 922 million was recognized in OCI related to the remeasurement of the DBO for the UK plan, resulting from a loss of CHF 866 million due to a market-driven decrease in the discount rate and a loss of CHF 156 million from market-driven changes in the inflation rate assumption, partly offset by a gain of CHF 63 million from changes in the life expectancy assumption and an experience gain of CHF 37 million.

US and German pension plans

In 2017, a net loss of CHF 80 million was recognized in OCI related to the remeasurement of the DBO for the US and German plans compared with a net loss of CHF 125 million in 2016. OCI losses in both years were primarily driven by market-driven decreases in discount rates.

Note 26 Pension and other post-employment benefit plans (continued)

The tables below show the principal actuarial assumptions used in calculating the DBO at the end of the year.

Principal actuarial assumptions used

	Swiss plan		UK plan		US and German plans[1]	
In %	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	0.67	0.73	2.55	2.69	3.14	3.58
Rate of salary increase	1.30	1.30	0.00	0.00	2.83	2.86
Rate of pension increase	0.00	0.00	3.11	3.18	1.50	1.50
Rate of interest credit on retirement savings	0.67	0.73	0.00	0.00	2.56	1.74

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	31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections[1]	21.6	21.5	23.0	22.9
UK	S2PA with CMI 2016 projections[2]	23.4	23.7	24.6	25.0
USA	RP2014 WCHA with MP2017 projection scale[3]	22.8	22.9	24.4	24.4
Germany	Dr. K. Heubeck 2005 G	20.3	20.1	22.9	22.8

		Life expectancy at age 65 for a female member currently			
		aged 65		aged 45	
Country	Mortality table	31.12.17	31.12.16	31.12.17	31.12.16
Switzerland	BVG 2015 G with CMI 2016 projections[1]	23.4	23.4	24.9	24.9
UK	S2PA with CMI 2016 projections[2]	25.2	25.6	26.5	27.4
USA	RP2014 WCHA with MP2017 projection scale[3]	24.4	24.5	26.0	26.1
Germany	Dr. K. Heubeck 2005 G	24.3	24.2	26.8	26.7

1 In 2016, the mortality table BVG 2015 G with proposed CMI 2016 was used. 2 In 2016, the mortality table S2PA with CMI 2015 projections was used. 3 In 2016, the mortality table RP2014 WCHA with MP2016 projection scale was used.

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 plan[2]		UK plan		US and German plans	
CHF million	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate						
Increase by 50 basis points	(875)	(1,435)	(341)	(388)	(88)	(86)
Decrease by 50 basis points	996	1,630	391	452	96	94
Rate of salary increase						
Increase by 50 basis points	60	86	–[3]	–[3]	1	1
Decrease by 50 basis points	(57)	(79)	–[3]	–[3]	(1)	(1)
Rate of pension increase						
Increase by 50 basis points	708	1,178	370	435	7	6
Decrease by 50 basis points	–[4]	–[4]	(327)	(377)	(6)	(6)
Rate of interest credit on retirement savings						
Increase by 50 basis points	164	264	–[5]	–[5]	9	9
Decrease by 50 basis points	(155)	(250)	–[5]	–[5]	(9)	(8)
Life expectancy						
Increase in longevity by one additional year	485	796	139	136	47	44

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 The decrease in sensitivity in 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG. 3 As the plan is closed for future service, a change in assumption is not applicable. 4 As the assumed rate of pension increase was 0% as of 31 December 2017 and as of 31 December 2016, a downward change in assumption is not applicable. 5 As the UK plan does not provide interest credits on retirement savings, a change in assumption is not applicable.

Note 26 Pension and other post-employment benefit plans (continued)

Fair value of plan assets

The tables below provide information on 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 plan

	31.12.17				31.12.16			
	Fair value			Plan asset allocation %	Fair value			Plan asset allocation %
CHF million	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	72	0	72	0	869	0	869	4
Real estate / property								
Domestic	0	1,714	1,714	11	0	2,689	2,689	11
Investment funds								
Equity								
Domestic	400	0	400	3	938	0	938	4
Foreign	4,499	798	5,297	33	6,558	1,170	7,728	31
Bonds[1]								
Domestic, AAA to BBB–	1,366	0	1,366	9	2,222	0	2,222	9
Foreign, AAA to BBB–	3,821	0	3,821	24	5,877	0	5,877	24
Foreign, below BBB–	346	0	346	2	1,176	0	1,176	5
Real estate								
Foreign	0	14	14	0	0	42	42	0
Other	516	2,423	2,940	18	283	2,776	3,059	12
Other investments	0	7	7	0	0	15	15	0
Total fair value of plan assets	11,019	4,956	15,975	100	17,923	6,691	24,614	100

	31.12.17	31.12.16
Total fair value of plan assets	15,975	24,614
of which:[2]		
Bank accounts at UBS AG	*117*	*432*
UBS AG debt instruments	*3*	*5*
UBS Group AG shares	*33*	*47*
Securities lent to UBS AG[3]	*1,979*	*1,855*
Property occupied by UBS AG	*83*	*83*
Derivative financial instruments, counterparty UBS AG[3]	*23*	*(220)*

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 the 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 2017 and 31 December 2016. Net of collateral, derivative financial instruments amounted to CHF 11 million as of 31 December 2017 (31 December 2016: CHF 76 million).

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

UK plan

CHF million	31.12.17 Fair value Quoted in an active market	Other	Total	Plan asset allocation %	31.12.16 Fair value Quoted in an active market	Other	Total	Plan asset allocation %
Cash and cash equivalents	159	0	159	5	133	0	133	4
Bonds[1]								
Domestic, AAA to BBB–	1,666	0	1,666	49	1,131	0	1,131	36
Domestic, below BBB–	1	0	1	0	1	0	1	0
Investment funds								
Equity								
Domestic	31	0	31	1	39	0	39	1
Foreign	1,020	0	1,020	30	984	0	984	31
Bonds[1]								
Domestic, AAA to BBB–	625	81	706	21	500	28	528	17
Domestic, below BBB–	21	0	21	1	23	0	23	1
Foreign, AAA to BBB–	143	0	143	4	245	0	245	8
Foreign, below BBB–	56	0	56	2	39	0	39	1
Real estate								
Domestic	100	27	128	4	39	72	111	4
Other	(4)	5	1	0	(35)	111	76	2
Other investments[2]	(560)	11	(549)	(16)	(144)	10	(134)	(4)
Total fair value of plan assets	3,257	124	3,381	100	2,955	221	3,175	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 the Standard & Poor's rating classification. 2 Mainly relates to repurchase arrangements on UK treasury bonds.

Note 26 Pension and other post-employment benefit plans (continued)

Composition and fair value of plan assets (continued)

US plans

	31.12.17				31.12.16			
	Fair value			Weighted average plan asset allocation %	Fair value			Weighted average plan asset allocation %
CHF million	Quoted in an active market	Other	Total		Quoted in an active market	Other	Total	
Cash and cash equivalents	74	0	74	6	75	0	75	7
Bonds[1]								
Domestic, AAA to BBB–	195	0	195	16	158	0	158	14
Domestic, below BBB–	10	0	10	1	13	0	13	1
Foreign, AAA to BBB–	44	0	44	4	42	0	42	4
Foreign, below BBB–	1	0	1	0	1	0	1	0
Investment funds								
Equity								
Domestic	291	0	291	24	264	0	264	23
Foreign	270	0	270	22	248	0	248	22
Bonds[1]								
Domestic, AAA to BBB–	210	0	210	17	218	0	218	19
Domestic, below BBB–	19	0	19	2	18	0	18	2
Foreign, AAA to BBB–	46	0	46	4	42	0	42	4
Foreign, below BBB–	5	0	5	0	5	0	5	0
Real estate								
Domestic	0	12	12	1	0	11	11	1
Other	21	0	21	2	19	0	19	2
Insurance contracts	0	17	17	1	0	18	18	2
Asset-backed securities	15	0	15	1	8	0	8	1
Other investments	4	0	4	0	3	0	3	0
Total fair value of plan assets	1,204	30	1,234	100	1,115	29	1,144	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 the Standard & Poor's rating classification.

b) Post-employment medical insurance plans

In the US and the UK, UBS AG offers post-employment medical insurance benefits that contribute to the health care coverage of certain employees and their beneficiaries after retirement. The UK post-employment medical insurance plan is closed to new entrants.

These plans are not prefunded. In the US, the retirees also contribute to the cost of the post-employment medical benefits.

The benefits expected to be paid by UBS AG to the post-employment medical insurance plans in 2018 are estimated to be CHF 5 million.

The table below provides an analysis of the movement in the net asset / liability recognized on the balance sheet for post-employment medical plans, as well as an analysis of amounts recognized in net profit and in *Other comprehensive income*.

Post-employment medical insurance plans

CHF million	UK plan		US plans		Total	
For the year ended	31.12.17	31.12.16	31.12.17	31.12.16	31.12.17	31.12.16
Post-employment benefit obligation at the beginning of the year	26	25	65	59	91	84
Current service cost	0	0	0	0	0	0
Interest expense	1	1	2	3	3	3
Plan participant contributions	0	0	3	2	3	2
Remeasurements	(1)	6	0	7	(1)	13
of which: actuarial (gains) / losses due to changes in demographic assumptions	*0*	*1*	*0*	*(1)*	*(1)*	*0*
of which: actuarial (gains) / losses due to changes in financial assumptions	*(1)*	*5*	*2*	*1*	*2*	*6*
of which: experience (gains) / losses [1]	*0*	*0*	*(2)*	*6*	*(2)*	*6*
Benefit payments[2]	(1)	(1)	(7)	(7)	(9)	(8)
Foreign currency translation	1	(4)	(3)	1	(1)	(3)
Post-employment benefit obligation at the end of the year	26	26	59	65	86	91
of which: amounts owed to active members	*6*	*6*	*0*	*0*	*6*	*6*
of which: amounts owed to deferred members	*0*	*0*	*0*	*0*	*0*	*0*
of which: amounts owed to retirees	*20*	*21*	*59*	*65*	*79*	*86*
Fair value of plan assets at the end of the year	0	0	0	0	0	0
Net post-employment benefit asset / (liability)	(26)	(26)	(59)	(65)	(86)	(91)
Analysis of amounts recognized in net profit						
Current service cost	0	0	0	0	0	0
Interest expense related to post-employment benefit obligation	1	1	2	3	3	3
Net periodic expenses	1	1	2	3	3	4
Analysis of amounts recognized in other comprehensive income (OCI)						
Remeasurement of post-employment benefit obligation	1	(6)	0	(7)	1	(13)
Total gains / (losses) recognized in other comprehensive income, before tax	1	(6)	0	(7)	1	(13)

1 Experience (gains) / losses are a component of actuarial remeasurements of the post-employment benefit obligation that reflect the effects of differences between the previous actuarial assumptions and what has actually occurred. 2 Benefit payments are funded by employer contributions and plan participant contributions.

Note 26 Pension and other post-employment benefit plans (continued)

Actuarial assumptions

The measurement of each medical insurance plan's post-employment benefit obligation considers different actuarial assumptions. Changes in assumptions lead to volatility in the post-employment benefit obligation. The following principal actuarial assumptions are applied:

– Discount rate: discount rates used for post-employment medical insurance plans are the same as those used for defined benefit pension plans. A decrease in the yield of high-quality corporate bonds increases the post-employment benefit obligation. Conversely, an increase in the yield of high-quality corporate bonds decreases the post-employment benefit obligation.
– Average health care cost trend rate: an increase in health care costs generally increases the post-employment benefit obligation.
– Life expectancy: as some plan participants have lifetime benefits under these plans, an increase in life expectancy increases the post-employment benefit obligation.

UBS AG regularly reviews the actuarial assumptions used in calculating its post-employment benefit obligations to determine their continuing relevance. Principal actuarial assumptions used to determine post-employment benefit obligations at the end of the year were:

Principal actuarial assumptions used[1]

	UK plan		US plans[2]	
In %	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate	2.55	2.69	3.54	3.97
Average health care cost trend rate – initial	5.10	5.10	7.99	7.03
Average health care cost trend rate – ultimate	5.10	5.10	4.50	4.50

1 The assumptions for life expectancies are provided within Note 26a. 2 Represents weighted average assumptions across US plans.

Sensitivity analysis of significant actuarial assumptions

The table below presents a sensitivity analysis for each significant actuarial assumption showing how the post-employment benefit obligation 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 post-employment benefit obligation, as the sensitivities may not be linear.

Sensitivity analysis of significant actuarial assumptions[1]

Increase / (decrease) in post-employment benefit obligation	UK plan		US plans	
CHF million	31.12.17	31.12.16	31.12.17	31.12.16
Discount rate				
Increase by 50 basis points	(2)	(2)	(3)	(3)
Decrease by 50 basis points	2	2	3	3
Average health care cost trend rate				
Increase by 100 basis points	4	4	1	2
Decrease by 100 basis points	(3)	(3)	(1)	(1)
Life expectancy				
Increase in longevity by one additional year	2	2	4	5

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.

c) Defined contribution plans

UBS AG sponsors a number of defined contribution plans in locations outside Switzerland. The locations with significant defined contribution plans are the US and the UK. Certain plans allow employees to make contributions and earn matching or other contributions from UBS AG. Employer contributions to defined contribution plans are recognized as an expense, which, for the years ended 31 December 2017, 2016 and 2015, amounted to CHF 232 million, CHF 236 million and CHF 239 million, respectively.

d) 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 2017, the minimum commitment toward the Swiss pension fund under the related leases was approximately CHF 5 million (31 December 2016: CHF 11 million).

→ **Refer to the "Composition and fair value of plan assets" table in Note 26a for more information on fair value of investments in UBS AG instruments held by the Swiss pension fund**

The following amounts have been received or paid by UBS AG from and to the pension and other 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		
CHF million	31.12.17	31.12.16	31.12.15
Received by UBS AG			
Fees	36	36	33
Paid by UBS AG			
Rent	4	4	5
Dividends, capital repayments and interest	9	15	13

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	
	31.12.17	31.12.16
Financial instruments bought by pension funds		
UBS Group AG shares (in thousands of shares)	905	2,427
UBS AG debt instruments (par values, CHF million)	2	0
Financial instruments sold by pension funds or matured		
UBS Group AG shares (in thousands of shares)	2,897	1,618
UBS AG debt instruments (par values, CHF million)	4	0

UBS Group AG shares held by pension and other post-employment benefit plans

	31.12.17	31.12.16
Number of shares (in thousands of shares)	16,370	18,363
Fair value (CHF million)	293	293

Note 27 Employee benefits: variable compensation

a) Plans offered

UBS has several share-based and other compensation plans that align the interests of Group Executive Board (GEB) members, Key Risk Takers (KRTs) and other employees with the interests of shareholders and other investors. These compensation plans are also designed to meet regulatory requirements. Section a) of this Note provides a description of the most significant compensation plans.

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 6 for a description of the accounting policy related to share-based and other compensation plans**

Mandatory deferred compensation plans

Equity Ownership Plan (EOP)

The EOP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. These employees receive at least 60% of their deferred performance award under the EOP in notional shares.

EOP awards granted to GEB members and certain other employees only vest if both Group and business division performance conditions are met. Group performance is measured based on the average adjusted return on tangible equity (RoTE) excluding deferred tax assets over the performance period. Business division performance is measured on the basis of the business division's average adjusted return on attributed equity (RoAE). For Corporate Center employees, it is measured on the basis of the average operating businesses RoAE.

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.

Notional shares represent a promise to receive UBS shares at vesting and do not carry voting rights during the vesting period. Notional shares granted before February 2014 have no rights to dividends, whereas awards granted since February 2014 carry a dividend equivalent that may be paid in notional shares or cash and that vests on the same terms and conditions as the awards. However, awards that have been granted in February 2018 for the performance year 2017 to individuals who are deemed to be Material Risk Takers (MRTs) based on regulatory guidance in the EU do not carry such a dividend equivalent. Awards are settled by delivering UBS shares at vesting, except in jurisdictions where this is not permitted for legal or tax reasons. EOP awards generally vest in equal installments after two and three years following grant (for GEB members, generally after three, four and five years). The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Deferred Contingent Capital Plan (DCCP)

The DCCP is a mandatory deferred compensation plan for all employees with total compensation greater than CHF / USD 300,000. DCCP awards granted up to January 2015 represent a right to receive a cash payment at vesting. For awards granted since February 2015, DCCP takes the form of notional additional tier 1 (AT1) capital instruments, which can be settled in the form of either a cash payment or a perpetual, marketable AT1 capital instrument, at the discretion of UBS. Awards vest in full after five years and up to seven years for certain employees subject to specific regulation in the UK unless there is a trigger event.

Awards are written down if the Group's common equity tier 1 (CET1) capital ratio falls below 10% for GEB members and below 7% for all other employees. Awards are also forfeited if a viability event occurs, that is, 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 the firm receives a commitment of extraordinary support from the public sector that is necessary to prevent such an event. As an additional performance condition, GEB members forfeit 20% of their award for each loss-making year during the vesting period.

For awards granted up to January 2015, interest on the awards is paid annually, provided that UBS achieved an adjusted profit before tax in the preceding year. For awards granted since February 2015, interest payments are discretionary. Awards granted to MRTs since February 2018 are not eligible for interest payments. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Asset Management EOP

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. The awards are generally forfeitable upon, among other circumstances, voluntary termination of employment with UBS.

Wealth Management Americas financial advisor compensation

In line with market practice for US wealth management businesses, the compensation for financial advisors in Wealth Management Americas is comprised of production payout and deferred compensation awards. Production payout, paid monthly in the form of non-deferred cash payments, is primarily based on compensable revenue.

Financial advisors may also qualify for deferred compensation awards, which vest over various time periods of up to 10 years. 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 policies or applicable laws and regulations.

Strategic objective awards

Strategic objective awards are deferred compensation awards based on strategic performance measures, including production, length of service with the firm and net new business. These awards are granted in the form of both deferred share-based and deferred cash-based awards with a vesting period of up to six years.

Through performance year 2016, strategic objective awards were partly granted under the PartnerPlus deferred cash plan. In addition to such granted awards (UBS AG company contributions), participants were also allowed to voluntarily contribute additional amounts otherwise payable as production payout up to a certain percentage, which vest upon contribution. Company contributions and voluntary contributions are credited with interest in accordance with the terms of the plan. Rather than being credited with interest, a participant may elect to have voluntary contributions, along with vested company contributions, 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 six to ten 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 exceed defined thresholds from 2010 through 2017. Awards were granted in 2010, 2011, 2015 and early 2018. The awards are distributed over seven years, with the exception of 2018 awards, which will be distributed over five years.

Other compensation plans

Equity Plus Plan (Equity Plus)

Equity Plus is a voluntary share-based compensation plan that provides eligible employees with the opportunity to purchase UBS shares at market value and receive one notional share for every three shares purchased, up to a maximum annual limit. Share purchases may be made annually from the performance award and / or monthly through deductions from salary. If the shares purchased are held until three years from the start of the associated plan year and, in general, if the employee remains in employment, the notional shares vest. For notional shares granted since April 2014, employees are entitled to receive a dividend equivalent, which may be paid in notional shares and / or cash.

Role-based allowances (RBAs)

Certain employees of legal entities regulated in the EU may receive an RBA in addition to their base salary. This allowance reflects the market value of a specific role and is only paid as long as the employee is within such a role. RBAs are offered in line with market practice and are generally paid in cash. In the UK, RBAs are awarded in cash and, above a certain threshold, in blocked UBS shares. Such shares will be unblocked in equal installments after two and three years. The compensation expense is recognized in the year of grant.

Discontinued deferred compensation plans

Senior Executive Equity Ownership Plan (SEEOP)

Up to February 2012, GEB members and selected senior executives received a portion of their mandatory deferral in UBS shares or notional shares, which vested in equal installments over a five-year vesting period and were forfeitable if certain conditions had not been met. The employee's business division or the Group as a whole had to be profitable in the financial year preceding scheduled vesting. Awards granted under SEEOP were settled by delivering UBS shares at vesting. No SEEOP awards have been granted since 2012.

Senior Executive Stock Option Plan (SESOP)

Up to February 2008, GEB members and selected senior executives were granted UBS options with a strike price set at 110% of the fair market value of a UBS share on the grant date. These awards vested in full following a three-year vesting period and generally expire ten years from the grant date. No SESOP awards have been granted since 2008.

Long-Term Deferred Retention Senior Incentive Scheme (LTDRSIS)

Awards under the LTDRSIS were granted to employees in Australia up to and including 2014 and represented a profit share amount based on the profitability of the Australian business. Awards vested after three years and included an arrangement that allowed for unpaid installments to be reduced if the business recorded a loss for the calendar year preceding vesting. The awards were generally forfeitable upon voluntary termination of employment with UBS.

Key Employee Stock Appreciation Rights Plan (KESAP) and Key Employee Stock Option Plan (KESOP)

Until 2009, certain key and high-potential employees were granted discretionary share-settled stock appreciation rights (SARs) or options on UBS shares with a strike price not less than the market value of a UBS share on the date of grant. A SAR gives employees the right to receive a number of UBS shares equal to the value of any market price increase of a UBS share between the grant date and the exercise date. One option entitles the holder to acquire one registered UBS share at the option's strike price. SARs and options are settled by delivering UBS shares, except in jurisdictions where this is not permitted for legal reasons. No options or SARs awards have been granted since 2009.

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 on compensation expenses related to total variable compensation, including financial advisor compensation in Wealth Management Americas, that were recognized in the financial year ended 31 December 2017, as well as expenses that were deferred and will be recognized in the income statement for 2018 and later. The majority of expenses deferred to 2018 and later that are related to the performance year 2017 relates to awards granted in February 2018. The total compensation expense for unvested share-based awards granted up to 31 December 2017 will be recognized in future periods over a weighted average period of 2.1 years.

Variable compensation including Wealth Management Americas financial advisor compensation

	Expenses recognized in 2017			Expenses deferred to 2018 and later		
CHF million	Related to the performance year 2017	Related to prior performance years	Total	Related to the performance year 2017	Related to prior performance years	Total
Non-deferred cash	1,944	(24)	1,920	0	0	0
Deferred compensation awards	385	691	1,076	575	668	1,243
of which: Equity Ownership Plan	*231*	*357*	*588*	*314*	*279*	*593*
of which: Deferred Contingent Capital Plan	*130*	*299*	*429*	*234*	*360*	*594*
of which: Asset Management EOP	*25*	*31*	*55*	*27*	*26*	*52*
of which: Other performance awards	*0*	*4*	*4*	*0*	*3*	*3*
Total variable compensation – performance awards	**2,329**	**667**	**2,996**	**575**	**668**	**1,243**
Replacement payments	12	57	69	79	40	119
Forfeiture credits	0	(104)	(104)	0	0	0
Severance payments	93	0	93	0	0	0
Retention plan and other payments	24	37	61	29	31	61
Deferred Contingent Capital Plan: interest expense	0	108	108	78	212	290
Total variable compensation – other	**129**	**98**	**227**	**186**	**283**	**470**
Financial advisor compensation	2,995	252	3,247	153	779	932
of which: non-deferred cash	*2,836*	*0*	*2,836*	*0*	*0*	*0*
of which: deferred share-based awards	*56*	*44*	*100*	*69*	*117*	*186*
of which: deferred cash-based awards	*102*	*209*	*311*	*84*	*662*	*746*
Compensation commitments with recruited financial advisors[1]	30	710	740	360	2,009	2,369
Total Wealth Management Americas: Financial advisor compensation	**3,025**	**962**	**3,986**	**513**	**2,788**	**3,300**
Total variable compensation including WMA FA compensation	**5,483**	**1,727**	**7,209[2]**	**1,274**	**3,739**	**5,013**

1 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. 2 Includes CHF 713 million in expenses related to share-based compensation (performance awards: CHF 588 million; other variable compensation: CHF 25 million; Wealth Management Americas financial advisor compensation: CHF 100 million). A further CHF 95 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 25 million, related to role-based allowances; Social security: CHF 48 million; Other personnel expenses: CHF 22 million, related to the Equity Plus Plan).

Note 27 Employee benefits: variable compensation (continued)

Variable compensation including Wealth Management Americas financial advisor compensation

	Expenses recognized in 2016			Expenses deferred to 2017 and later		
CHF million	Related to the performance year 2016	Related to prior performance years	Total	Related to the performance year 2016	Related to prior performance years	Total
Non-deferred cash	1,808	(41)	1,767	0	0	0
Deferred compensation awards	373	823	1,196	671	856	1,527
of which: Equity Ownership Plan	*214*	*484*	*698*	*372*	*356*	*727*
of which: Deferred Contingent Capital Plan	*133*	*295*	*428*	*266*	*468*	*735*
of which: Asset Management EOP	*26*	*39*	*65*	*34*	*27*	*60*
of which: Other performance awards	*0*	*6*	*6*	*0*	*5*	*5*
Total variable compensation – performance awards	**2,181**	**782**	**2,963**	**671**	**856**	**1,527**
Replacement payments	24	62	86	40	31	71
Forfeiture credits	0	(73)	(73)	0	0	0
Severance payments	217	0	217	0	0	0
Retention plan and other payments	25	51	76	24	27	50
Deferred Contingent Capital Plan: interest expense	0	112	112	98	243	341
Total variable compensation – other	**265**	**151**	**418**	**162**	**301**	**463**
Financial advisor compensation	2,651	247	2,898	196	893	1,089
of which: non-deferred cash	*2,506*	*0*	*2,506*	*0*	*0*	*0*
of which: deferred share-based awards	*33*	*48*	*81*	*57*	*120*	*177*
of which: deferred cash-based awards	*112*	*199*	*311*	*139*	*773*	*912*
Compensation commitments with recruited financial advisors[1]	43	756	799	607	2,120	2,727
Total Wealth Management Americas: Financial advisor compensation	**2,695**	**1,002**	**3,697**	**804**	**3,013**	**3,816**
Total variable compensation including WMA FA compensation	**5,142**	**1,935**	**7,078[2]**	**1,637**	**4,169**	**5,806**

1 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. 2 Includes CHF 819 million in expenses related to share-based compensation (performance awards: CHF 698 million; other variable compensation: CHF 40 million; Wealth Management Americas financial advisor compensation: CHF 81 million). A further CHF 90 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 39 million, related to role-based allowances; Social security: CHF 27 million; Other personnel expenses: CHF 24 million, related to the Equity Plus Plan).

Note 27 Employee benefits: variable compensation (continued)

Variable compensation including Wealth Management Americas financial advisor compensation

	Expenses recognized in 2015			Expenses deferred to 2016 and later		
CHF million	Related to the performance year 2015	Related to prior performance years	Total	Related to the performance year 2015	Related to prior performance years	Total
Non-deferred cash	2,073	(94)	1,979	0	0	0
Deferred compensation awards	461	769	1,230	900	822	1,722
of which: Equity Ownership Plan	*261*	*461*	*722*	*524*	*338*	*861*
of which: Deferred Contingent Capital Plan	*172*	*258*	*429*	*343*	*446*	*789*
of which: Asset Management EOP	*28*	*38*	*67*	*34*	*35*	*69*
of which: Other performance awards	*0*	*12*	*12*	*0*	*3*	*3*
Total variable compensation – performance awards	**2,534**	**675**	**3,209**	**900**	**822**	**1,722**
Replacement payments	11	65	76	72	41	114
Forfeiture credits	0	(86)	(86)	0	0	0
Severance payments	157	0	157	0	0	0
Retention plan and other payments	15	103	118	15	52	67
Deferred Contingent Capital Plan: interest expense	0	80	80	160	200	360
Total variable compensation – other	**184**	**162**	**346**	**248**	**293**	**541**
Financial advisor compensation	2,629	187	2,816	776	571	1,347
of which: non-deferred cash	*2,460*	*0*	*2,460*	*0*	*0*	*0*
of which: deferred share-based awards	*37*	*45*	*82*	*66*	*115*	*182*
of which: deferred cash-based awards	*132*	*142*	*275*	*710*	*456*	*1,166*
Compensation commitments with recruited financial advisors[1]	43	692	735	940	1,899	2,839
Total Wealth Management Americas: Financial advisor compensation	**2,673**	**879**	**3,552**	**1,716**	**2,470**	**4,186**
Total variable compensation including WMA FA compensation	**5,391**	**1,716**	**7,107**[2]	**2,864**	**3,585**	**6,449**

1 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. 2 Includes CHF 858 million in expenses related to share-based compensation (performance awards: CHF 722 million; other variable compensation: CHF 54 million; Wealth Management Americas financial advisor compensation: CHF 82 million). A further CHF 108 million in expenses related to share-based compensation was recognized within other Note 6 expense categories (Salaries: CHF 26 million, related to role-based allowances; Social security: CHF 61 million; Other personnel expenses: CHF 21 million, related to the Equity Plus Plan).

Note 27 Employee benefits: variable compensation (continued)

c) Outstanding share-based compensation awards

Share and performance share awards

Movements in outstanding share-based awards under the EOP plan during 2017 and 2016 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 and performance share awards granted under the EOP

	Number of shares 2017	Weighted average grant date fair value (CHF)	Number of shares 2016	Weighted average grant date fair value (CHF)
Outstanding, at the beginning of the year	512,185	16	427,443	18
Shares awarded during the year	117,082	14	199,755	13
Distributions during the year	(212,984)	16	(115,014)	18
Forfeited during the year	(11,563)	14	0	0
Outstanding, at the end of the year	404,720	14	512,185	16
of which: shares vested for accounting purposes	*132,117*		*189,953*	

The total carrying amount of the liability related to cash-settled share-based awards as of 31 December 2017 and 31 December 2016 was CHF 5 million and CHF 7 million, respectively.

d) Valuation

Share awards

UBS AG measures compensation expense based on the average market price of the UBS Group AG 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 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 2017. Unless otherwise stated, the subsidiaries listed below have share capital consisting solely of ordinary shares that are held fully 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 in the UK, 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.

Individually significant subsidiaries as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million		Equity interest accumulated in %
UBS Americas Holding LLC	Wilmington, Delaware, USA	Corporate Center	USD	2,250.0[1]	100.0
UBS Asset Management AG	Zurich, Switzerland	Asset Management	CHF	43.2	100.0
UBS Bank USA	Salt Lake City, Utah, USA	Wealth Management Americas	USD	0.0	100.0
UBS Europe SE	Frankfurt, Germany	Wealth Management	EUR	446.0	100.0
UBS Financial Services Inc.	Wilmington, Delaware, USA	Wealth Management Americas	USD	0.0	100.0
UBS Limited	London, United Kingdom	Investment Bank	GBP	226.6	100.0
UBS Securities LLC	Wilmington, Delaware, USA	Investment Bank	USD	1,283.1[2]	100.0
UBS Switzerland AG	Zurich, Switzerland	Personal & Corporate Banking	CHF	10.0	100.0

1 Comprised of common share capital of USD 1,000 and non-voting preferred share capital of USD 2,250,000,000. 2 Comprised 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 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 as of 31 December 2017

Company	Registered office	Primary business division	Share capital in million		Equity interest accumulated in %
UBS Americas Inc.	Wilmington, Delaware, USA	Corporate Center	USD	0.0	100.0
UBS Asset Management (Americas) Inc.	Wilmington, Delaware, USA	Asset Management	USD	0.0	100.0
UBS Asset Management (Australia) Ltd	Sydney, Australia	Asset Management	AUD	20.1[1]	100.0
UBS Asset Management (Deutschland) GmbH	Frankfurt, Germany	Asset Management	EUR	7.7	100.0
UBS Asset Management (Hong Kong) Limited	Hong Kong, Hong Kong	Asset Management	HKD	206.0	100.0
UBS Asset Management (Japan) Ltd	Tokyo, Japan	Asset Management	JPY	2,200.0	100.0
UBS Asset Management (Singapore) Ltd	Singapore, Singapore	Asset Management	SGD	4.0	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	Corporate Center	USD	0.0	100.0
UBS Card Center AG	Glattbrugg, Switzerland	Personal & Corporate Banking	CHF	0.1	100.0
UBS Credit Corp.	Wilmington, Delaware, USA	Wealth Management Americas	USD	0.0	100.0
UBS (France) SA.	Paris, France	Wealth Management	EUR	133.0	100.0
UBS Fund Advisor, L.L.C.	Wilmington, Delaware, USA	Wealth Management Americas	USD	0.0	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 Hedge Fund Solutions LLC	Wilmington, Delaware, USA	Asset Management	USD	0.1	100.0
UBS (Monaco) S.A.	Monte Carlo, Monaco	Wealth Management	EUR	49.2	100.0
UBS O'Connor LLC	Dover, Delaware, USA	Asset Management	USD	1.0	100.0
UBS Real Estate Securities Inc.	Wilmington, Delaware, USA	Investment Bank	USD	0.0	100.0
UBS Realty Investors LLC	Boston, Massachusetts, USA	Asset Management	USD	9.0	100.0
UBS Securities (Thailand) Ltd	Bangkok, Thailand	Investment Bank	THB	500.0	100.0
UBS Securities Australia Ltd	Sydney, Australia	Investment Bank	AUD	0.3[1]	100.0
UBS Securities India Private Limited	Mumbai, India	Investment Bank	INR	140.0	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
UBS South Africa (Proprietary) Limited	Sandton, South Africa	Investment Bank	ZAR	0.0	100.0
UBS UK Properties Limited	London, United Kingdom	Corporate Center	GBP	132.0	100.0

1 Includes a nominal amount relating to redeemable preference shares.

Note 28 Interests in subsidiaries and other entities (continued)

Changes in consolidation scope

In 2017, no significant subsidiaries were added to or removed from the scope of consolidation as a result of acquisitions or disposals.

Non-controlling interests

As of 31 December 2017 and 31 December 2016, non-controlling interests were not material to UBS AG.

Consolidated structured entities

UBS AG consolidates a structured entity (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.

Investment fund SEs are generally consolidated when UBS AG's aggregate exposure combined with its decision-making rights indicate the ability to use such power in a principal capacity. Typically, UBS AG will have decision-making rights as fund manager, earning a management fee, and will provide seed capital at the inception of the fund or hold a significant percentage of the fund units. Where other investors do not have the substantive ability to remove UBS as decision maker, UBS AG is deemed to have control and therefore consolidates the fund.

Securitization SEs are generally consolidated when UBS AG holds a significant percentage of the asset-backed securities issued by the SE and has the power to remove without cause the servicer of the asset portfolio.

Client investment SEs are generally consolidated when UBS AG has a substantive liquidation right over the SE or a decision right over the assets held by the SE and has exposure to variable returns through derivatives traded with the SE or holding notes issued by the SE.

In 2017 and 2016, UBS AG has not entered 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 has UBS AG an intention to do so in the future. Further, 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 2017 and 2016, 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.

Investments in associates and joint ventures

CHF million	31.12.17	31.12.16
Carrying amount at the beginning of the year	963	954
Additions	3	3
Disposals	0	(2)
Share of comprehensive income	98	82
of which: share of net profit [1]	*75*	*106*
of which: share of other comprehensive income [2]	*23*	*(24)*
Dividends received	(51)	(50)
Impairment	(7)	0
Foreign currency translation	12	(23)
Carrying amount at the end of the year	1,018	963
of which: associates	*989*	*934*
of which: UBS Securities Co. Limited, Beijing [3]	*401*	*392*
of which: SIX Group AG, Zurich [4]	*464*	*426*
of which: other associates	*124*	*116*
of which: joint ventures	*29*	*29*

1 For 2017, consists of CHF 60 million from associates and CHF 15 million from joint ventures. For 2016, consists of CHF 94 million from associates and CHF 12 million from joint ventures. 2 For 2017, consists of CHF 24 million from associates and negative CHF 1 million from joint ventures. For 2016, consists of negative CHF 25 million from associates and CHF 0 million from joint ventures. 3 UBS AG's equity interest amounts to 24.99%. 4 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

During 2017, UBS AG sponsored the creation of various SEs and interacted with a number of non-sponsored SEs, including securitization vehicles, client vehicles as well as certain investment funds, which UBS did not consolidate as of 31 December 2017 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 had an interest as of year-end, except for investment funds sponsored by third parties, for which the carrying value of UBS's interest as of year-end has been disclosed.

Interests in unconsolidated structured entities

	31.12.17				
CHF million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total	Maximum exposure to loss[1]
Trading portfolio assets	363	308	6,143	6,815	6,815
Positive replacement values	21	68	22	111	111
Loans	0	0	97	97	97
Financial assets designated at fair value	84	66[2]	0	150	1,675
Financial assets available for sale	0	3,865	45	3,910	3,910
Other assets	291	29[2]	0	320	1,407
Total assets	760[3]	4,337	6,307	11,403	
Negative replacement values	20[4]	53	203	276	14
Total liabilities	20	53	203	276	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	57[5]	78[6]	412[7]		

	31.12.16				
CHF million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total	Maximum exposure to loss[1]
Trading portfolio assets	634	394	6,215	7,243	7,243
Positive replacement values	40	76	101	217	217
Loans	0	0	79	79	79
Financial assets designated at fair value	103	83[2]	0	186	1,765
Financial assets available for sale	0	3,381	58	3,439	3,439
Other assets	289	37[2]	0	327	1,490
Total assets	1,066[3]	3,971	6,454	11,491	
Negative replacement values	33[4]	346	67	446	90
Total liabilities	33	346	67	446	
Assets held by the unconsolidated structured entities in which UBS had an interest (CHF billion)	72[5]	102[6]	334[7]		

1 For purposes 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 value of loan commitments, both designated at fair value and held at amortized cost. The maximum exposure to loss for these instruments is equal to the notional amount. 3 As of 31 December 2017, CHF 0.7 billion of the CHF 0.8 billion (31 December 2016: CHF 1.0 billion of the CHF 1.1 billion) was held in Corporate Center – Non-core and Legacy Portfolio. 4 Comprised of credit default swap (CDS) liabilities and other swap liabilities. The maximum exposure to loss for CDS is equal to the sum of the negative carrying value and the notional amount. For other swap liabilities, no maximum exposure to loss is reported. 5 Represents 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 value of UBS's interests in the investment funds not sponsored by UBS.

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 value 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 2017 and 2016, UBS AG did not provide support, financial or otherwise, to an unconsolidated SE when not contractually obligated to do so, nor has UBS AG an intention to do so in the future.

In 2017 and 2016, income and expenses from interests in unconsolidated SEs primarily resulted from mark-to-market movements recognized in net trading income, 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 2017 and 31 December 2016, UBS AG held interests, both retained and acquired, in various securitization vehicles, a majority of which are held within Corporate Center – Non-core and Legacy Portfolio. The Investment Bank also retained interests in securitization vehicles related to financing, underwriting, secondary market and derivative trading activities.

In some cases UBS AG may be required to absorb losses from an unconsolidated SE before other parties because UBS AG's interest is subordinated to others in the ownership structure. An overview of UBS AG's interests in unconsolidated securitization vehicles and the relative ranking and external credit rating of those interests is presented in the table on the following pages.

→ **Refer to Note 1a item 1 for more information on UBS AG's accounting policies regarding consolidation and sponsorship of securitization vehicles and other structured entities**

Interests in client vehicles

As of 31 December 2017 and 31 December 2016, 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

UBS AG holds interests in a number of investment funds, primarily resulting from seed investments or 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, 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 2017 or as of 31 December 2016.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles[1]

	31.12.17				
CHF million, except where indicated	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities[2]	Re-securitization[3]	Total
Sponsored by UBS					
Interests in senior tranches	84	24	0	10	118
of which: rated investment grade	*0*	*24*			*24*
of which: rated sub-investment grade	*84*				*84*
of which: defaulted				*10*	*10*
Interests in junior tranches	0	9	0	0	9
of which: rated investment grade		*9*			*9*
Total	84	32	0	10	126
of which: Trading portfolio assets	*0*	*32*	*0*	*10*	*43*
of which: Financial assets designated at fair value	*84*	*0*	*0*	*0*	*84*
Total assets held by the vehicles in which UBS had an interest (CHF billion)	1	10	0	1	12
Not sponsored by UBS					
Interests in senior tranches	75	6	165	64	311
of which: rated investment grade	*75*	*6*	*165*	*64*	*311*
Interests in mezzanine tranches	9	1	0	0	9
of which: rated investment grade		*1*			*1*
of which: defaulted	*9*				*9*
Interests in junior tranches	1	0	0	0	1
of which: rated sub-investment grade	*1*				*1*
Tranche information not available	0	0	0	0	0
of which: rated investment grade	*0*				*0*
of which: not rated	*0*				*0*
Total	85	7	165	64	321
of which: Trading portfolio assets	*85*	*7*	*165*	*64*	*321*
Total assets held by the vehicles in which UBS had an interest (CHF billion)	18	5	20	0	43

1 This table excludes receivables and derivative transactions with securitization vehicles. 2 Includes credit card, auto and student loan structures. 3 Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

Interests in unconsolidated securitization vehicles (continued)[1]

	31.12.16				
CHF million, except where indicated	Residential mortgage-backed securities	Commercial mortgage-backed securities	Other asset-backed securities[2]	Re-securitization[3]	Total
Sponsored by UBS					
Interests in senior tranches	103	34	0	14	151
of which: rated investment grade	*0*	*34*			*34*
of which: rated sub-investment grade	*103*				*103*
of which: defaulted				*14*	*14*
Interests in mezzanine tranches	1	0	0	0	1
of which: rated sub-investment grade	*1*				*1*
Total	104	34	0	14	152
of which: Trading portfolio assets	*1*	*34*	*0*	*14*	*49*
of which: Financial assets designated at fair value	*103*	*0*	*0*	*0*	*103*
Total assets held by the vehicles in which UBS had an interest (CHF billion)	2	13	0	1	16
Not sponsored by UBS					
Interests in senior tranches	165	4	241	125	535
of which: rated investment grade	*165*	*4*	*241*	*125*	*535*
Interests in mezzanine tranches	32	0	0	0	32
of which: rated investment grade	*29*				*29*
of which: defaulted	*3*				*3*
Interests in junior tranches	18	0	0	0	18
of which: rated investment grade	*17*				*17*
of which: rated sub-investment grade	*1*				*1*
Total	215	4	241	125	585
of which: Trading portfolio assets	*215*	*4*	*241*	*125*	*585*
Total assets held by the vehicles in which UBS had an interest (CHF billion)	41	8	5	1	56

1 This table excludes receivables and derivative transactions with securitization vehicles. 2 Includes credit card, auto and student loan structures. 3 Includes collateralized debt obligations.

Note 28 Interests in subsidiaries and other entities (continued)

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 active management services, UBS 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 net trading income 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 2017, UBS and third parties transferred assets totaling CHF 17 billion (2016: CHF 13 billion) into sponsored securitization and client vehicles created in 2017. 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 CHF 15 billion (31 December 2016: CHF 14 billion).

Sponsored unconsolidated structured entities in which UBS did not have an interest at year-end[1]

	As of or for the year ended			
	31.12.17			
CHF million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	2	(9)	0	(7)
Net fee and commission income	0	0	40	40
Net trading income	(8)	(49)	2	(55)
Total income	(6)	(58)	43	(21)
Asset information (CHF billion)	10[2]	7[3]	15[4]	

	As of or for the year ended			
	31.12.16			
CHF million, except where indicated	Securitization vehicles	Client vehicles	Investment funds	Total
Net interest income	3	(6)	0	(3)
Net fee and commission income	0	0	53	53
Net trading income	2	(158)	29	(128)
Total income	4	(165)	82	(78)
Asset information (CHF billion)	7[2]	6[3]	14[4]	

1 These tables exclude profit attributable to preferred noteholders of CHF 72 million for the year ended 31 December 2017 and CHF 78 million for the year ended 31 December 2016. 2 Represents the amount of assets transferred to the respective securitization vehicles. Of the total amount transferred, CHF 2 billion was transferred by UBS (31 December 2016: CHF 2 billion) and CHF 8 billion was transferred by third parties (31 December 2016: CHF 5 billion). 3 Represents total assets transferred to the respective client vehicles. Of the total amount transferred, CHF 6 billion was transferred by UBS (31 December 2016: CHF 5 billion) and CHF 1 billion was transferred by third parties (31 December 2016: CHF 1 billion). 4 Represents the total net asset value of the respective investment funds.

Note 29 Business combinations

In 2017 and 2016, UBS AG did not complete any significant business combinations.

Note 30 Changes in organization and disposals

Measures to improve the resolvability of the UBS Group

In December 2014, UBS Group AG became the holding company of the UBS Group. In 2015, UBS transferred its Personal & Corporate Banking and Wealth Management businesses booked in Switzerland from UBS AG to UBS Switzerland AG and implemented a more self-sufficient business and operating model for UBS Limited.

UBS Business Solutions AG was established in 2015 as a direct subsidiary of UBS Group AG to act as the UBS Group service company. In the second half of 2015, UBS AG transferred the ownership of the majority of its existing service subsidiaries outside the US to UBS Business Solutions AG, and in 2017 shared services functions in Switzerland and the UK were transferred from UBS AG to UBS Business Solutions AG. UBS AG also completed the transfer of the shared services functions in the US to its US service company, UBS Business Solutions US LLC, a wholly owned subsidiary of UBS Americas Holding LLC.

In addition, UBS AG transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS AG merged its Wealth Management subsidiaries in Italy, Luxembourg (including its branches in Austria, Denmark and Sweden), the Netherlands and Spain into UBS Deutschland AG, which was renamed to UBS Europe SE, to establish UBS AG's new European legal entity, which is headquartered in Frankfurt, Germany.

Transfers of shared services functions to UBS Business Solutions AG

In 2017, UBS transferred shared services functions in Switzerland and the UK from UBS AG to UBS Business Solutions AG. The transfer in Switzerland to UBS Business Solutions AG was executed in the second quarter of 2017. For UK shared services, a similar transfer to the UK branch of UBS Business Solutions AG was completed in the fourth quarter of 2017.

The transfer in Switzerland was effected by a distribution of the shares of an interim shared services subsidiary of UBS AG to UBS Group AG through a dividend in kind, and the merger of the subsidiary with the previously established UBS Business Solutions AG. The transfer resulted in a CHF 307 million reduction of net assets and of share premium within equity attributable to shareholders.

The transferred functions include Group Technology, Group Operations, Group Corporate Services and most other shared services functions. As a consequence, UBS AG no longer incurs the respective direct costs, no longer charges other Group entities for underlying services and no longer earns a related markup, but rather receives a charge including a markup from a service company for its own consumption of services provided by the service company. UBS AG retained the vast majority of its real estate portfolio and selected other Corporate Center – Services functions and continues to charge UBS Business Solutions AG for services provided to it, earning a markup.

The new shared services model resulted in a reduction of *Operating profit before tax* for UBS AG consolidated of approximately CHF 0.1 billion for the year 2017. This amount includes net increases in *Other income* of approximately CHF 0.3 billion and *General and administrative expenses* of approximately CHF 1.7 billion and net decreases in *Personnel expenses* of approximately CHF 1.2 billion and *Depreciation and impairment of property, equipment and software* of approximately CHF 0.1 billion.

Sale of subsidiaries and businesses

In the fourth quarter of 2017, UBS AG completed the sale of Asset Management's fund administration servicing units in Luxembourg and Switzerland to Northern Trust, resulting in a pre-tax gain on sale of CHF 153 million.

In the second quarter of 2017, UBS AG completed the sale of a life insurance subsidiary within Wealth Management. A loss on sale of CHF 23 million was recognized in 2016 relating to this transaction. Prior to completion of the sale, the assets and liabilities of this business were presented as a disposal group held for sale within *Other assets* and *Other liabilities* (31 December 2016: CHF 5.1 billion and CHF 5.2 billion, respectively).

In 2015, UBS AG sold its Alternative Fund Services (AFS) business to Mitsubishi UFJ Financial Group Investor Services. Upon completion of the sale, UBS AG recognized a gain on sale of CHF 56 million and reclassified an associated net foreign currency translation gain of CHF 119 million from *Other comprehensive income* to the income statement. Also during 2015, UBS AG completed the sale of certain subsidiaries and businesses within Wealth Management, which resulted in the recognition of a combined net gain of CHF 169 million.

Restructuring expenses

Restructuring expenses arise from programs that materially change either the scope of business that UBS AG engages in or the manner in which such business is conducted. Restructuring expenses are necessary to effect such programs and include items such as severance and other personnel-related expenses, duplicate headcount costs, impairment and accelerated depreciation of assets, contract termination costs, consulting fees, and related infrastructure and system costs. These costs are presented in the income statement according to the underlying nature of the expense.

Note 30 Changes in organization and disposals (continued)

Net restructuring expenses by business division and Corporate Center unit

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Wealth Management	463	447	323
Wealth Management Americas	113	139	137
Personal & Corporate Banking	103	117	101
Asset Management	100	100	82
Investment Bank	359	577	396
Corporate Center	49	62	194
of which: Services	*39*	*41*	*138*
of which: Group ALM	*4*	*0*	*0*
of which: Non-core and Legacy Portfolio	*6*	*21*	*56*
Total net restructuring expenses	1,188	1,442	1,233
of which: personnel expenses	*362*	*731*	*458*
of which: general and administrative expenses	*818*	*700*	*760*
of which: depreciation and impairment of property, equipment and software	*7*	*11*	*12*
of which: amortization and impairment of intangible assets	*0*	*0*	*2*

Net restructuring expenses by personnel expense category

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Salaries	213	422	311
Variable compensation – performance awards	22	101	38
Variable compensation – other	80	208	108
Contractors	48	56	46
Social security	6	8	5
Pension and other post-employment benefit plans	(15)	(76)	(65)
Other personnel expenses	8	12	15
Total net restructuring expenses: personnel expenses	362	731	458

Net restructuring expenses by general and administrative expense category

	For the year ended		
CHF million	31.12.17	31.12.16	31.12.15
Occupancy	75	123	109
Rent and maintenance of IT and other equipment	36	93	31
Communication and market data services	1	1	0
Administration	397	28	7
Marketing and public relations	1	0	0
Travel and entertainment	8	12	16
Professional fees	143	162	187
Outsourcing of IT and other services	166	287	316
Other[1]	(8)	(5)	95
Total net restructuring expenses: general and administrative expenses	818	700	760

1 Mainly comprised of onerous real estate lease contracts.

Note 31 Operating leases and finance leases

Information on lease contracts classified as operating leases where UBS AG is the lessee is provided in Note 31a and information on finance leases where UBS AG acts as a lessor is provided in Note 31b.

a) Operating lease commitments

As of 31 December 2017, UBS AG was obligated under a number of non-cancelable operating leases for premises and equipment used primarily for banking purposes. The significant premises leases usually include renewal options and escalation clauses in line with general office rental market conditions, as well as rent adjustments based on price indices. However, the lease agreements do not contain contingent rent payment clauses and purchase options, nor do they impose any restrictions on UBS AG's ability to pay dividends, engage in debt financing transactions or enter into further lease agreements.

CHF million	31.12.17
Expenses for operating leases to be recognized in:	
2018	652
2019	588
2020	506
2021	422
2022	375
2023 and thereafter	1,984
Subtotal commitments for minimum payments under operating leases	4,526
Less: Sublease rental income commitments	262
Net commitments for minimum payments under operating leases	**4,265**

CHF million	31.12.17	31.12.16	31.12.15
Gross operating lease expense recognized in the income statement	684	737	741
Sublease rental income	67	78	70
Net operating lease expense recognized in the income statement	617	659	671

b) Finance lease receivables

UBS AG leases a variety of assets to third parties under finance leases, such as commercial vehicles, production lines, medical equipment, construction 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 expenses cover the cost of the assets less their residual value as well as financing costs.

As of 31 December 2017, unguaranteed residual values of CHF 158 million had been accrued, and the accumulated allowance for uncollectible minimum lease payments receivable amounted to CHF 10 million. No contingent rents were received in 2017.

Lease receivables

CHF million	31.12.17		
	Total minimum lease payments	Unearned finance income	Present value
2018	333	22	311
2019–2022	684	36	648
Thereafter	112	3	110
Total	1,129	61	1,069

Note 32 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 Board of Directors and all EB members is included in the table below.

Remuneration of key management personnel

CHF million	31.12.17	31.12.16	31.12.15
Base salaries and other cash payments[1]	23	24	21
Incentive awards – cash[2]	13	10	9
Annual incentive award under DCCP	20	20	20
Employer's contributions to retirement benefit plans	2	2	1
Benefits in kind, fringe benefits (at market value)	2	2	2
Equity-based compensation[3]	36	38	39
Total	98	97	92

1 Includes role-based allowances that have been made in line with market practice in response to the EU Capital Requirements Directive of 2013 (CRD IV). 2 Includes immediate and deferred cash. 3 Expenses for shares granted are calculated at grant date of the respective award and allocated over the vesting period, generally for 5 years. Refer to Note 27 for more information. In 2017, 2016 and 2015, equity-based compensation was entirely comprised of EOP awards.

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 CHF 7.1 million in 2017, CHF 7.2 million in 2016 and CHF 6.7 million in 2015.

b) Equity holdings of key management personnel

Equity holdings of key management personnel

	31.12.17	31.12.16
Number of stock options from equity participation plans held by non-independent members of the BoD and the EB members[1]	398,867	620,950
Number of shares held by members of the BoD, EB and parties closely linked to them[2]	3,709,539	3,267,911

1 Refer to Note 27 for more information. 2 Excludes shares granted under variable compensation plans with forfeiture provisions.

Of the share totals above, 95,597 shares were held by close family members of key management personnel on 31 December 2017 and 31 December 2016. 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 2017 and 31 December 2016. Refer to Note 27 for more information. As of 31 December 2017, no member of the BoD or EB was the beneficial owner of more than 1% of UBS Group AG's shares.

Note 32 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 collectibility 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]

CHF million	2017	2016
Balance at the beginning of the year	33	33
Additions	1	13
Reductions	(1)	(13)
Balance at the end of the year[2]	34	33

1 All loans are secured loans. 2 Excludes unused uncommitted credit facilities for two EB members and one BoD member of CHF 5,196,294 as of 31 December 2017 and for one EB and one BoD member of CHF 2,684,498 as of 31 December 2016.

d) Other related party transactions with entities controlled by key management personnel

In 2017 and 2016, 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 2017, 31 December 2016 and 31 December 2015, there were no outstanding balances related to such transactions. Furthermore, in 2017 and 2016, 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 2017 and 2016, and therefore also received no fees.

Note 32 Related parties (continued)

e) Transactions with associates and joint ventures

Loans to and outstanding receivables from associates and joint ventures

CHF million	2017	2016
Carrying value at the beginning of the year	472	476
Additions	82	4
Reductions	(3)	(8)
Carrying value at the end of the year	551	472
of which: unsecured loans	*540*	*461*

Other transactions with associates and joint ventures

	As of or for the year ended	
CHF million	31.12.17	31.12.16
Payments to associates and joint ventures for goods and services received	177	153
Fees received for services provided to associates and joint ventures	2	3
Commitments and contingent liabilities to associates and joint ventures	4	4

→ **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

CHF million	2017	2016
Receivables		
Loans	2,152	681
Trading portfolio assets	98	84
Other assets	113	35
Payables		
Due to customers[1]	38,150	26,527
Other liabilities	1,547	1,111

1 Includes Group-internal funding obtained from UBS Group AG and UBS Group Funding (Switzerland) AG of CHF 35 billion as of 31 December 2017 (31 December 2016: CHF 25 billion).

Note 33 Invested assets and net new money

Invested assets

Invested assets include 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 such change in service level directly results from a new externally imposed regulation, the one-time net effect of the implementation is reported as an asset reclassification without net new money impact.

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 produces net new money even though client assets were already with UBS AG. There were no such transfers between the Investment Bank and other business divisions in 2017 and 2016.

Invested assets and net new money

	For the year ended	
CHF billion	31.12.17	31.12.16
Fund assets managed by UBS	330	275
Discretionary assets	1,025	886
Other invested assets[1]	1,824	1,649
Total invested assets[1,2]	3,179	2,810
of which: double counts	*204*	*176*
Net new money[2]	104	27

1 Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 were corrected by CHF 12 billion. 2 Includes double counts.

Development of invested assets

	For the year ended	
CHF billion	31.12.17	31.12.16
Total invested assets at the beginning of the year[1,2]	2,810	2,678
Net new money	104	27
Market movements[3]	313	98
Foreign currency translation	(45)	21
Other effects	(3)	(14)
of which: acquisitions / (divestments)	*4*	*(14)*
Total invested assets at the end of the year[1,2]	3,179	2,810

1 Includes double counts. 2 Certain account types were corrected during 2017. As a result, invested assets as of 31 December 2016 and 31 December 2015 were corrected by CHF 12 billion and CHF 11 billion, respectively. 3 Includes interest and dividend income.

Note 34 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of foreign operations into Swiss francs.

	Spot rate		Average rate[1]		
	As of		For the year ended		
	31.12.17	31.12.16	31.12.17	31.12.16	31.12.15
1 USD	0.97	1.02	0.98	0.99	0.97
1 EUR	1.17	1.07	1.12	1.09	1.06
1 GBP	1.32	1.26	1.28	1.32	1.47
100 JPY	0.86	0.87	0.88	0.91	0.80

1 Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a year represent an average of 12 month-end rates, weighted according to the income and expense volumes of all foreign operations 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 35 Events after the reporting period

Events subsequent to the publication of the unaudited fourth quarter 2017 report

The 2017 results and the balance sheet as of 31 December 2017 differ from those presented in the unaudited fourth quarter 2017 report published on 22 January 2018 as a result of events adjusted for after the balance sheet date. Provisions for litigation, regulatory and similar matters increased, which reduced 2017 operating profit before tax by CHF 141 million and 2017 net profit attributable to shareholders by CHF 112 million.

Integration of Wealth Management and Wealth Management Americas into a single business division

Effective 1 February 2018, UBS is integrating its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division. The firm will report the results for Global Wealth Management beginning with the first quarter of 2018.

→ **Refer to Note 1c for more information on the change in segment reporting**

Changes to the Pension Fund of UBS in Switzerland

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 in Switzerland and UBS have agreed measures that will take effect from the start of 2019 to support the long-term financial stability of the Swiss pension fund. As a result, the conversion rate will be lowered, the regular retirement age and employee contributions will be increased, and savings contributions will start earlier. These measures will have no effect on current pensioners of UBS.

To mitigate the effects of the reduction of the conversion rate on future pensions, UBS AG will make a payment to employees' retirement assets in the Swiss pension fund of up to CHF 450 million in three installments in 2020, 2021 and 2022.

In accordance with International Financial Reporting Standards (IFRS), these measures, including the portion of the payment to be made by UBS that is attributable to past service, will lead to a reduction in the pension obligation recognized by UBS AG, resulting in a pre-tax gain of CHF 123 million in the first quarter of 2018 with no overall effect on total equity and a reduced pension service cost starting from January 2018. The gain will be recognized as a reduction in personnel expense within the income statement across the business divisions and Corporate Center, with a corresponding effect in *Other comprehensive income*, as the Swiss pension plan is currently in a surplus situation that cannot be recognized due to the IFRS asset ceiling requirement. If the Swiss pension plan remains in an asset ceiling position, the annual payments adjusted for expected forfeitures are expected to reduce total equity by approximately CHF 130 million per year over the installment period, with no effect on the income statement.

→ **Refer to Note 26 for more information on the Swiss pension plan and the asset ceiling effect**

Note 36 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 (FINMA Circular 2015 / 1 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 article 25 through article 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 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. Financial assets available for sale

Under IFRS, financial assets available for sale are carried at fair value. Changes in fair value are recorded directly in equity until an asset is sold, collected or otherwise disposed of, or until an asset is determined to be impaired. At the time an available-for-sale asset is determined to be impaired, the cumulative unrealized loss previously recognized in equity is included in net profit or loss for the respective period. On disposal of a financial asset available for sale, the cumulative unrealized gain or loss previously recognized in equity is reclassified to the income statement.

Under Swiss GAAP, classification and measurement of financial assets designated as available for sale depend on the nature of the asset. Equity instruments with no permanent holding intent, as well as debt instruments, 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 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. 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 fair value hedge is deferred on the balance sheet as *Other assets* or *Other liabilities*. The carrying value of the hedged item designated in fair value hedges is not adjusted for fair value changes attributable to the hedged risk.

4. Fair value option

Under IFRS, UBS AG applies the fair value option to certain financial assets and financial liabilities not held for trading. Instruments for which the fair value option is applied are accounted for at fair value with changes in fair value reflected in *Net trading income*. The fair value option is applied primarily to structured debt instruments, certain non-structured debt instruments, high-quality liquid debt securities, structured reverse repurchase and repurchase agreements and securities borrowing agreements, certain structured and non-structured loans as well as loan commitments.

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, changes in fair value attributable to changes in unrealized own credit are not recognized.

Note 36 Main differences between IFRS and Swiss GAAP (continued)

5. 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.

6. Pension and other post-employment benefit plans

Swiss GAAP permits the use of IFRS or Swiss accounting standards for pension and other 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. Further, 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 and 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).

7. Netting of replacement values

Under IFRS, replacement values and related cash collateral 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, replacement values and related cash collateral 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.

8. 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.

9. 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 37 Supplemental guarantor information required under SEC regulations

Guarantee of PaineWebber securities

Prior to its acquisition by UBS in 2000, Paine Webber Group Inc. (PaineWebber) was an SEC registrant. Upon acquisition, PaineWebber was merged into UBS Americas Inc., a wholly owned subsidiary of UBS AG. Following the acquisition, UBS AG entered into a full and unconditional guarantee of the senior notes (Debt Securities) issued by PaineWebber. Under the guarantee, if UBS Americas Inc. fails to make any timely payment under the Debt Securities agreements, the holders of the Debt Securities or the Debt Securities trustee may demand payment from UBS AG without first proceeding against UBS Americas Inc.

As of 31 December 2017, CHF 1 million of these Debt Securities were outstanding. These remaining notes mature in 2018.

Guarantee of other securities

As of 31 December 2017 and 31 December 2016, UBS Preferred Funding Trust IV and UBS Preferred Funding Trust V had no balances outstanding. These entities are presented in a separate column in supplemental guarantor information provided for prior periods in the following tables. Amounts presented in this column are eliminated in the *Elimination entries* column, as these entities were not consolidated by UBS AG because UBS AG did not absorb any variability from the performance of these entities.

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 existing guarantee of aforementioned PaineWebber and other securities. To reflect this joint liability, UBS Switzerland AG is presented in a separate column as a subsidiary co-guarantor.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million For the year ended 31 December 2017	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Operating income						
Interest income	8,632	3,917	2,732	1,742	(2,815)	14,208
Interest expense	(7,114)	(596)	(1,307)	(1,434)	2,724	(7,728)
Net interest income	1,518	3,321	1,425	308	(91)	6,480
Credit loss (expense) / recovery	(135)	(22)	(4)	(5)	39	(128)
Net interest income after credit loss expense	1,382	3,299	1,421	303	(53)	6,352
Net fee and commission income	1,564	3,966	8,281	3,449	(47)	17,214
Net trading income	3,325	901	457	220	71	4,974
Other income	4,303	167	419	3,439	(7,388)	939
Total operating income	10,574	8,334	10,577	7,411	(7,417)	29,479
Operating expenses						
Personnel expenses	4,409	2,020	6,312	1,932	0	14,673
General and administrative expenses	4,830	3,334	3,014	3,087	(5,455)	8,811
Depreciation and impairment of property, equipment and software	652	11	156	108	0	928
Amortization and impairment of intangible assets	8	0	51	11	0	70
Total operating expenses	9,899	5,366	9,532	5,138	(5,455)	24,481
Operating profit / (loss) before tax	675	2,968	1,045	2,273	(1,962)	4,998
Tax expense / (benefit)	448	616	2,800	213	(1)	4,077
Net profit / (loss)	227	2,351	(1,755)	2,059	(1,962)	921
Net profit / (loss) attributable to preferred noteholders	72	0	0	0	0	72
Net profit / (loss) attributable to non-controlling interests	0	0	0	4	0	4
Net profit / (loss) attributable to shareholders	155	2,351	(1,755)	2,056	(1,962)	845

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million For the year ended 31 December 2017	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders						
Net profit / (loss)	155	2,351	(1,755)	2,056	(1,962)	845
Other comprehensive income						
Other comprehensive income that may be reclassified to the income statement						
Foreign currency translation, net of tax	(170)	0	(751)	426	(40)	(535)
Financial assets available for sale, net of tax	(6)	2	43	(31)	(93)	(86)
Cash flow hedges, net of tax	(465)	(157)	0	(1)	1	(621)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(641)	(156)	(709)	394	(132)	(1,242)
Other comprehensive income that will not be reclassified to the income statement						
Defined benefit plans, net of tax	275	(22)	41	(14)	25	305
Own credit on financial liabilities designated at fair value, net of tax	(313)	0	0	0	0	(313)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(38)	(22)	41	(14)	25	(8)
Total other comprehensive income	(679)	(177)	(668)	380	(107)	(1,250)
Total comprehensive income attributable to shareholders	(524)	2,174	(2,423)	2,436	(2,069)	(404)
Total comprehensive income attributable to preferred noteholders	423					423
Total comprehensive income attributable to non-controlling interests				5		5
Total comprehensive income	(101)	2,174	(2,423)	2,441	(2,069)	23

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

CHF million As of 31 December 2017	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Assets						
Cash and balances with central banks	36,552	38,467	3,100	9,656	0	87,775
Due from banks	30,467	3,977	4,712	66,649	(92,112)	13,693
Cash collateral on securities borrowed	9,907	20,972	10,775	6,188	(35,448)	12,393
Reverse repurchase agreements	51,293	13,858	20,676	19,368	(27,955)	77,240
Trading portfolio assets	104,118	1,719	6,720	25,974	(7,723)	130,807
of which: assets pledged as collateral that may be sold or repledged by counterparties	*58,524*	*0*	*2,303*	*7,411*	*(32,877)*	*35,363*
Positive replacement values	114,044	4,123	12,948	21,118	(34,004)	118,229
Cash collateral receivables on derivative instruments	22,346	696	2,129	10,828	(12,565)	23,434
Loans	106,469	184,331	51,743	24,078	(44,903)	321,718
Financial assets designated at fair value	34,097	12,768	3,351	10,820	(2,481)	58,556
Financial assets available for sale	3,607	790	6,495	918	(3,145)	8,665
Financial assets held to maturity	950	8,215	0	0	0	9,166
Investments in subsidiaries and associates	49,632	15	1	27	(48,657)	1,018
Property, equipment and software	6,384	92	979	529	0	7,985
Goodwill and intangible assets	294	0	4,880	1,281	(58)	6,398
Deferred tax assets	1,252	421	5,999	2,110	0	9,783
Other assets	18,157	1,179	11,101	2,456	(3,389)	29,505
Total assets	589,570	291,624	145,611	202,001	(312,442)	916,363
Liabilities						
Due to banks	24,361	20,728	3,160	51,915	(92,631)	7,533
Cash collateral on securities lent	29,898	1,323	2,243	3,774	(35,448)	1,789
Repurchase agreements	18,264	321	12,681	11,945	(27,955)	15,255
Trading portfolio liabilities	24,358	250	3,877	9,122	(7,145)	30,463
Negative replacement values	111,448	3,675	12,932	22,082	(34,004)	116,134
Cash collateral payables on derivative instruments	27,768	60	2,215	12,768	(12,565)	30,247
Due to customers	118,684	241,313	79,684	54,438	(46,977)	447,141
Financial liabilities designated at fair value	53,532	0	104	3,329	(2,762)	54,202
Debt issued	96,572	8,367	8	514	(711)	104,749
Provisions	1,057	145	1,682	200	0	3,084
Other liabilities	30,430	2,246	10,117	15,625	(3,428)	54,990
Total liabilities	536,372	278,430	128,702	185,711	(263,626)	865,588
Equity attributable to shareholders	53,198	13,194	16,909	16,233	(48,816)	50,718
Equity attributable to non-controlling interests				57		57
Total equity	53,198	13,194	16,909	16,290	(48,816)	50,775
Total liabilities and equity	589,570	291,624	145,610	202,001	(312,442)	916,363

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million For the year ended 31 December 2017	UBS AG[1]	UBS Switzerland AG[1]	UBS Americas Inc.[1]	Other subsidiaries[1]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(34,372)	(8,192)	(4,859)	(4,448)	(51,872)
Cash flow from / (used in) investing activities					
Purchase of subsidiaries, associates and intangible assets	(1)	(2)	(17)	(82)	(102)
Disposal of subsidiaries, associates and intangible assets[2]	289	0	0	46	336
Purchase of property, equipment and software	(1,032)	(83)	(291)	(94)	(1,500)
Disposal of property, equipment and software	1	0	53	160	213
Purchase of financial assets available for sale	(231)	0	(2,855)	(5,362)	(8,448)
Disposal and redemption of financial assets available for sale	3,385	1,282	2,777	7,473	14,917
Net (purchase) / redemption of financial assets held to maturity	(448)	370	0	0	(77)
Net cash flow from / (used in) investing activities	1,964	1,567	(333)	2,140	5,338
Cash flow from / (used in) financing activities					
Net short-term debt issued / (repaid)	24,195	(5)	0	(49)	24,141
Distributions paid on UBS AG shares	(2,250)	0	0	0	(2,250)
Issuance of long-term debt, including financial liabilities designated at fair value	48,484	622	103	297	49,506
Repayment of long-term debt, including financial liabilities designated at fair value	(41,722)	(580)	(129)	(867)	(43,299)
Dividends paid and repayments of preferred notes	(776)	0	0	0	(776)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends	1,242	(191)	883	(1,934)	0
Net cash flow from / (used in) financing activities	29,173	(154)	857	(2,558)	27,317
Total cash flow					
Cash and cash equivalents at the beginning of the year	44,269	46,629	11,892	18,317	121,107
Net cash flow from / (used in) operating, investing and financing activities	(3,236)	(6,780)	(4,335)	(4,866)	(19,216)
Effects of exchange rate differences on cash and cash equivalents	(511)	79	(400)	1,096	264
Cash and cash equivalents at the end of the year[3]	40,522	39,928	7,157	14,547	102,154
of which: cash and balances with central banks	*36,477*	*38,467*	*3,100*	*9,656*	*87,700*
of which: due from banks	*2,285*	*1,455*	*3,945*	*4,721*	*12,406*
of which: money market paper[4]	*1,760*	*7*	*112*	*169*	*2,049*

1 Cash flows generally represent a third-party view from a UBS AG consolidated perspective. 2 Includes dividends received from associates. 3 CHF 2,434 million of cash and cash equivalents were restricted. 4 Money market paper is included in the balance sheet under Trading portfolio assets, Financial investments available for sale and Financial assets designated at fair value.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million For the year ended 31 December 2016	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	UBS Preferred Funding Trust IV & V	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Operating income							
Interest income	8,500	4,151	2,227	25	1,148	(2,269)	13,782
Interest expense	(6,686)	(714)	(1,135)		(919)	2,054	(7,399)
Net interest income	1,815	3,438	1,092	25	229	(215)	6,383
Credit loss (expense) / recovery	(24)	(3)	(6)		(3)		(37)
Net interest income after credit loss expense	1,790	3,434	1,086	25	226	(215)	6,346
Net fee and commission income	1,500	3,782	7,873		3,332	(40)	16,447
Net trading income	3,717	780	454		310	(318)	4,943
Other income	8,113	346	576		1,677	(10,027)	685
Total operating income	15,120	8,343	9,988	25	5,545	(10,600)	28,421
Operating expenses							
Personnel expenses	5,691	2,044	6,243		1,613	0	15,591
General and administrative expenses	5,213	3,507	3,402		2,458	(6,891)	7,690
Depreciation and impairment of property, equipment and software	699	12	184		85	0	980
Amortization and impairment of intangible assets	22	0	60		9	0	91
Total operating expenses	11,625	5,563	9,889		4,165	(6,891)	24,352
Operating profit / (loss) before tax	3,495	2,780	99	25	1,380	(3,710)	4,069
Tax expense / (benefit)	892	589	(1,175)		482	(7)	781
Net profit / (loss)	2,603	2,191	1,274	25	898	(3,703)	3,288
Net profit / (loss) attributable to preferred noteholders	78	0	0	31	0	(31)	78
Net profit / (loss) attributable to non-controlling interests	0	0	0		4	0	4
Net profit / (loss) attributable to shareholders	2,525	2,191	1,274	(6)	894	(3,672)	3,207

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million For the year ended 31 December 2016	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	UBS Preferred Funding Trust IV & V	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders							
Net profit / (loss)	2,525	2,191	1,274	(6)	894	(3,672)	3,207
Other comprehensive income							
Other comprehensive income that may be reclassified to the income statement							
Foreign currency translation, net of tax	335	0	285		(707)	379	293
Financial assets available for sale, net of tax	(22)	(33)	(8)		(18)	6	(73)
Cash flow hedges, net of tax	(805)	109	0		0	29	(666)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(491)	77	277	0	(725)	415	(447)
Other comprehensive income that will not be reclassified to the income statement							
Defined benefit plans, net of tax	(651)	(54)	(59)		(36)	(25)	(824)
Own credit on financial liabilities designated at fair value, net of tax	(115)						(115)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	(766)	(54)	(59)	0	(36)	(25)	(939)
Total other comprehensive income	(1,257)	23	218	0	(761)	390	(1,386)
Total comprehensive income attributable to shareholders	1,268	2,214	1,492	(6)	133	(3,282)	1,820
Total comprehensive income attributable to preferred noteholders	349						349
Total comprehensive income attributable to non-controlling interests	0				3		3
Total comprehensive income attributable to UBS Preferred Funding Trust IV & V							0
Total comprehensive income	1,617	2,214	1,492	(6)	137	(3,282)	2,173

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated balance sheet

CHF million As of 31 December 2016	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Assets						
Cash and balances with central banks	40,538	44,528	8,925	13,775	0	107,767
Due from banks	30,008	3,886	3,759	33,420	(57,948)	13,125
Cash collateral on securities borrowed	6,561	6,657	13,173	5,004	(16,284)	15,111
Reverse repurchase agreements	52,782	19,273	14,406	7,507	(27,722)	66,246
Trading portfolio assets	74,172	1,673	4,702	22,729	(6,615)	96,661
of which: assets pledged as collateral that may be sold or repledged by counterparties	*39,596*	*0*	*1,960*	*5,850*	*(17,145)*	*30,260*
Positive replacement values	156,375	5,458	9,496	27,231	(40,149)	158,411
Cash collateral receivables on derivative instruments	22,117	913	2,701	12,068	(11,135)	26,664
Loans	94,506	184,241	50,150	41,199	(63,091)	307,004
Financial assets designated at fair value	35,498	16,416	5,371	11,589	(3,849)	65,024
Financial assets available for sale	8,104	2,046	6,593	3,469	(4,536)	15,676
Financial assets held to maturity	527	8,762	0	0	0	9,289
Investments in subsidiaries and associates	49,904	22	1	27	(48,991)	963
Property, equipment and software	6,961	19	1,075	241	0	8,297
Goodwill and intangible assets	297	0	5,130	1,161	(32)	6,556
Deferred tax assets	1,801	601	9,148	1,595	0	13,144
Other assets	10,645	1,526	9,071	7,241	(3,071)	25,412
Total assets	590,796	296,022	143,702	188,257	(283,424)	935,353
Liabilities						
Due to banks	27,992	13,204	5,288	32,733	(68,572)	10,645
Cash collateral on securities lent	13,193	1,518	2,549	1,841	(16,284)	2,818
Repurchase agreements	16,944	5,385	2,710	9,295	(27,722)	6,612
Trading portfolio liabilities	15,535	154	3,643	9,780	(6,287)	22,825
Negative replacement values	151,274	4,982	9,491	28,213	(40,149)	153,810
Cash collateral payables on derivative instruments	31,585	109	2,409	12,504	(11,135)	35,472
Due to customers	118,934	248,731	85,702	53,474	(56,641)	450,199
Financial liabilities designated at fair value	54,504	0	1	4,559	(4,047)	55,017
Debt issued	70,558	8,330	145	401	(437)	78,998
Provisions	1,483	186	2,168	312	21	4,169
Other liabilities	31,879	2,212	11,100	18,352	(3,099)	60,443
Total liabilities	533,881	284,811	125,206	171,464	(234,353)	881,009
Equity attributable to shareholders	56,273	11,211	18,496	16,754	(49,072)	53,662
Equity attributable to preferred noteholders	642	0	0	0	0	642
Equity attributable to non-controlling interests	0	0	0	40	0	40
Total equity	56,915	11,211	18,496	16,793	(49,072)	54,343
Total liabilities and equity	590,796	296,022	143,702	188,257	(283,424)	935,353

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million For the year ended 31 December 2016	UBS AG[1]	UBS Switzerland AG[1]	UBS Americas Inc.[1]	Other subsidiaries[1]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(26,981)	(3,914)	8,979	4,503	(17,413)
Cash flow from / (used in) investing activities					
Purchase of subsidiaries, associates and intangible assets	0	(3)	0	(23)	(26)
Disposal of subsidiaries, associates and intangible assets[2]	93	0	0	0	93
Purchase of property, equipment and software	(1,332)	(16)	(288)	(111)	(1,746)
Disposal of property, equipment and software	175	0	1	32	209
Purchase of financial assets available for sale	(694)	(998)	(2,792)	(2,788)	(7,271)
Disposal and redemption of financial assets available for sale	24,902	21,729	1,694	5,772	54,097
Net (purchase) / redemption of financial assets held to maturity	(527)	(8,468)	0	0	(8,996)
Net cash flow from / (used in) investing activities	22,616	12,245	(1,384)	2,882	36,359
Cash flow from / (used in) financing activities					
Net short-term debt issued / (repaid)	8,229	(7)	(2,975)	193	5,440
Distributions paid on UBS AG shares	(3,434)	0	0	0	(3,434)
Issuance of long-term debt, including financial liabilities designated at fair value	31,484	733	196	1,039	33,453
Repayment of long-term debt, including financial liabilities designated at fair value	(32,279)	(669)	(8)	(1,126)	(34,081)
Dividends paid and repayments of preferred notes	(1,366)	0	0	0	(1,366)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends	(1,333)	(2,000)	0	3,333	0
Net cash flow from / (used in) financing activities	1,300	(1,943)	(2,786)	3,435	6

Total cash flow					
Cash and cash equivalents at the beginning of the year	47,902	40,246	7,084	7,731	102,962
Net cash flow from / (used in) operating, investing and financing activities	(3,065)	6,388	4,808	10,821	18,952
Effects of exchange rate differences on cash and cash equivalents	(569)	(4)	0	(234)	(807)
Cash and cash equivalents at the end of the year[3]	44,269	46,629	11,892	18,317	121,107
of which: cash and balances with central banks	*40,486*	*44,528*	*8,925*	*13,775*	*107,715*
of which: due from banks	*2,836*	*2,095*	*2,931*	*4,065*	*11,927*
of which: money market paper[4]	*946*	*7*	*36*	*477*	*1,465*

1 Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2016, these trusts had cash inflows of CHF 1,317 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. 2 Includes dividends received from associates. 3 CHF 2,662 million of cash and cash equivalents were restricted. 4 Money market paper is included in the balance sheet under Trading portfolio assets, Financial investments available for sale and Financial assets designated at fair value.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated income statement

CHF million For the year ended 31 December 2015	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	UBS Preferred Funding Trust IV & V	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Operating income							
Interest income	9,102	3,039	1,367	63	1,626	(2,020)	13,178
Interest expense	(5,885)	(545)	(501)		(1,410)	1,892	(6,449)
Net interest income	3,218	2,494	866	63	217	(128)	6,729
Credit loss (expense) / recovery	(109)	(12)	0		4	0	(117)
Net interest income after credit loss expense	3,109	2,482	866	63	220	(128)	6,612
Net fee and commission income	2,738	3,001	7,940		3,586	(81)	17,184
Net trading income	5,031	735	355		331	(756)	5,696
Other income	15,371	120	774		89	(15,243)	1,112
Total operating income	26,249	6,338	9,935	63	4,227	(16,208)	30,605
Operating expenses							
Personnel expenses	6,800	1,607	6,281		1,265	0	15,954
General and administrative expenses	5,439	2,621	3,785		2,254	(5,880)	8,219
Depreciation and impairment of property, equipment and software	672	11	159		76	0	918
Amortization and impairment of intangible assets	22	0	73		12	0	107
Total operating expenses	12,934	4,239	10,298		3,607	(5,880)	25,198
Operating profit / (loss) before tax	13,315	2,099	(362)	63	619	(10,327)	5,407
Tax expense / (benefit)	1,136	489	(1,200)		(1,317)	(16)	(908)
Net profit / (loss)	12,180	1,610	837	63	1,936	(10,313)	6,314
Net profit / (loss) attributable to preferred noteholders	77	0	0	31	0	(31)	77
Net profit / (loss) attributable to non-controlling interests	0	0	0		3	0	3
Net profit / (loss) attributable to shareholders	12,103	1,610	837	32	1,933	(10,281)	6,235

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 for legal entities and sub-groups at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of comprehensive income

CHF million For the year ended 31 December 2015	UBS AG (standalone)[1]	UBS Switzerland AG (standalone)[1]	UBS Americas Inc.[2]	UBS Preferred Funding Trust IV & V	Other subsidiaries[2]	Elimination entries	UBS AG (consolidated)
Comprehensive income attributable to shareholders							
Net profit / (loss)	12,103	1,610	837	32	1,933	(10,281)	6,235
Other comprehensive income							
Other comprehensive income that may be reclassified to the income statement							
Foreign currency translation, net of tax	(11)	0	121		(843)	467	(266)
Financial assets available for sale, net of tax	(51)	43	(21)		(16)	(19)	(64)
Cash flow hedges, net of tax	(503)	(72)	0		0	57	(518)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(564)	(29)	100	0	(859)	504	(848)
Other comprehensive income that will not be reclassified to the income statement							
Defined benefit plans, net of tax	701	(337)	(71)		27	(15)	304
Total other comprehensive income that will not be reclassified to the income statement, net of tax	701	(337)	(71)	0	27	(15)	304
Total other comprehensive income	136	(366)	29	0	(832)	489	(545)
Total comprehensive income attributable to shareholders	12,239	1,244	866	32	1,101	(9,792)	5,690
Total comprehensive income attributable to preferred noteholders	18	0	0	0	0	0	18
Total comprehensive income attributable to non-controlling interests	0	0	0	0	1	0	1
Total comprehensive income attributable to UBS Preferred Funding Trust IV & V	0	0	0	40	0	(40)	0
Total comprehensive income	12,257	1,244	866	72	1,102	(9,832)	5,709

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 for legal entities and sub-groups" at www.ubs.com/investors for information prepared in accordance with Swiss GAAP. 2 Amounts presented in these columns serve as a basis for preparing UBS AG consolidated financial statements in accordance with IFRS.

Note 37 Supplemental guarantor information required under SEC regulations (continued)

Supplemental guarantor consolidated statement of cash flows

CHF million For the year ended 31 December 2015	UBS AG[1]	UBS Switzerland AG[1]	UBS Americas Inc.[1]	Other subsidiaries[1]	UBS AG (consolidated)
Net cash flow from / (used in) operating activities	(1,457)	2,681	(525)	1,298	1,997
Cash flow from / (used in) investing activities					
Purchase of subsidiaries, associates and intangible assets	(12)	0	1	0	(13)
Disposal of subsidiaries, associates and intangible assets[2]	464	0	13	0	477
Purchase of property, equipment and software	(1,423)	(5)	(299)	(114)	(1,841)
Disposal of property, equipment and software	503	0	9	35	547
Purchase of financial assets available for sale	(66,659)	(18,686)	(2,722)	(13,123)	(101,189)
Disposal and redemption of financial assets available for sale	51,515	22,501	2,952	16,616	93,584
Net (purchase) / redemption of financial assets held to maturity					
Net cash flow from / (used in) investing activities	(15,613)	3,810	(47)	3,415	(8,434)
Cash flow from / (used in) financing activities					
Net short-term debt issued / (repaid)	(5,603)	24	(826)	0	(6,404)
Distributions paid on UBS AG shares	(2,626)	0	0	0	(2,626)
Issuance of long-term debt, including financial liabilities designated at fair value	46,882	772	7	129	47,790
Repayment of long-term debt, including financial liabilities designated at fair value	(42,415)	(402)	(129)	(1,274)	(44,221)
Dividends paid and repayments of preferred notes	(108)	0	0	0	(108)
Net changes in non-controlling interests	0	0	0	(5)	(5)
Net activity related to group internal capital transactions and dividends[3]	(30,512)	33,293	(114)	(2,666)	0
Net cash flow from / (used in) financing activities	(34,382)	33,687	(1,062)	(3,817)	(5,573)

Total cash flow

Cash and cash equivalents at the beginning of the year	100,662	0	8,960	7,093	116,715
Net cash flow from / (used in) operating, investing and financing activities	(51,451)	40,178	(1,634)	896	(12,010)
Effects of exchange rate differences on cash and cash equivalents	(1,309)	67	(241)	(259)	(1,742)
Cash and cash equivalents at the end of the year[4]	47,902	40,246	7,084	7,731	102,962
of which: cash and balances with central banks	*45,125*	*38,701*	*4,971*	*2,509*	*91,306*
of which: due from banks	*2,072*	*1,438*	*2,009*	*5,213*	*10,732*
of which: money market paper[5]	*704*	*107*	*104*	*9*	*924*

1 Cash flows generally represent a third-party view from a UBS AG (consolidated) perspective. As a consequence, the non-consolidated UBS Preferred Funding Trusts IV and V are not presented in this table. For the year ended 31 December 2015, these trusts had cash inflows of CHF 77 million from operating activities and an equivalent cash outflow for dividends paid to preferred note holders. 2 Includes dividends received from associates. 3 Includes a transfer of cash and cash equivalents from UBS AG to UBS Switzerland AG of CHF 33,283 million. Refer to "Establishment of UBS Switzerland AG" in the "Legal entity financial and regulatory information" section of the UBS Group AG Annual Report 2015 for more information on the business transfer from UBS AG to UBS Switzerland AG. 4 CHF 3,963 million of cash and cash equivalents were restricted. 5 Money market paper is included in the balance sheet under Trading portfolio assets and Financial investments available for sale.

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. Because a broad-based international financial services firm such as UBS is inherently exposed to multiple risks, many of which become apparent only with the benefit of hindsight, risks of which we are not presently aware or which we currently do not consider to be material could also adversely affect us. The order of presentation of the risk factors below does not indicate the likelihood of their occurrence or the potential magnitude of their consequences.

Market conditions and fluctuations may have a detrimental effect on our profitability, capital strength, liquidity and funding position

Low and negative interest rates in Switzerland and the eurozone have negatively affected our net interest income: A continuing low or negative interest rate environment may further erode interest margins and adversely affect the net interest income generated by our Personal & Corporate Banking and Global Wealth Management businesses. Our performance is also affected by the cost of maintaining the high-quality liquid assets (HQLA) required to cover regulatory outflow assumptions embedded in the liquidity coverage ratio (LCR).

The Swiss National Bank permits Swiss banks to make deposits up to a threshold at zero interest. Any reduction in or limitations on the use of this exemption from the otherwise applicable negative interest rates could exacerbate the effect of negative interest rates in Switzerland. 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 our funding, net new money outflows and / or a declining market share in our domestic lending business.

Our equity and capital are also affected by changes in interest rates. In particular, the calculation of our Swiss pension plan net defined benefit assets and liabilities is sensitive to the discount rate applied. Any further reduction in interest rates may lower the discount rates and result in pension plan deficits due to the long duration of corresponding liabilities. This would lead to a corresponding reduction in our equity and fully applied common equity tier 1 (CET1) capital.

We are subject to risk from currency fluctuations: We prepare our consolidated financial statements in Swiss francs. However, a substantial portion of our assets, liabilities, invested assets, revenues and expenses, equity of foreign operations and risk-weighted assets (RWA) are denominated in US dollars, euros, British pounds and in other foreign currencies. Accordingly, changes in foreign exchange rates may adversely affect our profits, balance sheet, including deferred tax assets, and capital, leverage and liquidity ratios. In particular, the portion of our operating income denominated in non-Swiss franc currencies is greater than the portion of operating expenses denominated in non-Swiss franc currencies. Therefore, the appreciation of the Swiss franc against other currencies generally has an adverse effect on our profits, in the absence of any mitigating actions.

In order to hedge our CET1 capital ratio, CET1 capital needs to have foreign currency exposure, leading to currency sensitivity of CET1 capital. As a consequence, it is not possible to simultaneously fully hedge both the amount of capital and the capital ratio. As the proportion of RWA denominated in non-Swiss franc currencies outweighs the capital in these currencies, a significant appreciation of the Swiss franc against these currencies could benefit our capital ratios, while a significant depreciation of the Swiss franc against these currencies could adversely affect our capital ratios.

→ **Refer to the "Current market climate and industry trends" section of this report for more information**

Substantial changes in the regulation of our businesses may adversely affect our business and our ability to execute our strategic plans

Fundamental changes in the laws and regulations affecting financial institutions can have a material and adverse effect on our business. Following the 2007–2009 financial crisis, regulators and legislators have adopted a wide range of changes to the laws, regulations and supervisory frameworks applicable to banks intended to address the perceived causes of the crisis and to limit the systemic risks posed by major financial institutions. These changes have caused us to make significant changes in our businesses and strategy and to move significant operations into subsidiaries to improve our resolvability or meet regulatory requirements, resulting in substantial implementation costs, increased our capital and funding costs and reduced operational flexibility. Although many of the regulatory changes have been completed, a number of these changes are being phased in over time or require further rulemaking or guidance for implementation. Certain changes are still under consideration. There remains significant uncertainty regarding a number of the measures referred to above.

Notwithstanding attempts by regulators to align their efforts, the measures adopted or proposed differ significantly across the major jurisdictions, making it increasingly difficult to manage a global institution like UBS. Swiss regulatory changes with regard to such matters as capital and liquidity have often proceeded more quickly than those in other major jurisdictions, and the requirements for Swiss major international banks are among the strictest of the major financial centers. This could put Swiss banks such as UBS at a disadvantage when they compete with peer financial institutions subject to more lenient regulation or with unregulated non-bank competitors.

Higher capital and total loss-absorbing capacity requirements increase our costs: As an internationally active Swiss systemically relevant bank (SRB), we are subject to capital and total loss-absorbing capacity (TLAC) requirements that are among the most stringent in the world. New Swiss SRB capital requirements impose significantly higher requirements based on RWA and a significantly higher leverage ratio requirement. In addition, we are required to maintain minimum levels of TLAC measured based on both our RWA and the leverage ratio denominator.

We expect increases in our RWA from changes in methodology, add-ons in the calculation of RWA and other changes in 2018 and 2019. Changes to international capital standards for banks recently adopted by the Basel Committee on Banking Supervision are expected to further increase our RWA when the standards are scheduled to become effective in 2022. We also expect that we will incur significant costs to implement the proposed changes.

Liquidity and funding: The requirements to maintain an LCR of HQLA to estimated stressed short-term net cash outflows, the proposed requirement to maintain a net stable funding ratio (NSFR), and other similar liquidity and funding requirements we are subject to, oblige us to maintain high levels of overall liquidity, limit our efforts to optimize interest income and expense, make certain lines of business less attractive and reduce our overall ability to generate profits. Both the LCR and NSFR 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, and the relevant calculations make assumptions about the relative likelihood and amount of outflows of funding and available sources of additional funding in market- 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. 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 them. These funds are available to meet funding and collateral needs in the relevant jurisdictions, but are generally not readily available for use by the Group as a whole.

Banking structure and activity limitations: We have made significant changes in our legal and operational structure to meet legal and regulatory requirements and expectations. For example, we have transferred all of our US subsidiaries under a US intermediate holding company to meet US regulatory requirements and substantially all the operations of Personal & Corporate Banking and Wealth Management booked in Switzerland to UBS Switzerland AG to improve our resolvability. These changes, particularly the transfer of operations to subsidiaries, such as our US intermediate holding company and UBS Switzerland AG, require significant time and resources to implement and create operational, capital, liquidity, funding and tax inefficiencies. In addition, they may increase our aggregate credit exposure to counterparties as they transact with multiple entities within the UBS Group. 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.

In the US, we have incurred substantial costs for implementing our compliance and monitoring framework in connection with the Volcker Rule under the Dodd-Frank Act. We have also been required to modify our business activities both inside and outside the US to conform to the Volcker Rule's activity limitations. The Volcker Rule may also have a substantial impact on market liquidity and the economics of market-making activities. We may incur additional costs in the short term if aspects of the Volcker Rule are repealed or modified. We may become subject to other similar regulations substantively limiting the types of activities in which we may engage or the way we conduct our operations. If adopted as proposed, the rule on single counterparty risk proposed by the US Federal Reserve Board may affect how we conduct our operations in the US, including our use of other financial firms for payments and securities clearing services and as transactional counterparties.

Resolvability and resolution and recovery planning: 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 the Swiss TBTF 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 the event of a significant adverse event or to wind down the Group or the operations in a host country through resolution or insolvency proceedings. We have made changes to the legal structure of the Group to improve the viability of our recovery and resolution plans and may be required in the future to make further changes to our legal structure, operations, or liquidity and funding plans to enable our recovery and resolution plans to meet regulatory expectations. If a recovery or resolution plan that we are required to produce in a jurisdiction 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, 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.

The Swiss Banking Act and implementing ordinances provide FINMA with significant powers to intervene in order to prevent a failure of, or to resolve, a failing financial institution. FINMA has considerable discretion in determining whether, when, or in what manner to exercise such powers. In case of a threatened insolvency, FINMA may impose more onerous requirements on us, including restrictions on the payment of dividends and interest. FINMA could also require us, directly or indirectly, for example, to alter our legal structure, including by separating lines of business into dedicated entities, with limitations on intra-Group funding and certain guarantees, or to further reduce business risk levels in some manner. FINMA also has the ability to write down or convert into common equity the capital instruments and other liabilities of UBS Group AG, UBS AG and UBS Switzerland AG in connection with a resolution. Refer to "*If we experience financial difficulties, FINMA has the power to open resolution 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*" below.

Substantial changes in market regulation have affected and will continue to affect how we conduct our business: The revised Markets in Financial Instruments Directive and the associated Regulation (MiFID II / MiFIR) took effect on 3 January 2018. MiFID II, among other things, introduces substantial new regulation of exchanges and trading venues, including new pre-trade and post-trade transparency requirements, a ban on the practice of using commissions on transactions to compensate for research services and substantial new conduct requirements for financial services firms when dealing with clients. Implementation by the G20 countries of the commitment to require all standardized over-the-counter (OTC) derivative contracts to be traded on exchanges or trading facilities and cleared through central counterparties has had and will continue to have a significant effect on our OTC derivatives business, which is conducted primarily in the Investment Bank. These market changes are likely to reduce the revenue potential of certain lines of business for market participants generally, and we may be adversely affected. For example, we expect that, as a rule, the shift of OTC derivatives trading to a central clearing model will tend to reduce profit margins in these products and the changes introduced by MiFID II may result in a reduction in commission rates and trading margins. Also, these laws may have a material impact on the market infrastructure that we use, available platforms, collateral management and the way we interact with clients, and may cause us to incur material implementation costs. Margin requirements for non-cleared OTC derivatives have required significant changes to collateral agreements with counterparties and our clients' operational processes. In some jurisdictions implementation of these changes is ongoing, while rulemaking and implementation are delayed in others. This may result in market dislocation, disruption of cross-border trading, and concentration of counterparty trading. It also affects our ability to implement the required changes and may limit our ability to transact with clients.

Some of the regulations applicable to UBS AG as a registered swap dealer with the Commodity Futures Trading Commission (CFTC) in the US, and certain regulations that will be applicable when UBS AG registers as a security-based swap dealer with 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 will likely duplicate or 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 could limit our access to the market in those jurisdictions and may negatively influence our ability to act as a global firm. In addition, as such determinations are typically applied on a jurisdictional level rather than on an entity level, we will generally need to rely on jurisdictions' willingness to collaborate.

→ **Refer to the "Regulation and supervision" and "Regulatory and legal developments" sections of this report for more information**

If we are unable to maintain our capital strength, this may adversely affect our ability to execute our strategy, our client franchise and our competitive position

Maintaining our capital strength is a key component of our strategy. It enables us to support the growth of our businesses as well as to meet potential regulatory changes in capital requirements. It reassures our stakeholders, forms the basis for our capital return policy and contributes to our credit ratings. Our capital ratios are determined primarily by RWA, eligible capital and leverage ratio denominator (LRD), all of which may fluctuate based on a number of factors, some of which are outside our control.

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 certain reductions in the ratings of securitization exposures, acquisitions and divestments changing the level of goodwill, 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, which is a major driver of our value-at-risk, adverse currency movements, increased counterparty risk, deterioration in the economic environment or increased operational risk could result in a rise 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 or, as discussed above, the imposition of additional supplemental RWA charges or multipliers applied to certain exposures and other methodology changes, as well as the implementation of the recently adopted changes to international capital standards for banks, could substantially increase our RWA. In addition, we may not be successful in our plans to further reduce RWA, either because we are unable to carry out fully the actions we have planned or because other business or regulatory developments or actions counteract the effects of our actions.

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 activities even if we satisfy other risk-based capital requirements. Our LRD 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 partially outside our control.

→ **Refer to the "Regulatory and legal developments" section of this report for more information**

We may not be successful in the ongoing execution of our strategic plans

Over the last six years, we have transformed our business to focus on our wealth management businesses and our universal bank in Switzerland, complemented by Asset Management and a significantly smaller Investment Bank; substantially reduced the RWA and LRD usage in our Corporate Center – Non-core and Legacy Portfolio; and made significant cost reductions. We have recently provided an update on the execution of our strategy and updated our performance targets and provided guidance on capital and resources. Risk remains that we may not succeed in executing our strategy or achieve our performance targets, or may be delayed in doing so. Market events or other factors may adversely affect our ability to achieve our objectives. Macroeconomic conditions, geopolitical uncertainty, changes to regulatory requirements and the continuing costs of meeting these requirements have prompted us to adapt our targets in the past and we may need to do so again in the future.

As part of our strategic plans, we expect to continue to make significant expenditures on technology and infrastructure to improve our client experience, improve and further enable digital offerings and increase efficiency. There is a risk that our investments in new technology will not fully achieve our objectives or improve our ability to attract and retain customers. In addition, we may face competition in providing digitally enabled offerings from both existing competitors and new financial service providers in various portions of the value chain. Our ability to develop and implement competitive digitally enabled offerings and processes will be an important factor in our ability to compete.

Moreover, the continued illiquidity and complexity of many of our legacy risk positions remaining in Corporate Center – Non-core and Legacy Portfolio could make it difficult to sell or otherwise exit these positions and there remains a risk that we could incur significant losses in doing so.

As part of our strategy, we also have programs under way that seek to improve our operating efficiency, in part by controlling our costs. A number of factors could negatively affect our plans. We may not be able to identify feasible cost reduction opportunities that are also consistent with our business goals, and cost reductions may be realized later or may be less than we anticipate. Higher temporary and permanent regulatory costs and higher business demand than we had originally anticipated have partly offset our cost reductions and delayed the achievement of our cost reduction targets in the past, and we could continue to be challenged in the execution of our ongoing plans.

Changes in our workforce as a result of outsourcing, nearshoring or offshoring or staff reductions may introduce new operational risks that, if not effectively addressed, could affect our ability to recognize the desired cost and other benefits from such changes or could result in operational losses. Such changes can also lead to expenses recognized in the income statement well in advance of the cost savings intended to be achieved through such workforce strategy, for example, if provisions for real estate lease contracts need to be recognized or when, in connection with the closure or disposal of non-profitable operations, foreign currency translation losses previously recorded in other comprehensive income are reclassified to the income statement.

As we implement our effectiveness and efficiency programs, we may also experience unintended consequences, such as the 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.

→ **Refer to the "Our strategy" section of this report for more information**

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, and we are subject to extensive regulatory oversight and 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. 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 consequences for us.

Our settlements with governmental authorities in connection with foreign exchange, LIBOR and 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 antitrust 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 that 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 and 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 have resulted in continued scrutiny. We are also subject to significant new regulatory requirements, including recovery and resolution planning, US enhanced prudential standards and Comprehensive Capital Analysis and Review (CCAR). Our implementation of additional regulatory requirements and changes in supervisory standards will likely receive heightened scrutiny from supervisors. If we do not meet supervisory expectations in relation to these or other matters, or have additional supervisory or regulatory issues, we would likely be subject to continued regulatory scrutiny as well as measures that might further constrain our strategic flexibility. We are in active dialog with our regulators concerning the actions that we are taking to improve our operational risk management, 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.

→ **Refer to "Note 20 Provisions and contingent liabilities" in the "Consolidated financial statements" section of this report for more information**

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 loss from the unauthorized trading incident announced in September 2011.

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, including through the introduction of viruses or malware, 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. We may not be able to anticipate, detect or recognize threats to our systems or data or that our preventative measures may not be effective to prevent an attack or a security breach. In the event a security breach occurs 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.

A major focus of US and other countries' governmental policies relating to financial institutions in recent years has been 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. 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. 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.

As a result of new and changed regulatory requirements and the changes we have made in our legal structure to meet regulatory requirements and improve our resolvability, the volume, frequency and complexity of our regulatory and other reporting have significantly increased. Regulators have also significantly increased expectations for our internal reporting and data aggregation. We have incurred and continue to incur significant costs to implement infrastructure to meet these requirements. Failure to timely and accurately meet external reporting requirements or to meet regulatory expectations for internal 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 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 are located. This may include a disruption due to natural disasters, pandemics, civil unrest, war or terrorism and involve electrical, communications, transportation or other services used by us or third parties with whom we conduct business.

Our reputation is critical to the success of our business

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, and contributed to our loss of and difficulty in attracting staff in the past. Any further reputational damage could have a material adverse effect on our operational results and financial condition and on our ability to achieve our strategic goals and financial targets.

Performance in the financial services industry is affected by market conditions and the macroeconomic climate

Our businesses are materially affected by market and economic 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, changes in monetary or fiscal policy, trade imbalances, natural disasters, pandemics, civil unrest, acts of violence, war or terrorism. Macroeconomic and political developments can have unpredictable and destabilizing effects and, because financial markets are global and highly interconnected, even local and regional events can have widespread impact well beyond the countries in which they occur. Moreover, if individual countries impose restrictions on cross-border payments 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, and / or be impeded in, or prevented from, managing our risks.

We could be materially affected if a crisis develops, regionally or globally, as a result of disruptions in emerging markets or developed markets that are susceptible to macroeconomic and 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. The binding scenario we use in our combined stress test framework reflects these aspects, and assumes a hard landing in China, leading to severe contagion of Asian and emerging markets economies and at the same time multiple debt restructurings in Europe, related direct losses for European banks and fear of a eurozone breakup severely affecting developed markets such as Switzerland, the UK and the US.

→ **Refer to "Risk measurement" in the "Risk management and control" section of this report for more information on our stress testing framework**

We have material exposures to a number of markets, and the regional balance of our business mix also exposes us to risk. Our Investment Bank's Equities business, for example, is more heavily weighted to Europe and Asia, and within this business our derivatives business is more heavily weighted to structured products for wealth management clients, in particular with European and Asian underlyings. Turbulence in these markets can therefore affect us more than other financial service providers.

A decrease in business and client activity and market volumes, for example, as a result of significant market volatility, adversely affects transaction fees, commissions and margins, particularly in our wealth management businesses and in the Investment Bank, as we experienced in 2016. A market downturn is likely to reduce the volume and valuations of assets that we manage on behalf of clients, reducing our asset and performance-based fees, and could also cause a decline in the value of assets that we own and account for as investments or trading positions. On the other hand, reduced market liquidity or volatility limits trading opportunities and impedes our ability to manage risks, impacting trading income, and may reduce institutional client activity and therefore transaction and performance-based fees.

Credit risk is an integral part of many of our activities, including lending, underwriting and derivatives activities. Worsening economic conditions and adverse market developments could lead to impairments and defaults on credit exposures and on our trading and investment positions. Losses may be exacerbated by declines in the value of collateral we hold. We are exposed to credit risk in activities such as our prime brokerage, reverse repurchase and Lombard lending, as the value or liquidity of the assets against which we provide financing may decline rapidly. Macroeconomic developments, such as the strength of the Swiss franc and its effect on Swiss exports, the adoption of negative interest rates by the Swiss National Bank or other central banks or any return of crisis conditions within the eurozone or the EU, and the potential implications of the decision in Switzerland to reinstate immigration quotas for EU and European Economic Area citizens, could also adversely affect the Swiss economy, our business in Switzerland in general and, in particular, our Swiss mortgage and corporate loan portfolios.

The aforementioned developments have in the past affected, and could materially affect, the financial performance of business divisions and of UBS as a whole, including through impairment of goodwill and the adjustment of deferred tax asset levels. Refer to "*Our financial results may be negatively affected by changes to assumptions and valuations, as well as changes to accounting standards*" and "*The effect of taxes on our financial results is significantly influenced by tax law changes and reassessments of our deferred tax assets*" below.

→ **Refer to the "Current market climate and industry trends" section of this report for more information**

UK withdrawal from the EU

In December 2017, the UK and the remaining EU member states reached an agreement on the separation issues under Phase I of the negotiations for the UK's withdrawal from the EU. As a result, the European Council agreed that "sufficient progress" had been made to allow the negotiations to move to Phase II on transitional arrangements and the future EU-UK relationship. The UK is still expected to leave the EU in March 2019, subject to a possible transition period.

The nature of the UK's future relationship with the EU remains unclear. Any future limitations on providing financial services into the EU from our UK operations could require us to make potentially significant changes to our operations in the UK and the EU, and to our legal structure. In the absence of adequate transition relief being agreed and passed into law by the United Kingdom and the European Union, we currently expect to merge UBS Limited into UBS Europe SE, our German headquartered European bank, prior to the United Kingdom leaving the European Union on 29 March 2019. Clients and other counterparties of UBS Limited would become counterparties of UBS Europe SE through the planned merger of the two entities. However, we anticipate that clients of UBS Limited who can be serviced by UBS AG, London Branch would generally be migrated to UBS AG, London Branch prior to this merger. We further anticipate that some staff would be relocated as a result; the exact number of staff and roles would be determined in due course. The timing and extent of the actions we take may vary considerably depending on regulatory requirements and the nature of any transition or successor agreements with the EU.

We may not be successful in implementing changes in our wealth management businesses to meet changing market, regulatory and other conditions

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, the US Department of Labor has adopted a rule expanding the definition of "fiduciary" under the Employee Retirement Income Security Act (ERISA), which requires us to comply with fiduciary standards under ERISA when dealing with certain retirement plans. We will likely be required to materially change business processes, policies and the terms on which we interact with these clients in order to comply with these rules when they become fully effective. In addition, MiFID II imposes new requirements on us when providing advisory services to clients in the EU, including new requirements for agreements with clients.

We have 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 we have 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 result in additional cross-border outflows.

In recent years, our Wealth Management net new money inflows have come predominantly from clients in Asia Pacific and in the ultra high net worth segment globally. Over time, inflows from these lower-margin segments and markets have been replacing outflows from higher-margin segments and markets, in particular 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 our Wealth Management's margins.

As the discussion above indicates, we are exposed to possible outflows of client assets in our asset-gathering businesses and to changes affecting the profitability of our wealth management businesses. 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 them by devising and implementing adequate business strategies, adequately developing or updating our technology, particularly in trading businesses, and our digital channels and tools, or are unable to attract or retain the qualified people needed to carry them out.

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 those of other stakeholders, we have made changes to the terms of compensation awards. Among other things, we have introduced individual caps on the proportion of fixed to variable pay for the GEB members, as well as certain other employees. 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.

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, depending on which and how many roles are affected, could seriously compromise our ability to execute our strategy and to successfully improve our operating and control environment and may affect our business performance.

Swiss law requires that shareholders approve the compensation of the Board of Directors (BoD) and the Group Executive Board (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 we generate. We must, therefore, 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 are not always able to prevent serious losses arising from extreme or sudden market events that are not anticipated by our risk measures and systems. The deterioration of financial markets since the beginning of the crisis was extremely severe by historical standards. Value-at-risk, a statistical measure for market risk, is derived from historical market data, and thus by definition could not have anticipated the losses suffered in the stressed conditions of the crisis. Moreover, stress loss and concentration controls and the dimensions in which we aggregated risk to identify potentially highly correlated exposures proved to be inadequate. As a result, we recorded substantial losses on fixed income trading positions, particularly in 2008 and 2009. Notwithstanding the steps we have taken to strengthen our risk management and control framework, 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;
- 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 for our own account are severely affected by events not anticipated by our models, and accordingly we suffer defaults and impairments beyond the level implied by our risk assessment; or
- collateral or other security provided by our counterparties proves inadequate to cover their obligations at the time of their default.

We hold positions related to real estate in various countries, and could suffer losses on these positions. These positions include a substantial Swiss mortgage portfolio. Although management believes that this portfolio is prudently managed, we could nevertheless be exposed to losses if the concerns expressed by the Swiss National Bank and others about unsustainable price escalation in the Swiss real estate market come to fruition. In addition, we continue to hold substantial legacy risk positions, primarily in Corporate Center – Non-core and Legacy Portfolio. They remain illiquid in many cases, and we continue to be exposed to the risk that they may again deteriorate in value.

We also manage risk on behalf of our clients in our asset and wealth management businesses. The performance of assets we hold for our clients in these activities could 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. They are subject to a distinct control framework. Deteriorations in the fair value of these positions would have a negative effect on our earnings.

Liquidity and funding management are critical to our 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. The volume of our funding sources has generally been stable, but could change in the future due to, 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 holding company level and / or at subsidiaries level, 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 absent 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 can affect the availability of certain kinds of funding. In addition, as we experienced in connection with Moody's downgrade of our long-term rating in June 2012, rating downgrades can require us to post additional collateral or make additional cash payments under master trading agreements relating to our derivatives businesses. 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.

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 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, or the assessment of the impairment of goodwill. 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. Moreover, if the estimates and assumptions in future periods deviate from the current outlook, our financial results may also be negatively affected.

Changes to IFRS or interpretations thereof may cause our 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, we adopted IFRS 9 effective on 1 January 2018, which required us to change the accounting treatment of certain instruments, requires us to record loans at inception net of expected credit losses instead of recording credit losses on an incurred loss basis and is generally expected to result in an increase in recognized credit loss allowances. In addition, the expected credit loss (ECL) provisions of IFRS 9 may result in greater volatility in credit loss expense as ECL changes in response to developments in the credit cycle and composition of our loan portfolio. The effect may be more pronounced in a deteriorating economic environment.

→ **Refer to the "Critical accounting estimates and judgments" section and "Note 1 Summary of significant accounting policies" in the "Consolidated financial statements" section of this report for more information**

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 statutory tax rates. 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. This would have the effect of increasing our effective tax rate in the year in which any write-downs are taken. Conversely, if our performance is expected to improve, particularly in the US or the UK, we could potentially recognize additional DTAs as a result of that assessment. The effect of doing so would be to significantly 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 and Switzerland, 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 (TCJA) resulted in a CHF 2.9 billion net write-down in the Group's DTAs in the fourth quarter of 2017. Changes in tax law may materially affect our effective tax rate and in some cases may substantially affect the profitability of certain activities. For example, the TCJA introduced a new minimum tax regime referred to as the base erosion and anti-abuse tax (BEAT) that potentially subjects otherwise deductible payments made from our US businesses to non-US affiliated parties to a minimum tax. We currently expect that BEAT could increase our current tax expense by up to CHF 60 million in 2018. The actual effects could be materially higher as the amount of payments subject to BEAT will increase with higher interest rates and business activity and as a result of interpretative uncertainty relating to BEAT. It may also be lower if we are able to successfully mitigate our payments subject to BEAT.

We generally revalue our DTAs in the second half of the financial year based on a reassessment of future profitability taking into account updated business plan forecasts. 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 in the forecast period used for recognizing 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 recent periods have demonstrated that changes in the recognition of DTAs can have a very significant effect on our reported results. The enactment of the TCJA, and the narrowing of the window between the end of the forecast period and the expiry of our US net operating losses, may also lead us to review our approach to periodically remeasuring our US DTAs and the timing for recognizing deferred tax in our income statement. Any change in the manner in which we remeasure DTAs could impact the effective tax rate, particularly in the year in which the change is made.

Our full-year effective tax rate could also change if aggregate tax expenses in respect of profits from branches and subsidiaries without loss coverage differ from what is expected, or in case of changes to the forecast period used for DTA recognition purposes as part of the aforementioned reassessment of future profitability. Moreover, tax laws or the tax authorities in countries where we have undertaken legal structure changes 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 could be written down through the income statement.

In addition, statutory and regulatory changes, as well as changes to the way in which courts and tax authorities interpret tax laws, could cause the amount of taxes ultimately paid by us to materially differ from the amount accrued.

Our stated capital returns objective is based, in part, on capital ratios that are subject to regulatory change and may fluctuate significantly

We plan to operate with a fully applied CET1 capital ratio of around 13% and a fully applied CET1 leverage ratio of around 3.7%. Our ability to maintain these ratios is subject to numerous risks, including the financial results of our businesses, the effect of changes to capital standards, methodologies and interpretation that may adversely affect the calculation of our fully applied CET1 capital ratio, the imposition of risk add-ons or capital buffers, and the application of additional capital, liquidity and similar requirements to subsidiaries. These risks could prevent or delay our ability to achieve our capital returns policy of a progressive cash dividend coupled with a share repurchase program.

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 Limited and UBS Americas Holding LLC, 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 impact 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, the US CCAR process requires that our US intermediate holding company demonstrate that it can continue to meet minimum capital standards over a nine-quarter hypothetical severely adverse economic scenario. If it fails to meet the quantitative capital requirements, or the Federal Reserve Board's qualitative assessment of the capital planning process is adverse, our US intermediate holding company will be prohibited from paying dividends or making distributions. 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.

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 AG, UBS Group AG and UBS Switzerland AG, if there is justified concern that the entity is overindebted, 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 our shareholders and creditors or may prevent UBS Group AG, UBS AG or UBS Switzerland AG from paying dividends or making payments on debt obligations.

Protective measures may include, but are not limited to, certain measures that could require or result in a moratorium on, or the deferment of, payments. We would have limited ability to challenge any such protective measures, and creditors 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 the termination of, or the exercise of rights to terminate, netting rights, rights to enforce or dispose of certain types of collateral or 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 of the 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 in the event of a subsequent winding up, liquidation or dissolution of the entity subject to restructuring proceedings, which would increase the risk that investors would lose all or some of their investment.

FINMA has broad powers and 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.

Moreover, FINMA has expressed its preference for a "single-point-of-entry" resolution strategy for global systemically important financial groups, led by the bank's home supervisory and resolution authorities and focused on the top-level group company. This would mean that, if UBS AG or one of UBS Group AG's other subsidiaries faces substantial losses, FINMA could open restructuring proceedings with respect to UBS Group AG only and order a bail-in of its liabilities if there is a justified concern that in the near future such losses could impact UBS Group AG. In that case, it is possible that the obligations of UBS AG or any other subsidiary of UBS Group AG would remain unaffected and outstanding, while the equity capital and the capital and other debt instruments of UBS Group AG would be written down and / or converted into equity of UBS Group AG in order to recapitalize UBS AG or such other subsidiary.

APPENDIX IV

EXTRACT OF
THE UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS OF
UBS AG AND ITS SUBSIDIARIES
FOR THE FIRST QUARTER ENDED 31 MARCH 2018

UBS AG interim consolidated financial statements (unaudited)

Income statement

		For the quarter ended		
CHF million	Note	31.3.18	31.12.17	31.3.17
Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income		2,253	2,722	2,437
Interest expense from financial instruments measured at amortized cost		(1,330)	(1,489)	(1,194)
Interest income from financial instruments measured at fair value through profit or loss		1,594	893	955
Interest expense from financial instruments measured at fair value through profit or loss		(790)	(467)	(510)
Net interest income		1,727	1,658	1,688
Fee and commission income		4,900	4,772	4,807
Fee and commission expense		(409)	(478)	(436)
Net fee and commission income	3	4,491	4,294	4,371
Other net income from fair value changes on financial instruments		1,466	984	1,441
Credit loss (expense) / recovery	8	(25)	(89)	0
Other income	4	164	395	60
Total operating income		7,823	7,242	7,560
Personnel expenses	5	3,556	3,420	4,044
General and administrative expenses	6	2,236	2,817	1,601
Depreciation and impairment of property, equipment and software		232	233	253
Amortization and impairment of intangible assets		16	17	21
Total operating expenses		6,040	6,487	5,919
Operating profit / (loss) before tax		1,783	755	1,641
Tax expense / (benefit)	7	411	3,140	364
Net profit / (loss)		1,371	(2,385)	1,277
Net profit / (loss) attributable to preferred noteholders		0	26	46
Net profit / (loss) attributable to non-controlling interests		1	0	1
Net profit / (loss) attributable to shareholders		1,370	(2,412)	1,231

Statement of comprehensive income

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Comprehensive income attributable to shareholders			
Net profit / (loss)	1,370	(2,412)	1,231
Other comprehensive income that may be reclassified to the income statement			
Foreign currency translation			
Foreign currency translation movements, before tax (revaluation of net investment)	(479)	350	(317)
Effective portion of changes in fair value of hedging instruments designated as net investment hedges, before tax	94	(112)	(57)
Foreign currency translation differences on foreign operations reclassified to the income statement	0	0	4
Effective portion of changes in fair value of hedging instruments designated in net investment hedge reclassified to the income statement	0	(6)	0
Income tax relating to foreign currency translations, including the impact of net investment hedges	1	(32)	2
Subtotal foreign currency translation, net of tax	(383)	200	(368)
Financial assets measured at fair value through other comprehensive income			
Net unrealized gains / (losses), before tax	(71)	(11)	44
Impairment charges reclassified to the income statement from equity	0	2	14
Realized gains reclassified to the income statement from equity	0	(51)	(8)
Realized losses reclassified to the income statement from equity	0	4	2
Income tax relating to net unrealized gains / (losses)	19	17	(8)
Subtotal financial assets measured at fair value through other comprehensive income, net of tax	(51)	(39)	43
Cash flow hedges of interest rate risk			
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	(441)	(150)	(30)
Net (gains) / losses reclassified to the income statement from equity	(127)	(187)	(220)
Income tax relating to cash flow hedges	114	66	52
Subtotal cash flow hedges, net of tax	(454)	(270)	(198)
Total other comprehensive income that may be reclassified to the income statement, net of tax	(889)	(109)	(522)
Other comprehensive income that will not be reclassified to the income statement			
Defined benefit plans			
Gains / (losses) on defined benefit plans, before tax	(34)	0	49
Income tax relating to defined benefit plans	21	11	2
Subtotal defined benefit plans, net of tax	(13)	10	51
Own credit on financial liabilities designated at fair value			
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	171	(23)	(181)
Income tax relating to own credit on financial liabilities designated at fair value	(2)	0	0
Subtotal own credit on financial liabilities designated at fair value, net of tax	170	(23)	(181)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	157	(13)	(129)
Total other comprehensive income	(732)	(122)	(652)
Total comprehensive income attributable to shareholders	638	(2,534)	579

Statement of comprehensive income (continued)

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Comprehensive income attributable to preferred noteholders			
Net profit / (loss)	0	26	46
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	0	307	(2)
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	0	307	(2)
Total other comprehensive income that will not be reclassified to the income statement, net of tax	0	307	(2)
Total comprehensive income attributable to preferred noteholders	0	333	44
Comprehensive income attributable to non-controlling interests			
Net profit / (loss)	1	1	1
Other comprehensive income that will not be reclassified to the income statement			
Foreign currency translation movements, before tax	0	2	2
Income tax relating to foreign currency translation movements	0	0	0
Subtotal foreign currency translation, net of tax	0	2	2
Total other comprehensive income that will not be reclassified to the income statement, net of tax	0	2	2
Total comprehensive income attributable to non-controlling interests	1	3	2
Total comprehensive income			
Net profit / (loss)	1,371	(2,385)	1,277
Other comprehensive income	(732)	187	(651)
of which: other comprehensive income that may be reclassified to the income statement	*(889)*	*(109)*	*(522)*
of which: other comprehensive income that will not be reclassified to the income statement	*157*	*296*	*(129)*
Total comprehensive income	639	(2,198)	626

Balance sheet

CHF million	Note	31.3.18	31.12.17
Assets			
Cash and balances at central banks		92,800	87,775
Loans and advances to banks		13,284	13,693
Receivables from securities financing transactions		77,016	89,633
Cash collateral receivables on derivative instruments	10	24,271	23,434
Loans and advances to customers	8	318,394	320,659
Other financial assets measured at amortized cost	11	19,235	36,935
Total financial assets measured at amortized cost		545,000	572,129
Financial assets at fair value held for trading	9	105,785	126,244
of which: assets pledged as collateral that may be sold or repledged by counterparties		*34,536*	*35,363*
Derivative financial instruments	9,10	113,334	118,229
Brokerage receivables	9	20,250	
Financial assets at fair value not held for trading	9	97,213	58,556
Total financial assets measured at fair value through profit or loss		336,581	303,028
Financial assets measured at fair value through other comprehensive income	9	6,758	8,665
Investments in associates		1,037	1,018
Property, equipment and software		8,015	7,985
Goodwill and intangible assets		6,235	6,398
Deferred tax assets		9,671	9,783
Other non-financial assets	11	6,984	7,358
Total assets		920,280	916,363

Balance sheet (continued)

CHF million	Note	31.3.18	31.12.17
Liabilities			
Amounts due to banks		9,024	7,533
Payables from securities financing transactions		9,167	17,044
Cash collateral payables on derivative instruments	10	29,426	30,247
Customer deposits		401,514	412,392
Funding from UBS Group AG and its subsidiaries		35,925	34,749
Debt issued measured at amortized cost	13	102,213	104,749
Other financial liabilities measured at amortized cost	11	6,372	37,133
Total financial liabilities measured at amortized cost		593,640	643,847
Financial liabilities at fair value held for trading	9	34,747	30,463
Derivative financial instruments	9,10	111,945	116,134
Brokerage payables designated at fair value	9	34,793	
Debt issued designated at fair value	9,12	52,059	49,502
Other financial liabilities designated at fair value	9,11	34,438	16,223
Total financial liabilities measured at fair value through profit or loss		267,983	212,323
Provisions	14	2,999	3,084
Other non-financial liabilities	11	4,808	6,335
Total liabilities		869,430	865,588
Equity			
Share capital		386	386
Share premium		26,998	26,966
Retained earnings		30,099	29,102
Other comprehensive income recognized directly in equity, net of tax		(6,696)	(5,736)
Equity attributable to shareholders		50,788	50,718
Equity attributable to non-controlling interests		62	57
Total equity		50,850	50,775
Total liabilities and equity		920,280	916,363

Statement of changes in equity

CHF million	Share capital	Share premium	Retained earnings	Other comprehensive income recognized directly in equity, net of tax[1]
Balance as of 1 January 2017	**386**	**29,505**	**28,265**	**(4,494)**
Issuance of share capital				
Premium on shares issued and warrants exercised		6		
Tax (expense) / benefit		3		
Dividends		(2,250)		
Preferred notes				
New consolidations / (deconsolidations) and other increases / (decreases)		(9)		
Total comprehensive income for the period			1,102	(522)
of which: net profit / (loss)			*1,231*	
of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax				*(522)*
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*51*	
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*(181)*	
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation				
Balance as of 31 March 2017	**386**	**27,254**	**29,367**	**(5,017)**
Balance as of 1 January 2018 before the adoption of IFRS 9 and IFRS 15	386	26,966	29,102	(5,736)
Effect of adoption of IFRS 9			(505)	(72)
Effect of adoption of IFRS 15			(24)	
Balance as of 1 January 2018 after the adoption of IFRS 9 and IFRS 15	386	26,966	28,573	(5,808)
Issuance of share capital				
Premium on shares issued and warrants exercised		19		
Tax (expense) / benefit		0		
Dividends				
New consolidations / (deconsolidations) and other increases / (decreases)		14		
Total comprehensive income for the period			1,527	(889)
of which: net profit / (loss)			*1,370*	
of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax				*(889)*
of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans			*(13)*	
of which: OCI that will not be reclassified to the income statement, net of tax – own credit			*170*	
of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation				
Balance as of 31 March 2018	386	26,998	30,099	(6,696)

1 Excludes defined benefit plans and own credit that are recorded directly in Retained earnings.

of which: foreign currency translation	*of which: financial assets measured at fair value through OCI*	*of which: cash flow hedges*	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
(5,564)	*98*	*972*	53,662	**642**	**40**	**54,343**
			0			0
			6			6
			3			3
			(2,250)	(46)	(4)	(2,300)
			0	0		0
			(9)		1	(9)
(368)	*43*	*(198)*	579	44	2	626
			1,231	*46*	*1*	*1,277*
(368)	*43*	*(198)*	*(522)*			*(522)*
			51			*51*
			(181)			*(181)*
			0	*(2)*	*2*	*0*
(5,932)	*141*	*774*	51,990	**641**	**38**	**52,669**
(6,099)	*12*	*351*	50,718		57	50,775
	(72)		(577)			(577)
			(24)			(24)
(6,099)	*(60)*	*351*	50,117		57	50,174
			0			0
			19			19
			0			0
			0		(4)	(4)
			14		8	22
(383)	*(51)*	*(454)*	638		1	639
			1,370		*1*	*1,371*
(383)	*(51)*	*(454)*	*(889)*			*(889)*
			(13)			*(13)*
			170			*170*
			0		*0*	*0*
(6,482)	*(110)*	*(103)*	50,788		62	50,850

Statement of cash flows[1]

	Year-to-date	
CHF million	31.3.18	31.3.17
Cash flow from / (used in) operating activities		
Net profit / (loss)	1,371	1,277
Non-cash items included in net profit and other adjustments:		
Depreciation and impairment of property, equipment and software	232	253
Amortization and impairment of intangible assets	16	21
Credit loss expense / (recovery)	25	0
Share of net profits of associates / joint ventures and impairment of associates	(15)	(19)
Deferred tax expense / (benefit)	228	128
Net loss / (gain) from investing activities	149	141
Net loss / (gain) from financing activities	(3,647)	449
Other net adjustments	(590)	(562)
Net change in operating assets and liabilities:		
Loans and advances to banks / amounts due to banks	1,651	(2,192)
Securities financing transactions	4,839	(10,223)
Cash collateral on derivative instruments	(1,763)	(1,396)
Loans and advances to customers	(7,029)	(4,420)
Customer deposits	(3,822)	(368)
Financial assets and liabilities at FV held for trading and derivative financial instruments	14,202	(2,080)
Brokerage receivables and payables	3,226	
Financial assets at fair value not held for trading, other financial assets and liabilities	(4,639)	13,297
Provisions, other non-financial assets and liabilities	(1,384)	(1,523)
Income taxes paid, net of refunds	(133)	(50)
Net cash flow from / (used in) operating activities	2,919	(7,267)
Cash flow from / (used in) investing activities		
Purchase of subsidiaries, associates and intangible assets	(5)	(1)
Disposal of subsidiaries, associates and intangible assets[2]	29	3
Purchase of property, equipment and software	(327)	(306)
Disposal of property, equipment and software	29	21
Purchase of financial assets measured at fair value through other comprehensive income	(422)	(2,227)
Disposal and redemption of financial assets measured at fair value through other comprehensive income	225	2,102
Net (purchase) / redemption of debt securities measured at amortized cost	(1,061)	
Net (purchase) / redemption of financial assets held to maturity		199
Net cash flow from / (used in) investing activities	(1,533)	(208)

Table continues on the next page.

Statement of cash flows (continued)[1]

Table continued from previous page.

	Year-to-date	
CHF million	31.3.18	31.3.17
Cash flow from / (used in) financing activities		
Net short-term debt issued / (repaid)	(4,507)	9,432
Distributions paid on UBS shares		(2,250)
Issuance of long-term debt, including debt issued designated at fair value[3]	19,203	14,195
Repayment of long-term debt, including debt issued designated at fair value[3]	(10,107)	(10,803)
Net changes in non-controlling interests	17	(4)
Net cash flow from / (used in) financing activities	4,605	10,569
Total cash flow		
Cash and cash equivalents at the beginning of the period	102,154	121,107
Net cash flow from / (used in) operating, investing and financing activities	5,991	3,094
Effects of exchange rate differences on cash and cash equivalents	(17)	(57)
Cash and cash equivalents at the end of the period[4]	108,128	124,145
of which: cash and balances with central banks	*92,723*	*108,931*
of which: due from banks	*12,178*	*12,638*
of which: money market paper[5]	*3,227*	*2,576*
Additional information		
Net cash flow from / (used in) operating activities includes:		
Interest received in cash	3,197	2,759
Interest paid in cash	1,898	1,658
Dividends on equity investments, investment funds and associates received in cash[6]	541	436

1 Upon adoption of IFRS 9 cash flows from certain financial instruments have been reclassified from investing to operating activities. Refer to Note 1 for more information. 2 Includes dividends received from associates. 3 Includes funding from UBS Group AG and its subsidiaries. 4 CHF 3,428 million and CHF 2,314 million of cash and cash equivalents (mainly reflected in Loans and advances to banks) were restricted as of 31 March 2018 and 31 March 2017, respectively. Refer to "Note 23 Restricted and transferred financial assets" in the "Consolidated financial statements" section in the Annual Report 2017 for more information. 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. 6 Includes dividends received from associates reported within Cash flow from / (used in) investing activities.

Notes to the UBS AG interim consolidated financial statements (unaudited)

Note 1 Basis of accounting

1.1 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 (IASB), and are presented in Swiss francs (CHF), which is also the functional currency of UBS AG's Head Office and its Swiss-based operations.[1] 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 2017, 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 2017. 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 such 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 on areas of estimation uncertainty considered to require critical judgment, refer to "Note 1a) Significant accounting policies" in the "Consolidated financial statements" section of the Annual Report 2017 and in Note 1.3 in this report.

1.2 Changes to segment reporting effective first quarter 2018

Effective 1 February 2018, UBS AG integrated its Wealth Management and Wealth Management Americas business divisions into a single Global Wealth Management business division, which is managed on an integrated basis, with a single set of key performance indicators, performance targets, operating plan and management structure. Consistent with this, the operating results of Global Wealth Management are presented and assessed on an integrated basis in internal reporting to management. Consequently, beginning from the first quarter of 2018, Global Wealth Management qualifies as an operating and reportable segment for the purposes of segment reporting and is presented in these Financial Statements alongside Personal & Corporate Banking, Asset Management, the Investment Bank and Corporate Center (with its units Services, Group Asset and Liability Management (Group ALM) and Non-core and Legacy Portfolio). Following the change in the composition of UBS AG's operating segments and corresponding reportable segments, previously reported segment information has been restated. The change has no effect on the recognized goodwill of both former segments.

1 As explained in the Annual Report 2017 of UBS Group AG and UBS AG, in light of cumulative changes in UBS's legal structure, business activities and evolving changes to its structural currency management strategy, it is anticipated that during the second half of 2018 the functional currency of UBS AG's Head Office in Switzerland will change from Swiss francs to US dollars, and the functional currency of UBS AG's London Branch operations will change from British pounds to US dollars, where such changes would be made on a prospective basis. As a consequence, it is also expected that management would change the presentation currency of UBS AG's consolidated financial statements from Swiss francs to US dollars to align to the change in functional currency, with prior periods restated.

1.3 Update to significant accounting policies disclosed in Note 1a) to the Financial Statements 2017

The adoption of IFRS 9, *Financial Instruments* (IFRS 9) and IFRS 15, *Revenue from Contracts with Customers* (IFRS 15) resulted in changes to UBS AG's accounting policies applicable from 1 January 2018. Accounting polices set out in section 1.3.1 replace item 3) b, c, g, h, i, l, o and p in Note 1a) in the UBS AG consolidated annual Financial Statements for the year ended 31 December 2017 and those set out in section 1.3.2 replace item 4) in Note 1a) in the UBS AG consolidated annual Financial Statements for the year ended 31 December 2017.

As permitted by the transition provisions of IFRS 9 and IFRS 15, UBS AG elected not to restate comparative period information, and the accounting policies as set out in Note 1 in the UBS AG consolidated annual Financial Statements for the period ended 31 December 2017 apply to comparative periods.

1.3.1 Update to Note 1a) to the Financial Statements 2017 mainly related to IFRS 9

Update to Note 1a) 3) Financial instruments

b. Classification, measurement and presentation

On initial recognition, financial assets are classified as measured at amortized cost, fair value through other comprehensive income (FVOCI) or fair value through profit or loss (FVTPL).

A debt instrument is measured at amortized cost if it meets the following conditions:

– it is held within a business model that has an objective to hold financial assets to collect contractual cash flows; and
– the contractual terms of the financial asset result in cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI).

A debt instrument is measured at FVOCI if it meets both of the following conditions:

– it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
– the contractual terms of the financial asset result in cash flows that are SPPI.

Equity instruments are accounted for at FVTPL. All other financial assets are measured at FVTPL and consist of held for trading assets, assets mandatorily measured on a fair value basis and derivatives, except to the extent that they are designated in a hedging relationship, in which case the IAS 39 hedge accounting requirements continue to apply.

Business model assessment

UBS AG determines the nature of the business model, for example if the objective is to hold the financial asset and collect the contractual cash flows, by considering the way in which the financial assets are managed to achieve a particular business objective as determined by management.

Financial assets that are held for trading or managed on a fair value basis are measured at FVTPL insofar as the associated business model is neither to hold the financial assets to collect contractual cash flows nor to hold to collect contractual cash flows and sell.

UBS AG originates loans to hold to maturity and to sell or sub-participate to other parties, resulting in a transfer of substantially all the risks and rewards, and derecognition of the loan or portions of it. UBS AG considers the activities of lending to hold and lending to sell or sub-participate as two separate business models, with financial assets within the former considered to be within a business model that has an objective to hold the assets to collect contractual cash flows, and those within the latter included in a trading portfolio. In certain cases, it may not be possible on origination to identify whether loans or portions of loans will be sold or sub-participated and certain loans may be managed on a fair value basis through, for instance, using credit derivatives. These financial assets are mandatorily measured at FVTPL.

Critical accounting estimates and judgments

UBS AG exercises judgment to determine the appropriate level at which to assess its business models. In general the assessment is performed at the product level, e.g., retail and commercial mortgages. In other cases the assessment is carried out at a more granular level, e.g., loan portfolios by region, and, if required, further disaggregation is performed by business strategy. In addition, UBS AG exercises judgment in determining the effect of sales of financial instruments on the business model assessment.

Note 1 Basis of accounting (continued)

Contractual cash flow characteristics
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, which could affect whether the instrument is considered to meet the SPPI criteria.

For example, UBS AG holds portfolios of private mortgage contracts and corporate loans in Personal & Corporate Banking that commonly contain clauses that provide for two-way compensation if prepayment occurs. The amount of compensation paid by or to UBS AG reflects the effect of changes in market interest rates. UBS AG has determined that the inclusion of the change in market interest rates in the compensation amount is reasonable for the early termination of the contract, and therefore results in contractual cash flows that are SPPI.

Critical accounting estimates and judgments

UBS AG applies judgment when considering whether certain contractual features, such as interest rate reset frequency or non-recourse features, significantly affect future cash flows. Furthermore, judgment is required when assessing whether compensation paid or received on early termination of lending arrangements results in cash flows that are not SPPI.

All financial instruments are initially measured at fair value. In the case of financial instruments subsequently measured at amortized cost or FVOCI, the initial fair value is adjusted for directly attributable transaction costs.

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 Basis of accounting (continued)

<table>
<tr><th colspan="2">Financial assets classification</th><th>Significant items included</th><th>Measurement and presentation</th></tr>
<tr><td colspan="2">Measured at amortized cost</td><td>A debt financial asset is measured at amortized cost if:
– it is held in a business model that has an objective to hold assets to collect contractual cash flows, and
– the contractual terms give rise to cash flows that are SPPI.

This classification includes:
– cash and balances at central banks
– loans and advances to banks
– cash collateral receivable 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
– debt securities held as high-quality liquid assets (HQLA)
– fee and lease receivables.</td><td>Measured at amortized cost using the effective interest rate (EIR) method less allowances for expected credit losses (ECL) (refer to items 3c and 3g 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 3c in this Note
– ECL and reversals
– Foreign exchange translation gains and losses

Upfront fees and direct costs relating to loan origination, refinancing or restructuring as well as to loan commitments – when it is probable that UBS AG will enter into a specific lending relationship – are deferred and amortized over the life of the loan using the EIR method.

When the financial asset at amortized cost is derecognized, the gain or loss is recognized in the income statement.

Amounts arising from exchange-traded derivatives (ETD) and certain over-the-counter (OTC) derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to “Note 1a) Significant accounting policies” items 3d and 3j in the “Consolidated financial statements” section of the Annual Report 2017 for more information) are presented within Cash collateral receivables on derivative instruments.</td></tr>
<tr><td>Measured at FVOCI</td><td>Debt instruments measured at FVOCI</td><td>A debt financial asset is measured at FVOCI if:
– it is held in a business model whose objective is achieved by both holding assets to collect contractual cash flows and selling the assets, and
– the contractual terms give rise to cash flows that are SPPI.

This classification primarily includes debt securities and certain asset-backed securities held as HQLA for which the contractual cash flows meet the SPPI conditions.</td><td>Measured at fair value with unrealized gains and losses reported in Other comprehensive income, net of applicable income taxes, until such investments are derecognized (when sold, collected or otherwise disposed). Upon derecognition, any accumulated balances in Other comprehensive income are reclassified to the income statement and reported within Other income.

The following items are recognized in the income statement:
– Interest income, which is accounted for in accordance with item 3c in this Note
– ECL and reversals
– Foreign exchange translation gains and losses.

The amounts recognized in the income statement are determined on the same basis as for financial assets measured at amortized cost.</td></tr>
</table>

Note 1 Basis of accounting (continued)

Financial assets classification		Significant items included	Measurement and presentation
Measured at FVTPL	Held for trading	Financial assets held for trading include: – all derivatives with a positive replacement value, except those that are designated as effective hedging instruments – 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.	Measured at fair value with changes recognized in profit or loss. Changes in fair value, initial transaction costs and gains and losses realized on disposal or redemption are recognized in *Other net income from fair value changes on financial instruments*, except interest and dividend income on instruments other than derivatives (refer to item 3c in this Note for more information), interest on derivatives designated as hedging instruments in certain types of hedge accounting relationships and forward points on certain long- and short-duration foreign exchange contracts, which are reported in *Net interest income*. Derivative assets are generally presented as *Derivative financial instruments*, except those exchange-traded and OTC-cleared derivatives which are considered to be settled on a daily basis or qualify for netting and are presented within *Cash collateral receivables on derivative instruments.* The presentation of fair value changes on derivatives that are designated and effective as hedging instruments depends on the type of hedge relationship (refer to "Note 1a) Significant accounting policies" item 3k in the "Consolidated financial statements" section of the Annual Report 2017 for more information). Financial assets held for trading (other than derivatives) are presented as *Financial assets at fair value held for trading*. Other financial assets mandatorily measured at fair value through profit or loss are presented as *Financial assets at fair value not held for trading*, except for brokerage receivables, which are presented as a separate line item on UBS AG's balance sheet.
	Mandatorily measured at FVTPL – Other	A financial asset is mandatorily measured at FVTPL if: – it is not held in a business model whose objective is to hold assets to collect contractual cash flows or to hold them to collect contractual cash flows and sell, and / or – the contractual terms give rise to cash flows that are not SPPI, and / or – it is not held for trading. The following financial assets are mandatorily measured at FVTPL: – 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 and 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. These assets represent holdings in investments funds, whereby the contractual cash flows do not meet the SPPI conditions because the entry and exit price is based on the fair value of the fund's assets – Brokerage receivables, for which contractual cash flows do not meet the SPPI conditions due to the aggregate balance being 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 conditions because interest may be reset at rates that contain leverage – Equity instruments – Assets held under unit-linked investment contracts.	

Note 1 Basis of accounting (continued)

<table>
<tr><th colspan="2">Financial liabilities classification</th><th>Significant items included</th><th>Measurement and presentation</th></tr>
<tr><td colspan="2">Measured at amortized cost</td><td>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 and obligations against funding from UBS Group AG and its subsidiaries
– Cash collateral payables on derivative instruments.</td><td>Measured at amortized cost using the EIR method.

Upfront fees and direct costs relating to the issuance or origination of the liability are deferred and amortized over the life of the liability using the EIR method.

When the financial liability at amortized cost is derecognized, the gain or loss is recognized in the income statement.

Amortized cost liabilities are presented on the balance sheet primarily as Amounts due to banks, Customer deposits, Payables from securities financing transactions , Debt issued measured at amortized cost and Funding from UBS Group AG and its subsidiaries.

Amounts arising from ETD and certain OTC derivatives cleared through central clearing counterparties that are either considered to be daily settled or qualify for netting (refer to “Note 1a) Significant accounting policies” items 3d and 3j in the “Consolidated financial statements” section of the Annual Report 2017 for more information) are presented within Cash collateral payables on derivative instruments.</td></tr>
<tr><td rowspan="2">Measured at fair value through profit or loss</td><td>Held for trading</td><td>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
– 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).</td><td rowspan="2">Measurement of financial liabilities classified at FVTPL follows the same principles as for financial assets classified at FVTPL, except that the amount of change in the fair value of the financial liability that is attributable to changes in UBS AG’s own credit risk is presented in OCI.

Financial liabilities measured at FVTPL are presented as Financial liabilities at fair value held for trading and Other financial liabilities designated at fair value, respectively, except for brokerage payables and debt issued, which are presented as separate sub-totals on UBS AG’s balance sheet.

Derivative liabilities are generally presented as Derivative financial instruments, except those exchange-traded and OTC-cleared derivatives which are considered to be settled on a daily basis or qualify for netting and are presented within Cash collateral payables on derivative instruments.

Bifurcated embedded derivatives are measured at fair value, but are presented on the same balance sheet line as the host contract measured at amortized cost.

Derivatives that are designated and effective as hedging instruments are also measured at fair value. The presentation of fair value changes differs depending on the type of hedge relationship (refer to “Note 1a) Significant accounting policies” item 3k in the “Consolidated financial statements” section of the Annual Report 2017 for more information).</td></tr>
<tr><td>Designated at FVTPL</td><td>UBS AG designated 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
– Loan commitments that are hedged predominantly with credit derivatives and those managed on a fair value basis
– Amounts due under unit-linked investment contracts whose cash flows are linked to financial assets measured at FVTPL and eliminate an accounting mismatch
– Brokerage payables, which arise in conjunction with brokerage receivables and are measured at FVTPL to achieve measurement consistency.</td></tr>
</table>

c. Interest income and expense

Interest income and expense are recognized in the income statement applying the EIR method.

In determining interest income and expense, the EIR is applied to the gross carrying amount of the financial asset (unless the asset is credit-impaired) or the amortized cost of a financial liability, based on estimated future cash flows that take into account all contractual cash flows, except those related to ECL. However, when a financial asset becomes credit-impaired after initial recognition, interest income is determined by applying EIR to the amortized cost of the instrument. Furthermore, for financial assets that were credit-impaired on initial recognition, interest is determined by applying a credit-adjusted EIR to the amortized cost of the instrument.

Note 1 Basis of accounting (continued)

UBS AG also presents interest income and expense on financial instruments (excluding derivatives) measured at FVTPL separately from the rest of the fair value changes in the income statement. Interest income or expense on financial instruments measured at amortized cost and financial assets measured at FVOCI are presented separately within *Interest income from financial instruments measured at amortized cost and fair value through other comprehensive income* and *Interest expense from financial instruments measured at amortized cost,* with interest on financial instruments at FVTPL presented in *Interest income (or expense) from financial instruments measured at fair value through profit or loss*. All are part of *Net interest income*.

Interest income from financial instruments measured at fair value through profit or loss includes forward points on certain short- and long-duration foreign exchange contracts and dividend income.

Furthermore, interest income and expense on derivatives designated as hedging instruments in effective hedge relationships are presented consistently with the interest income and expense of the respective hedged item.

→ **Refer to "Note 1a) Significant Accounting Policies" in the "UBS AG consolidated financial statements" section of the Annual Report 2017 for more information**

g. 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. 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, which are customary in the Swiss market for corporate and commercial clients. UBS AG refers to both as "other credit lines," with clients allowed to draw down on demand balances (with the Swiss master credit facilities also allowing for term products) and which can be terminated by UBS AG at any time. Though these other credit lines are revocable, UBS AG is exposed to credit risk because the client has the ability to draw down funds before UBS AG can take credit risk mitigation actions.

Recognition of expected credit losses

ECL represent the difference between contractual cash flows and those UBS AG expects to receive, discounted at the EIR. For loan commitments and other credit facilities in scope of ECL, expected cash shortfalls are determined by considering expected future draw downs.

ECL are recognized on the following basis:

- A 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. Instruments in this category are referred to as instruments in stage 1. For instruments with a remaining maturity of less than 12 months, ECL are determined for this shorter period.
- Lifetime ECL are recognized if a significant increase in credit risk (SICR) is detected 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. Instruments in this category are referred to as instruments in stage 2. Where an SICR is no longer observed, the instrument will move back to stage 1.
- Lifetime ECL are always recognized for credit-impaired financial instruments, referred to as instruments in stage 3. The IFRS 9 determination of whether an instrument is credit-impaired is based on the occurrence of one or more loss events, with lifetime ECL generally derived by estimating expected cash flows based on a chosen recovery strategy with additional consideration given to forward-looking economic scenarios. Credit-impaired exposures may include positions for which no loss has occurred or no allowance has been recognized, for example, because they are expected to be fully recoverable through the collateral held.
- Changes in lifetime ECL since initial recognition are also recognized for assets that are purchased or originated credit-impaired financial assets (POCI). POCI are initially recognized at fair value with interest income subsequently being recognized based on a credit-adjusted EIR. POCI include financial instruments that are newly recognized following a substantial restructuring and remain a separate category until maturity.

UBS AG does not apply the low-credit-risk practical expedient that allows a lifetime ECL for lease or fee receivables to be recognized irrespective of whether a significant increase in credit risk has occurred. Instead, UBS AG has incorporated lease and fee receivables into the standard ECL calculation.

A write-off is made when all or part of a financial asset is deemed uncollectible or forgiven. Write-offs reduce the principal amount of a claim and are charged against previously established allowances for credit losses. Recoveries, in part or in full, of amounts previously written off are generally credited to *Credit loss expense / recovery*. Write-offs and partial write-offs represent derecognition / partial derecognition events.

ECL are recognized in profit or loss with a corresponding ECL allowance reported as a decrease in the carrying value of financial assets measured at amortized cost on the balance sheet. For financial assets measured at fair value through OCI, the carrying value is not reduced, but an accumulated amount is recognized in OCI. For off-balance sheet financial instruments and other credit lines, provisions for ECL are reported in *Provisions*. ECL are recognized within the income statement in *Credit loss expense / recovery.*

Default and credit impairment

The definition of default is based on quantitative and qualitative criteria. A counterparty is classified as defaulted at the latest when material payments of interest, principal or fees are overdue for more than 90 days, or more than 180 days for the Personal & Corporate Banking and Swiss wealth management portfolios. Counterparties are also classified as defaulted when bankruptcy, insolvency proceedings or enforced liquidation have commenced, obligations have been restructured on preferential terms or there is other evidence that payment obligations will not be fully met without recourse to collateral. The latter may be the case even if, to date, all contractual payments have been made when due. If a counterparty is defaulted, generally all claims against the counterparty are treated as defaulted.

An instrument is classified as credit-impaired if the counterparty is defaulted, and / or the instrument is POCI. An instrument is POCI if it has been purchased with a material discount to its carrying amount following a risk event of the issuer or originated with a defaulted counterparty. Once a financial asset is classified as defaulted / credit-impaired (except POCIs), it remains as such unless all past due amounts have been rectified, additional payments have been made on time, the position is not classified as credit-restructured, and there is general evidence of credit recovery. A minimum period of three months is applied whereby most instruments remain in stage 3 for a longer period.

Measurement of expected credit losses

IFRS 9 ECL reflect an unbiased, probability-weighted estimate based on either loss expectations resulting from default events over a maximum 12-month period from the reporting date or over the remaining life of a financial instrument. The method used to calculate individual probability-weighted unbiased ECL is based on a combination of the following principal factors: probability of default (PD), loss given default (LGD) and exposure at default (EAD). 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 each instrument or group of instruments, parameter time series are generated consisting of the instruments' PD, LGD and EAD profiles considering the respective period of exposure to credit risk.

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 new IFRS 9-related models have been developed, which 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. The assignment of internal counterparty rating grades and the determination of default probabilities for the purposes of Basel III are not affected by the IFRS 9 ECL calculation.

Probability of default (PD): The 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. The lifetime PD calculation is based on a series of 12-month PIT PDs that are derived from TTC PDs and scenario forecasts. This modeling is region-, industry- and client segment-specific and considers both scenario-systematic and client-idiosyncratic information. To derive the cumulative lifetime PD per scenario, the series of 12-month PIT PDs are transformed into marginal PIT PDs taking any assumed default events from previous periods into account.

Note 1 Basis of accounting (continued)

Exposure at default (EAD): The EAD represents an estimate of the exposure to credit risk at the time of a potential default occurring during the life of a financial instrument. It represents the cash flows outstanding at the time of default, 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. IFRS 9-specific CCFs have been modeled to capture client segment- and product-specific patterns after removing Basel standard-specific limitations, i.e., conservativism and focus on a 12-month period prior to default.

Loss given default (LGD): The LGD represents an estimate of the loss at the time of a potential default occurring during the life of a financial instrument. The determination of the LGD takes 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.

PD and LGD are determined for four different scenarios whereas EAD projections are treated as scenario independent.

Parameters are generally determined on an individual financial asset level. For credit card exposures in Switzerland, personal account overdrafts and certain loans to financial advisors, a portfolio approach is applied that derives an average PD and LGD for the entire portfolio.

Scenarios and scenario weights

The determination of the probability weighted ECL requires evaluating a range of diverse and relevant future economic conditions.

To accommodate this requirement, UBS AG uses four different economic scenarios in the ECL calculation: an upside, a baseline, a mild downside and a severe downside scenario. 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. Those variables range from above-trend economic growth to severe recession. A weight is computed for each scenario by using a probabilistic econometric model that considers recent information as well as several decades of historical data. The determined weights constitute the probabilities that the respective set of macroeconomic conditions will occur. The scenarios, including the narratives, the macroeconomic and financial variables and the scenario weights, are further discussed, challenged and potentially refined by a team of UBS AG-internal experts. The baseline scenario is aligned to the economic and market assumptions used for UBS AG business planning purposes.

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 and judgment increases. 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 the ECL calculation vary by type of exposure and are determined during the credit cycle index model development process in close alignment with practitioner judgment. Certain variables may only be relevant for specific types of exposures, such as house price indices for mortgage loans, while other variables have key relevance in the ECL calculation for all exposures. 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 in the ECL calculation:

- GDP growth rates
- House price indices
- Unemployment rates
- Interest rates, specifically LIBOR and government bond yields
- Equity indices
- Consumer price indices

Note 1 Basis of accounting (continued)

The forward-looking macroeconomic assumptions used in the ECL calculation are developed by UBS AG economists, risk methodology personnel and credit risk officers. Assumptions and scenarios are validated and approved through a scenario committee and an operating committee, which also aim to ensure a consistent use of forward-looking information throughout UBS AG, including in the business planning process. ECL inputs are tested and reassessed for appropriateness at least each quarter and appropriate adjustments are made when needed.

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.

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 unit. 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, allowing for 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 review as a substantive credit review providing for a re-origination of the facility. Following this, a 12 month measurement period 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.

Significant increase in credit risk

Financial instruments subject to ECL are monitored on an ongoing basis. To determine whether the recognition of a 12-month ECL continues to be appropriate, it is assessed whether an SICR has occurred since initial recognition of the financial instrument. The assessment criteria include 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.

In both cases the respective PDs are determined for the residual lifetime of the instrument, i.e., the period between the reporting date and maturity. 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 being recognized.

The threshold applied varies depending on the original credit quality of the borrower. For instruments with lower default probabilities at inception due to good credit quality of the counterparty, the SICR threshold is set at a higher level than for instruments with higher default probabilities at inception. This implies that for instruments with initially lower default probabilities a relatively higher deterioration in credit quality is needed to trigger an SICR than for those instruments with originally higher PDs. The SICR assessment based on PD changes is made at an individual financial asset level. A high-level overview of the SICR trigger, expressed in rating downgrades, together with the corresponding ratings at origination of an instrument is provided in the "SICR thresholds" table below. This simplified view is aligned to internal ratings as disclosed in the internal ratings table presented in "Credit risk" in the "Risk management and control" section of the Annual Report 2017. The actual SICR thresholds applied are defined on a more granular level interpolating between the values shown in the table.

SICR thresholds

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

Note 1 Basis of accounting (continued)

Irrespective of the SICR assessment based on default probabilities, credit risk is generally deemed to have significantly increased for an instrument if the borrower becomes more than 30 days past due on his contractual payments. This presumption is rebutted only where reasonable and supportable information is available that demonstrates that UBS AG is not exposed to an SICR even if contractual payments become more than 30 days past due.

For certain less material portfolios, specifically the Swiss credit card portfolio and the recruitment and retention loans to financial advisors within Global Wealth Management, the 30 days past due criterion is used as the primary indicator of an SICR. Where instruments are transferred to stage 2 due to the 30 days 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 that are between 90 and 180 days past due, 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 and hence for a transfer to stage 2. 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. Instruments for which an SICR since initial recognition is determined based on criteria other than changed default probabilities remain in stage 2 for at least six months post resolution of the stage 2 trigger event.

The overall SICR determination process does not apply to Lombard loans, securities financing transactions and certain other asset-based lending transactions due to the risk management practices adopted, including daily monitoring processes with strict remargining requirements. If margin calls are not satisfied, a position is closed out and classified as a stage 3 position. ECL on these positions are not material.

Critical accounting estimates and judgments

The calculation of ECL requires management to apply significant judgment and make estimates and assumptions that involve significant uncertainty at the time they are made. Changes to these estimates and assumptions can result in significant changes to the timing and amount of ECL to be recognized.

Determination of a significant increase of credit risk

IFRS 9 does not include a definition of what constitutes an SICR. UBS AG assesses whether an SICR has occurred since initial recognition based on qualitative and quantitative reasonable and supportable forward-looking information that includes significant management judgment. More stringent criteria could significantly increase the number of instruments migrating to stage 2. An IFRS 9 Operating Committee has been established to review and challenge the SICR approach and any potential changes and determinations made in the quarter.

Scenarios, scenario weights and macroeconomic factors

ECL reflect an unbiased and probability-weighted amount, which UBS AG determines by evaluating a range of possible outcomes. Management selects forward-looking scenarios and judges the suitability of respective weights to be applied. Each of the scenarios is based on management's assumptions around future economic conditions in the form of macroeconomic, market and other factors. Changes in the scenarios and weights, the corresponding set of macroeconomic variables and the assumptions made around those variables for the forecast horizon would have a significant effect on the ECL. An IFRS 9 Scenario Committee, in addition to the Operating Committee, has been established to derive, review and challenge the selection and weights.

ECL measurement period

Lifetime ECL are generally determined based upon the contractual maturity of the transaction, which significantly affects ECL. The ECL calculation is therefore sensitive to any extension of contractual maturities triggered by business decisions, consumer behaviors and an increased number of stage 2 positions. In addition, 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 has been applied for credit card limits, capped at 12 months for stage 1 positions, and a 12-month period has been applied for master credit facilities.

Modeling and management adjustments

A number of complex models have been developed or modified to calculate ECL, with additional management adjustments required. Internal counterparty rating changes, new or revised models and data may significantly affect ECL. The models are governed by UBS AG's model validation controls, which aim to ensure independent verification, and are approved by the Group Model Governance Board (GMGB). The management adjustments are approved by the IFRS 9 Operating Committee and endorsed by the GMGB.

h. Restructured and modified financial assets

When a counterparty is in financial difficulties or where default has already occurred, UBS AG may restructure financial assets by providing concessions that would otherwise not be considered and that are outside of UBS AG's normal risk appetite, such as preferential interest rates, extension of maturity and subordination. When a credit restructuring takes place, each case is considered individually and the counterparty is generally classified as defaulted until the loan is collected or written off, non-preferential conditions are granted that supersede the preferential conditions, or until the counterparty has recovered and the preferential conditions no longer exceed UBS AG's risk appetite.

Concessions granted when there is no evidence of financial difficulties, or where changes to terms and conditions are within UBS AG's usual risk appetite, are not considered to be a credit restructuring.

Modifications represent contract amendments that result in an alteration of future contractual cash flows and that can occur within UBS AG's normal risk appetite 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 value of a financial asset is recognized in profit or loss as a modification gain or loss. Further, the subsequent SICR assessment is made by comparing the risk of default at the reporting date based on the modified contractual terms of the financial asset with the risk of default at initial recognition based on the original, unmodified contractual terms of the financial asset.

o. Loan commitments

Loan commitments are arrangements under which clients can borrow stipulated amounts under defined terms and conditions.

Loan commitments that can be canceled at any time by UBS AG at its discretion are neither recognized on the balance sheet nor included in off-balance sheet disclosures.

Loan commitments that cannot be canceled by UBS AG once the commitments are communicated to the beneficiary or that are revocable only due to automatic cancelation upon deterioration in a borrower's creditworthiness are considered irrevocable and 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) *other loan commitments*. UBS AG recognizes ECL on non-cancelable other loan commitments. In addition, UBS AG also recognizes ECL on loan commitments that can be canceled at any time if UBS is exposed to credit risk (refer to item g in this Note). Corresponding ECL are presented within *Provisions* on the UBS AG's balance sheet. ECL relating to these other loan commitments is recorded in the income statement in *Credit loss expense / recovery*.

When a client draws on a commitment, the resulting loan is presented within (i) *Financial assets at fair value held for trading*, consistent with the associated *derivative loan commitment*, (ii) *Financial assets at fair value not held for trading*, following *loan commitments designated at fair value through profit or loss* or (iii) *Loans and advances to customers*, when the associated loan commitment is accounted for as an *other loan commitment*.

p. Financial guarantee contracts

Financial guarantee contracts are contracts that require the issuer 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. UBS AG issues such financial guarantees to banks, financial institutions and other parties on behalf of clients to secure loans, overdrafts and other banking facilities.

Certain issued financial guarantees that are managed on a fair value basis are designated at fair value through profit or loss. Financial guarantees that are not managed on a fair value basis are initially recognized in the financial statements at fair value and are subsequently measured at the higher of:
- the amount of ECL (refer to item g in this Note) and
- the amount initially recognized less the cumulative amount of income recognized as of the reporting date.

ECL resulting from guarantees is recorded in the income statement in *Credit loss expense / recovery*.

q. Other net income from fair value changes of financial instruments

The line item *Other net income from fair value changes of financial instruments* substantially includes fair value gains and losses on financial instruments at fair value through profit or loss, as well as the effects at derecognition, trading gains and losses and intermediation income arising from certain client-driven Global Wealth Management and Personal & Corporate Banking financial transactions. In addition, foreign currency translation effects and income and expenses from precious metals are presented under this income statement line item.

Note 1 Basis of accounting (continued)

1.3.2 Update to Note 1a) to the Financial Statements 2017 mainly related to IFRS 15

Update to Note 1a) 4) Fee and commission income and expenses

UBS AG earns fee income from a 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 asset or portfolio management, custody services and certain advisory services and
- fees earned from point in time services such as underwriting fees and brokerage fees (e.g., securities and derivative execution and clearing).

→ **Refer to Note 3 for more information including the disaggregation of revenues**

Over time services

Fees earned from services that are provided over a certain period of time are recognized ratably over the service period provided the fees are not contingent on successfully meeting specified performance criteria that are beyond the control of UBS AG (see measurement below).

Costs to fulfill over time services are recorded in the income statement immediately because such services are considered to be a series of services that are substantially the same from day to day and have the same pattern of transfer. The costs to fulfill neither generate nor enhance the resources of UBS AG that will be used to satisfy future performance obligations and cannot be distinguished between those that relate to satisfied and unsatisfied performance obligations. Therefore, these costs do not qualify to be recognized as an asset. Where costs incurred relate to contracts that include variable consideration that is constrained by factors beyond UBS AG's control, e.g., successful mergers and acquisitions (M&A) activity, or where UBS AG has a history of not recovering such costs on similar transactions, then such costs are expensed immediately as incurred.

Point in time services

Fees earned from providing transaction-type services are recognized when the service has been completed provided such fees are not subject to refund or another contingency beyond the control of UBS AG.

Incremental costs to fulfill services provided at a point in time are typically incurred and recorded at the same time as the performance obligation is satisfied and revenue is earned, and are therefore not recognized as an asset, e.g., brokerage. Where recovery of costs to fulfill relates to an uncompleted point in time service for which the satisfaction of the performance obligation in the contract is dependent upon factors beyond the control of UBS AG, such as underwriting a successful securities issuance, or where UBS AG has a history of not recovering such costs through reimbursement on similar transactions, then such costs are expensed immediately as incurred.

Measurement

Fee and commission income is measured based on consideration specified in a legally enforceable contract with a customer, excluding amounts such as taxes collected on behalf of third parties. Consideration can include both fixed and variable amounts. Variable consideration includes refunds, discounts, performance bonuses and other amounts that are contingent on the occurrence or non-occurrence of a future event. Variable consideration that is contingent on an uncertain event can only be recognized to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue for a contract will not occur. This is referred to as the variable consideration constraint. UBS AG does not consider the highly probable criterion to be met where the contingency on which income is dependent is beyond the control of UBS AG. In such circumstances, UBS AG only recognizes revenue when the contingency has been resolved or an uncertain event has occurred. Examples include asset management performance-linked fees, which are only payable if the returns of a fund exceed a benchmark and are only recognized after the performance period has elapsed. Similarly, M&A advisory fees that are dependent on a successful client transaction are not recognized until the transaction on which the fees are dependent has been executed. Asset management fees (excluding performance-based fees) received on a periodic basis, typically quarterly, that are determined based on a fixed percentage of net asset value that has not been established at the reporting date are estimated and accrued ratably over the period to the next invoice date, except during periods in which market volatility indicates there is a risk of significant reversal. Research revenues earned by the Investment Bank under commission-sharing or research payment account agreements are not recognized until the client has provided a definitive allocation of amounts between research providers, as prior to this UBS AG generally does not have an enforceable right to a specified amount of consideration.

Consideration received is allocated to the separately identifiable performance obligations in a contract. Due to the nature of UBS AG's revenues, which do not typically include multiple performance obligations or, where they do, are considered to be a series with the same pattern of transfer, e.g., asset management, significant judgment is not required to allocate a transaction price between performance obligations or in determining the timing of revenue recognition. UBS AG has taken the practical expedient to not disclose information on the allocation of the transaction price to remaining performance obligations in contracts. This is because contracts are typically less than one year in duration. Where contracts have a longer duration, they are either subject to the variable consideration constraint with fees calculated on future net asset value, which cannot be included within the transaction price for the contract, or result in revenue being recognized ratably using the output method corresponding directly to the value of the services completed to date and to which UBS AG would be entitled to invoice upon termination of the contract, e.g., loan commitments.

Presentation of fee and commission income and expense
Fee and commission income and expense are presented gross on the face of the income statement when UBS AG is considered to be principal in the contractual relationship with its customer and any suppliers used to fulfill such contracts. This occurs where UBS AG has control over such services and its relationship with suppliers prior to provision of the service to the client. UBS AG only considers itself to be an agent to services provided by third parties where its client controls the choice of supplier and the services to be provided, and UBS AG does not transform or integrate the service into a UBS AG product or service or take responsibility for the quality of the service, e.g., third-party execution costs for exchange-traded derivatives and fees payable to third-party research providers, where UBS AG is merely acting as a payment agent for its client. When UBS AG is acting as an agent, any costs incurred are directly offset against the associated income.

Presentation of expenses in the income statement
UBS AG presents expenses primarily in line with their nature in the income statement, differentiating between expenses that are incremental and incidental to revenues, which are presented within *Total operating income,* and those that are related to personnel, general and administrative expenses, which are presented within *Total operating expenses*

Contract assets, contract liabilities and capitalized expenses
UBS AG has applied the practical expedient that allows for costs incurred to obtain a contract to be expensed as incurred where the amortization period for any asset recognized would be less than 12 months.

Where UBS AG provides services to clients, consideration is due immediately upon satisfaction of a point in time service or at the end of a prespecified period for an over time service, e.g., certain asset management fees are collected monthly or quarterly, through deduction from a client account, deduction from fund assets or through separate invoicing. Where receivables are recorded, they are presented within *Other financial assets measured at amortized cost.*

Contract liabilities relate to prepayments received from customers where UBS AG is yet to satisfy its performance obligation.

Contract assets are recorded when an entity's right to consideration in exchange for services transferred is conditional on something other than the passage of time, e.g., the entity's future performance.

UBS AG has not recognized any material contract assets, contract liabilities or capitalized expenses during the period and has therefore not provided a contract balances reconciliation.

Note 1 Basis of accounting (continued)

1.4 Adoption of IFRS 9

1.4.1 Introduction

Effective 1 January 2018, UBS AG adopted IFRS 9, *Financial Instruments*, which replaces IAS 39*, Financial Instruments: Recognition and Measurement* and substantially changes accounting and financial reporting in three key areas: classification and measurement of financial assets, impairment and hedge accounting. In addition, UBS AG early adopted the Amendment to IFRS 9*, Prepayment Features with Negative Compensation*, issued in October 2017, which allows UBS AG to continue to apply amortized cost accounting to Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs. UBS AG has retained hedge accounting under IAS 39 as permitted and early adopted the own credit requirements of IFRS 9 during the first quarter of 2016.

As permitted by the transitional provisions of IFRS 9, UBS AG elected not to restate comparative figures. Any effect on the carrying amounts of financial assets and liabilities at the date of transition to IFRS 9 was recognized as an adjustment to opening retained earnings. The detailed effects of the adoption of IFRS 9 on 1 January 2018 are presented in this Note and the updated accounting policies for classification and measurement of financial instruments and impairment of financial assets as applied from 1 January 2018 are presented in Note 1.3.

1.4.2 Transition impact

The adoption of IFRS 9 effective 1 January 2018 has resulted in a reduction to IFRS consolidated equity as of 1 January 2018 of CHF 577 million. This effect is comprised of classification and measurement changes of CHF 351 million on a pre-tax basis and CHF 293 million net of tax, as well as effects from the implementation of impairment requirements based on an ECL methodology of CHF 348 million on a pre-tax basis and CHF 284 million net of tax. Further detail is provided in section 1.4.5 of this Note.

UBS AG continues to test and refine the new accounting processes, internal controls and governance framework necessitated by the adoption of IFRS 9. Therefore, the estimation of ECL and related effects remain subject to change until finalization of the financial statements for the year ending 31 December 2018.

→ **Refer to the 31 March 2018 Pillar 3 report – UBS Group and significant regulated subsidiaries and sub-groups under "Pillar 3 disclosures" at *www.ubs.com/investors* for more information on the effect of the IFRS 9 transition on UBS's capital adequacy**

1.4.3 Governance

The implementation of IFRS 9 has been a key strategic initiative for UBS implemented under the joint sponsorship of the Group Chief Financial Officer and the Group Chief Risk Officer. The incorporation of forward-looking information into the ECL calculation and the definition and assessment of what constitutes a significant increase in credit risk (SICR) are inherently subjective and involve the use of significant expert judgment. Therefore, UBS AG has developed a front-to-back governance framework over the ECL calculation process jointly owned by the Group Chief Financial Officer and the Group Chief Risk Officer and has designed controls to be in compliance with the requirements of the Sarbanes-Oxley Act. UBS AG has efficient credit risk management processes in place that continue to be applicable and aim to ensure the effects of economic developments are appropriately considered, mitigation actions are taken where required and risk appetite is reassessed and adjusted as needed.

→ **Refer to the "Risk management and control" section of the Annual Report 2017 for more information**

1.4.4 Retrospective amendments to UBS AG balance sheet presentation

Although the effect of IFRS 9 classification and measurement changes has been applied prospectively, UBS AG has made a series of changes to the presentation of its IFRS balance sheet to facilitate comparability and prior-period information is presented for periods ending before 1 January 2018 in this revised structure. The primary changes include:

- IAS 39-specific asset categories, such as "Financial assets held to maturity" and "Financial assets available for sale," have been superseded by the new categories "Financial assets measured at amortized cost" and "Financial assets measured at fair value through other comprehensive income."
- A new line, *Financial assets at fair value not held for trading*, has been created to accommodate in particular financial assets previously designated at fair value, all of which are mandatorily classified at fair value through profit or loss under IFRS 9.

Note 1 Basis of accounting (continued)

Other assets and *Other liabilities* have been split between measured at amortized cost, measured at fair value through profit or loss and other non-financial assets and liabilities.

- *Cash collateral on securities borrowed* and *Reverse repurchase agreements* have been combined into a single line, *Receivables from securities financing transactions.* Similarly, *Cash collateral on securities lent* and *Repurchase agreements* have been combined into a single line, *Payables from securities financing transactions.*
- Finance lease receivables, previously presented within *Loans*, are now presented within *Other financial assets measured at amortized cost.*
- Precious metal positions previously presented in *Trading portfolio assets* are now presented within the new line *Other non-financial assets.*
- *Financial liabilities designated at fair value* have been split into two lines: *Debt issued designated at fair value* and *Other financial liabilities designated at fair value.*
- Obligations of UBS AG from funding received from UBS Group AG or its subsidiaries, which are not within the UBS AG scope of consolidation, previously included within *Due to customers, are* now presented separately within *Funding from UBS Group AG and its subsidiaries.*

Note 1 Basis of accounting (continued)

The table below illustrates the new balance sheet presentation of assets and liabilities as of 31 December 2017 in comparison with the presentation in the Annual Report 2017. The presentation of the components of equity has not changed, and therefore, for illustration purposes, total liabilities and equity are presented in a single line in the table. The table does not reflect any of the effects of adopting the classification and measurement requirements of IFRS 9, which are presented in section 1.4.5 under *Reclassification and remeasurement of carrying amounts and recognition of ECL upon adoption of IFRS 9.*

Retrospective amendments to UBS AG's balance sheet presentation as of 31 December 2017

CHF million		31.12.17	31.12.17
Assets	References	Former presentation	Revised presentation
Cash and balances at central banks		87,775	87,775
Loans and advances to banks (formerly: Due from banks)		13,693	13,693
Receivables from securities financing transactions (new line)	1		89,633
Cash collateral on securities borrowed (newly included in Receivables from securities financing transactions)	1	12,393	
Reverse repurchase agreements (newly included in Receivables from securities financing transactions)	1	77,240	
Cash collateral receivables on derivative instruments		23,434	23,434
Loans and advances to customers (formerly: Loans)	2	321,718	320,659
Financial assets held to maturity (superseded)	3	9,166	
Other financial assets measured at amortized cost (new line)	2,3,7		36,935
Total financial assets measured at amortized cost			572,129
Financial assets at fair value held for trading (formerly: Trading portfolio assets)	4	130,807	126,244
of which: assets pledged as collateral that may be sold or repledged by counterparties		*35,363*	*35,363*
Derivative financial instruments (formerly: Positive replacement values)		118,229	118,229
Brokerage receivables (new line, formerly included within Other assets)		n/a	n/a
Financial assets at fair value not held for trading (new line)	5		58,556
Financial assets designated at fair value	5	58,556	
Total financial assets measured at fair value through profit or loss			303,028
Financial assets available for sale (superseded)	6	8,665	
Financial assets measured at fair value through other comprehensive income (new line)	6		8,665
Investments in associates		1,018	1,018
Property, equipment and software		7,985	7,985
Goodwill and intangible assets		6,398	6,398
Deferred tax assets		9,783	9,783
Other non-financial assets (new line)	4,7		7,358
Other assets (superseded)	7	29,505	
Total assets		916,363	916,363
Liabilities			
Amounts due to banks		7,533	7,533
Payables from securities financing transactions (new line)	8		17,044
Cash collateral on securities lent (newly included in Payables from securities financing transactions)	8	1,789	
Repurchase agreements (newly included in Payables from securities financing transactions)	8	15,255	
Cash collateral payables on derivative instruments		30,247	30,247
Customer deposits (formerly: Due to customers)	9	447,141	412,392
Funding from UBS Group AG and its subsidiaries (new line, formerly included within Due to customers)	9		34,749
Debt issued measured at amortized cost		104,749	104,749
Other financial liabilities measured at amortized cost (new line)	11		37,133
Total financial liabilities measured at amortized cost			643,847
Financial liabilities at fair value held for trading (formerly: Trading portfolio liabilities)		30,463	30,463
Derivative financial instruments (formerly: Negative replacement values)		116,134	116,134
Brokerage payables designated at fair value (new line, formerly included within Other liabilities)		n/a	n/a
Financial liabilities designated at fair value (superseded)	10	54,202	
Debt issued designated at fair value (new line)	10		49,502
Other financial liabilities designated at fair value (new line)	10,11		16,223
Total financial liabilities measured at fair value through profit or loss			212,323
Provisions		3,084	3,084
Other non-financial liabilities (new line)	11		6,335
Other liabilities (superseded)	11	54,990	
Total liabilities		865,588	865,588
Total liabilities and equity		916,363	916,363

Note 1 Basis of accounting (continued)

Explanatory footnotes to the table "Retrospective amendments to UBS AG balance sheet presentation"

Table ref.	Description of presentation changes applied retrospectively to the balance sheet as of 31 December 2017
Balance sheet assets	
1	Cash collateral on securities borrowed of CHF 12,393 million and reverse repurchase agreements of CHF 77,240 million as of 31 December 2017 are now presented as a total of CHF 89,633 within a single line, *Receivables from securities financing transactions*.
2	Finance lease receivables of CHF 1,059 million as of 31 December 2017, previously presented within *Loans*, are now presented within *Other financial assets measured at amortized cost*.
3	*Financial assets held to maturity* measured at amortized cost of CHF 9,166 million as of 31 December 2017 are now presented within *Other financial assets measured at amortized cost*.
4	Precious metal positions of CHF 4,563 million as of 31 December 2017, previously presented in *Trading portfolio assets*, are now presented within *Other non-financial assets*.
5	Financial assets designated at fair value through profit or loss of CHF 58,556 million as of 31 December 2017, previously presented in a separate line, are now presented within *Financial assets at fair value not held for trading*.
6	Debt and equity instruments of CHF 8,665 million as of 31 December 2017 previously presented in *Financial assets available for sale* are now presented within *Financial assets measured at fair value through other comprehensive income*.
7	The reporting line *Other assets* has been split into two new reporting lines, *Other financial assets measured at amortized cost* and *Other non-financial assets*. – Assets of CHF 29,505 million as of 31 December 2017, previously presented within Other assets, are now presented within Other assets measured at amortized cost (CHF 26,710 million) and Other non-financial assets (CHF 2,795 million). – Financial assets now presented within Other financial assets measured at amortized cost include brokerage receivables of CHF 19,080 million, debt securities of CHF 9,166 million, loans to financial advisors of CHF 3,118 million and other assets amounting to CHF 5,571 million. Refer to Note 11 a) for more information. – Refer to Note 11 b) for more information on assets now presented within *Other non-financial assets.*
Balance sheet liabilities	
8	Cash collateral on securities lent of CHF 1,789 million and repurchase agreements of CHF 15,255 million as of 31 December 2017 are now presented within a single line, *Payables from securities financing transactions*.
9	Obligations of UBS AG from funding received from UBS Group AG or its subsidiaries of CHF 34,749 million as of 31 December 2017, which are not within the UBS AG scope of consolidation and were previously included within *Due to customers*, are now presented separately within *Funding from UBS Group AG and its subsidiaries*.
10	Financial liabilities designated at fair value through profit or loss of CHF 54,202 million as of 31 December 2017 are now presented within *Debt issued designated at fair value* (CHF 49,502 million) and *Other financial liabilities designated at fair value* (CHF 4,700 million).
11	The reporting line *Other liabilities* has been split into three new reporting lines, *Other financial liabilities measured at amortized cost*, *Other financial liabilities designated at fair value* and *Other non-financial liabilities*. – Liabilities amounting to CHF 54,990 million as of 31 December 2017, previously presented within *Other liabilities,* are now presented within *Other financial liabilities measured at amortized cost* (CHF 37,133 million, thereof CHF 29,646 million brokerage payables), within *Other financial liabilities designated at fair value* (amounts due under unit-linked investment contracts of CHF 11,523 million) and within *Other non-financial liabilities* (CHF 6,335 million). – Refer to note 11 c) for more information on financial liabilities now presented within *Other financial liabilities measured at amortized cost.* – Refer to note 11 d) for more information on financial liabilities now presented within *Other financial liabilities designated at fair value.* – Refer to note 11 e) for more information on liabilities now presented within *Other non-financial liabilities.*

Note 1 Basis of accounting (continued)

1.4.5 Transition to IFRS 9 as of 1 January 2018

Transition to Classification and measurement requirements

As set out in the amended accounting policies in Note 1.3, IFRS 9 requires all financial assets, except equity instruments and derivatives, to be classified at amortized cost, at fair value through other comprehensive income (FVOCI) or at fair value through profit or loss (FVTPL), based on the business model for managing the respective assets and their contractual cash flow characteristics.

Changes resulting from the application of IFRS 9 classification and measurement requirements as of 1 January 2018 have been applied as follows:

- Determination of the business model was made based on facts and circumstances as of the 1 January 2018 transition date;
- De-designations and new designations of financial instruments at FVTPL, pursuant to transition requirements of IFRS 9, have been carried out as of 1 January 2018. These reassessments resulted in:
  i. the de-designation of certain financial assets designated at FVTPL, as they are managed on a fair value basis, and therefore are mandatorily measured at fair value, or no longer managed on a fair value basis but held to collect the contractual cash flows and therefore are measured at amortized cost;
  ii. newly designated financial liabilities at FVTPL (e.g., brokerage payables) in order to achieve measurement consistency with associated financial assets that are mandatorily measured at FVTPL (e.g., brokerage receivables).

For UBS AG, the most significant IFRS 9 classification and measurement changes on transition to IFRS 9 are as follows:

- financial assets that no longer qualify for amortized cost accounting under IFRS 9 have been classified at FVTPL because their cash flow characteristics do not satisfy the solely payments of principal and interest criteria (e.g., auction rate securities and certain brokerage receivables);
- lending arrangements that no longer qualify for amortized cost accounting under IFRS 9 are classified at FVTPL because the business model within which they are managed does not have an objective to hold financial assets in order to collect the contractual cash flows or to collect contractual cash flows and sell (e.g., certain Investment Bank lending arrangements);
- equity instruments classified as available for sale under IAS 39 are classified at FVTPL under IFRS 9; and
- financial liabilities are newly designated under IFRS 9 at FVTPL, from amortized cost accounting, to align with conclusions reached for associated financial assets that will be measured at FVTPL (e.g., brokerage payables).

Effect on UBS AG income statement presentation

Upon adoption of IFRS 9, the reclassification of auction rate securities, certain loans in the Investment Bank, certain repurchase agreements and brokerage balances from amortized cost to FVTPL has resulted in the interest income from these instruments moving from Interest income (expense) from financial instruments measured at amortized cost to interest income (expense) from financial instruments measured at fair value through profit or loss. These changes have been applied prospectively from 1 January 2018.

Effect on UBS AG Statement of cash flows

Following the adoption of IFRS 9, changes have been made to the Statement of cash flows to reflect the changes arising from financial instruments that have been reclassified on the balance sheet. In particular, cash flows from certain financial assets previously measured as available-for-sale assets at fair value through other comprehensive income have been reclassified from investing activities to operating activities as the assets are fair valued through profit or loss effective 1 January 2018.

Transition to expected credit loss requirements

As set out in UBS AG's amended accounting policies in Note 1.3, IFRS 9 introduces a forward-looking ECL approach, which is intended to result in an earlier recognition of credit losses compared with the incurred-loss impairment approach for financial instruments under IAS 39 and the loss-provisioning approach for financial guarantees and loan commitments under IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*.

The majority of ECL calculated as of the transition date relates to the private and commercial mortgage portfolio and corporate lending in Switzerland within Personal & Corporate Banking.

Note 1 Basis of accounting (continued)

Models at transition

For the purpose of implementing ECL under IFRS 9, UBS AG has leveraged existing 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.

Existing models have been adapted and 29 new models have been developed for the ECL calculation 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 TTC parameters. Management adjustments have also been made. UBS AG has leveraged its existing model risk framework, including the key model validation control executed by Model Risk Management & Control. New and revised models have been approved by UBS's GMGB.

The assignment of internal counterparty rating grades and the determination of default probabilities for the purposes of Basel III remain unchanged.

→ **Refer to "Credit risk models" in the "Risk, treasury and capital management" section of our Annual Report 2017 for more information**

→ **Refer to "Significant accounting and financial reporting changes in 2018" in the "Operating environment and strategy" section of our Annual Report 2017 for more information**

Scenarios and scenario weights at transition

As outlined in Note 1.3, UBS AG uses four different economic scenarios in the ECL calculation: an upside, a baseline, a mild downside and a severe downside scenario. ECL calculated on transition have been determined for each of the scenarios and subsequently weighted based on the probabilities in the table "Economic scenarios and weights applied."

Economic scenarios and weights applied

ECL scenario	Assigned weights in % (1.1.18)
Upside	20.0
Baseline	42.5
Mild downside	30.0
Severe downside	7.5

UBS AG has established IFRS 9 ECL Scenario and Operating Committees to propose and approve the selection of the scenarios and weights to be applied and to monitor whether appropriate governance exists.

Macroeconomic and other factors: For each of the economic scenarios, UBS AG forecasts a wide range of forward-looking macroeconomic, market and other factors. Historical information was used to support the identification of the key factors and to project their development under the different scenarios. As the forecast horizon increases, the availability of information decreases and judgment increases. For cycle-sensitive PD and LGD determination purposes, UBS AG projected those 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 the ECL calculation vary by type of exposure and are determined during the credit cycle index model development process in close alignment with practitioner judgment. 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.

The following represent the most significant macroeconomic factors for UBS AG and could substantially change the estimated ECL:

- GDP growth rates, given their significant effect on borrowers' performance
- House price indices, given their significant effect on mortgage collateral valuations
- Unemployment rates, given their significant effect on private clients' ability to meet contractual obligations
- Interest rates, given the significant effect on the counterparties' abilities to service their debt
- Equity indices, given their relevance for equity collateral valuation
- Consumer price indices, given their overall relevance for companies' performance, private clients' purchasing power and economic stability.

Macroeconomic and other factors at transition

Assumptions around the most important forward-looking economic factors for Switzerland, the US and other regions as applied in each of the economic scenarios to determine ECL at the date of transition can be summarized as follows:

In the upside scenario, which assumes GDP growth rising above trend in most countries with only a moderate rise in inflation and ongoing accommodative monetary policies, GDP growth in Switzerland peaks at around 5% annually. Strong growth leads to a decline in unemployment to very low levels (below 1%) by 2020. Asset prices grow at robust pace, with equity prices increasing by approximately 10% annually and house prices (single-family homes) rising by approximately 4% annually. Policy and short-term interest rates remain low over the entire scenario, while government bond yields experience a sustained increase.

Note 1 Basis of accounting (continued)

In the US and the rest of the world, the scenario shows broadly similar features, with growth accelerating in Year 1 before steadily returning toward trend by Year 3. Specifically in the US, GDP growth accelerates at a slightly faster pace than in Switzerland, although the US experiences a slightly less substantial improvement in the unemployment rate by Year 3. The degree of policy tightening is marginally greater over the scenario horizon and, as in Switzerland, long-term government bond yields rise more significantly than short-term rates, and to a greater degree.

For the baseline scenario, which is modelled along our business plan assumptions of a continuation of overall important global growth, Swiss GDP growth remains between 1% and 2% annually over the three years of the scenario. Moderate growth results in a very mild increase of unemployment, which stabilizes at around 3.5%. Asset price growth is also moderate, with the Swiss equity price index rising by approximately 8% annually, while house prices grow by less than 1% annually. Policy rates, short-term interest rates and government bond yields increase very gradually over the three years of the scenario by approximately 50 basis points.

GDP growth in the US remains relatively stable, and faster than in Switzerland. Monetary policy tightens at a similar pace to Switzerland and, combined with a modest decline in the unemployment rate, helps to keep inflation in check. US equity prices slightly underperform their Swiss counterparts, while house prices outperform relatively stagnant Swiss house price growth. In the rest of the world, growth remains buoyant, with moderating growth in both Europe and China contrasting with accelerating growth in other emerging markets.

The mild downside scenario is based on a monetary policy tightening assumption, implemented to deflate a potential asset price bubble, causing Swiss GDP to decline by almost 1% in the first year of the scenario. The unemployment rate rises to roughly 5%. Equity prices fall by more than 20% over three years, while house prices decline by 15% over the same period. The fall of the nominal asking rent index is cushioned by higher interest rates, which register a more moderate decline than house prices. Short-term interest rates rise significantly due to monetary tightening, as well as government bond yields.

In this scenario, inflation in the US accelerates rapidly, leading to a sharp rise in short-term interest rates, similar to Switzerland. GDP growth averages a similar pace to Switzerland over three years, while equity and house prices also fall by a broadly similar degree to their Swiss equivalents. In the rest of the world, growth is also weighed down, particularly in more vulnerable emerging markets such as Russia, Turkey and Brazil, as interest rates and credit spreads rise sharply.

The severe downside scenario is modeled to mimic a severe recession caused by an event affecting Switzerland's competitiveness in key export markets, with Swiss GDP shrinking almost 7% in the first year of the scenario. The severe recession results in a substantial increase in unemployment, which peaks at around 9%. Asset prices plummet, with the Swiss equity index falling more than 55% over three years, and house prices declining 27% over the same period. Policy and short-term interest rates remain low over the entire scenario horizon.

US GDP and unemployment deteriorate by a lesser degree than in Switzerland, and while house and equity prices decline sharply, the effects are also less severe than in Switzerland. With more scope to cut rates than the SNB, short-term rates fall in the US. In the rest of the world, growth also slows sharply, particularly in the eurozone and neighboring emerging markets such as Turkey and Russia.

ECL measurement period at transition

As set out in Note 1.3, for the majority of ECL-relevant instruments, the contractual maturity is used to calculate the measurement period, with this capped at 12 months when stage 1 ECL are required. In addition, 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 has been applied for credit cards and 12 months for master credit facilities. UBS AG's ECL-relevant financial instruments have relatively short average maturities, which significantly contribute to the level of ECL on transition.

SICR determination at transition

The identification of instruments for which an SICR has been determined since initial recognition and the corresponding allocation to stage 2 at transition generally follow the principles described in the relevant accounting policy provided in Note 1.3. Furthermore, the following principles have been applied:

General: In estimating the retrospective lifetime PDs, we have considered the economic conditions over the relevant prior periods and the general significant uncertainty inherent in such approximation to determine the allocation of instruments to stage 2 at transition.

Real estate financing: The Basel III rating methodology applied to the majority of income-producing real estate financings within Personal & Corporate Banking, which is leveraged for IFRS 9 ECL calculations, was significantly changed in 2017. As a consequence, there is no comparable rating on origination to determine whether an SICR has arisen over time. As permitted by the IFRS 9 transition requirements, a lifetime ECL allowance has therefore been recognized for certain real estate financing positions and will continue to be recognized until the positions are derecognized.

Other portfolios, including private mortgages and commercial SME clients: The Basel III rating models for other key portfolios in Personal & Corporate Banking, in particular for private client mortgages and commercial clients in the small and medium-sized enterprise (SME) segment, have recently been subject to a major redesign. While the methodology remained essentially the same and the calibration to the portfolios' average TTC PD value unchanged, the effect on the stage allocation is significant. This is due to the fact that the introduction of new models has led to a broader and different distribution of borrowers across the rating spectrum; while there was no material effect on those counterparties with an uplift in their rating, some of those that had a downward shift in their rating triggered the SICR threshold and a reclassification into stage 2 at transition.

The table on the following pages provides a detailed overview of the IFRS 9 transition effects as of 1 January 2018. This includes:
- reclassification of IAS 39 carrying amounts to the new categories applicable under IFRS 9;
- remeasurement of carrying amounts due to reclassification (any remeasurement to fair value and / or reversal of IAS 39 allowances or IAS 37 provisions for assets moving from amortized cost to fair value); and
- recognition of IFRS 9 ECL for in-scope assets, off-balance sheet positions and other credit lines.

The following table also includes the effects recognized for deferred tax assets and therefore the total impact provided in *Retained earnings* in the table is net of tax effects. Explanatory footnotes provided after the table provide additional details on these changes.

Note 1 Basis of accounting (continued)

Reclassification and remeasurement of carrying amounts and recognition of ECL upon adoption of IFRS 9

	31.12.17		1.1.18			
CHF million	Classification under IAS 39	Carrying amount (IAS 39)	Reclassification (of IAS 39 carrying amounts)	Remeasurement due to reclassification incl. reversal of IAS 39/ IAS 37 allowances/ provisions	Recognition of ECL (IFRS 9)	Carrying amount (IFRS 9)
Assets						
Cash and balances at central banks	Loans and receivables	87,775			0	87,775
Loans and advances to banks	Loans and receivables	13,693	(17)		(3)[12]	13,673
to: Brokerage receivables	*Loans and receivables*		*(17)[1]*			
Receivables from securities financing transactions	Loans and receivables	89,633	(4,957)		(2)[12]	84,674
to: Financial assets at fair value not held for trading	*Loans and receivables*		*(4,957)[2]*			
Cash collateral receivables on derivative instruments	Loans and receivables	23,434			0	23,434
Loans and advances to customers	Loans and receivables	320,659	(7,822)	0	(235)[12]	312,602
to: Financial assets at fair value not held for trading	*Loans and receivables*		*(2,678)[3]*			
to: Brokerage receivables	*Loans and receivables*		*(4,691)[1]*			
to: Financial assets at fair value held for trading	*Loans and receivables*		*(468)[4]*			
from: Financial assets at fair value not held for trading	*FVTPL (designated)*		*8[5]*	*0*		
from: Financial assets at fair value held for trading	*FVTPL (held for trading)*		*6[5]*			
Other financial assets measured at amortized cost	Loans and receivables, held to maturity	36,935	(18,525)	0	(35)[12]	18,375
to: Brokerage receivables	*Loans and receivables*		*(19,080)[1]*			
from: Financial assets measured at fair value through other comprehensive income	*Available-for-sale*		*555[6]*	*0*		
Total financial assets measured at amortized cost		572,129	(31,321)	0	(275)	540,533
Financial assets at fair value held for trading	FVTPL (held for trading)	126,244	(10,854)	(15)		115,375
to: Loans and advances to customers	*FVTPL (held for trading)*		*(6)[5]*			
to: Financial assets at fair value not held for trading	*FVTPL (held for trading)*		*(11,316)[7]*			
from: Loans and advances to customers	*Loans and receivables*		*468[4]*	*(15)[4]*		
of which: assets pledged as collateral that may be sold or repledged by counterparties	*FVTPL (held for trading)*	*35,363*				*35,363*
Derivative financial instruments	FVTPL (derivatives)	118,229				118,229
Brokerage receivables	Loans and receivables		23,787			23,787
from: Loans and advances to banks	*Loans and receivables*		*17[1]*			
from: Loans and advances to customers	*Loans and receivables*		*4,691[1]*			
from: Other financial assets measured at amortized cost	*Loans and receivables*		*19,080[1]*			
Financial assets at fair value not held for trading	FVTPL (designated)	58,556[9]	20,297	(287)		78,566
to: Loans and advances to customers	*FVTPL (designated)*		*(8)[5]*			
from: Financial assets at fair value held for trading	*FVTPL (held for trading)*		*11,316[7]*			
from: Receivables from securities financing transactions	*Loans and receivables*		*4,957[2]*	*(1)*		
from: Loans and advances to customers	*Loans and receivables*		*2,678[3]*	*(286)[3]*		
from: Financial assets measured at fair value through other comprehensive income	*Available-for-sale*		*1,356[8]*			
Total financial assets measured at fair value through profit or loss		303,028	33,231	(303)		335,957
Financial assets measured at fair value through other comprehensive income	**Available-for-sale**	8,665	(1,911)			6,755[10]
to: Other financial assets measured at amortized cost	*Available-for-sale*		*(555)[6]*			
to: Financial assets at fair value not held for trading	*Available-for-sale*		*(1,356)[8]*			
Investments in associates		1,018				1,018
Property, equipment and software		7,985				7,985
Goodwill and intangible assets		6,398				6,398
Deferred tax assets		9,783		58[11]	64[11]	9,905
Other non-financial assets		7,358				7,358
Total assets		916,363		(245)	(211)	915,908

Note 1 Basis of accounting (continued)

Reclassification and remeasurement of carrying amounts and recognition of ECL upon adoption of IFRS 9 (continued)

	31.12.17		1.1.18			
CHF million	Classification under IAS 39	Carrying amount (IAS 39)	Reclassification (of IAS 39 carrying amounts)	Remeasurement due to reclassification incl. reversal of IAS 39/ IAS 37 allowances/ provisions	Recognition of ECL (IFRS 9)	Carrying amount (IFRS 9)
Liabilities						
Amounts due to banks	Amortized cost	7,533				7,533
Payables from securities financing transactions	Amortized cost	17,044	(5,081)			11,963
to: Other financial liabilities designated at fair value	*Amortized cost*		*(5,081)[13]*			
Cash collateral payables on derivative instruments	Amortized cost	30,247				30,247
Customer deposits	Amortized cost	412,392	(5,268)			407,124
to: Brokerage payables designated at fair value	*Amortized cost*		*(5,268)[14]*			
Funding from UBS Group AG and its subsidiaries	Amortized cost	34,749				34,749
Debt issued measured at amortized cost	Amortized cost	104,749				104,749
Other financial liabilities measured at amortized cost	Amortized cost	37,133	(29,646)	(4)		7,482
to: Brokerage payables designated at fair value	*Amortized cost*		*(29,646)[14]*			
Derecognition: deferred fees on other loan commitments	*Amortized cost*			*(4)[4]*		
Total financial liabilities measured at amortized cost		643,847	(39,996)	(4)		603,848
Financial liabilities at fair value held for trading	FVTPL (held for trading)	30,463				30,463
Derivative financial instruments	FVTPL (derivatives)	116,134		57		116,192
Recognition: Loan commitments	*Amortized cost – off-balance sheet*			*60[4]*		
Derecognition: Loan commitments	*FVTPL (derivatives)*			*(2)[5]*		
Brokerage payables designated at fair value	Amortized cost		34,915			34,915
from: Customer deposits	*Amortized cost*		*5,268[14]*			
from: Other financial liabilities measured at amortized cost	*Amortized cost*		*29,646[14]*			
Debt issued designated at fair value	FVTPL (designated)	49,502				49,502
Other financial liabilities designated at fair value	FVTPL (designated)	16,223	5,081	(5)		21,300
from: Payables from securities financing transactions	*Amortized cost*		*5,081[13]*	*(5)[13]*		
Total financial liabilities measured at fair value through profit or loss		212,323	39,996	53		252,371
Provisions		3,084			74[12]	3,158
Other non-financial liabilities		6,335				6,335
Total liabilities		865,588		49	74	865,711
Equity						
Share capital		386				386
Share premium		26,966				26,966
Retained earnings		29,102	72[8,15]	(293)	(284)	28,597
Other comprehensive income recognized directly in equity, net of tax		(5,736)	(72)[8,15]			(5,808)
Equity attributable to shareholders		50,718	0	(293)[15]	(284)[15]	50,141
Equity attributable to non-controlling interests		57				57
Total equity		50,775	0	(293)	(284)	50,198
Total liabilities and equity		916,363	0	(245)	(211)	915,908

Note 1 Basis of accounting (continued)

Explanatory footnotes to the table "Reclassification and remeasurement of carrying amounts and recognition of ECL upon adoption of IFRS 9"

Table ref.	Description of classification or remeasurement changes on adoption of IFRS 9 as of 1 January 2018
1	Certain customer and prime brokerage receivable balances, in the Investment Bank and Global Wealth Management, fail the solely payments of principal and interest (SPPI) criteria for measurement at amortized cost. This includes CHF 4,691 million previously included within *Loans and advances to customers*, CHF 17 million from *Loans and advances to banks* and CHF 19,080 million previously included within *Other financial assets measured at amortized cost*. The receivables are managed under a business model whose objective is to hold the assets to collect contractual cash flows. However, the reported receivables represent an aggregation of cash receivable and payable balances that form a single unit of account at the client level and generate a return that does not constitute consideration for the time value of money, credit risk and other basic lending risks. The SPPI criterion is therefore not met and under IFRS 9 the receivables are mandatorily measured at FVTPL and separately presented as *Brokerage receivables*. There was no difference between the amortized cost carrying amount and the fair value as of 1 January 2018 and therefore no remeasurement gain or loss has been recognized.
2	Based on the business model assessment under IFRS 9, certain reverse repurchase agreements with a carrying amount of CHF 4,957 million as of 31 December 2017 were determined to be managed on a fair value basis and were therefore reclassified from amortized cost to FVTPL measurement under IFRS 9. The carrying value has been reclassified from *Receivables from securities financing transactions* to *Financial assets at fair value not held for trading* as of 1 January 2018. A remeasurement loss of CHF 1 million has been recorded in *Retained earnings*. CHF 11,490 million of forward starting reverse repurchase agreements are newly accounted for as derivatives, prior to settlement, from 1 January 2018 as they are managed on a fair value basis. The fair value of the derivatives as of 1 January 2018 was immaterial.
3	Certain positions previously included within *Loans and advances to customers* with a carrying amount of CHF 2,678 million as of 31 December 2017 were reclassified to *Financial assets at fair value not held for trading* upon adoption of IFRS 9. This includes: – auction rate securities (CHF 2,114 million) that are held in Corporate Center and that contain an embedded leverage feature triggering the failure of the SPPI criteria. – certain loans in the Investment Bank (CHF 552 million) and in Corporate Center (CHF 12 million), which either fail the SPPI criteria or are held within a business model with an intent to sell or substantially hedge the primary risks. These assets are mandatorily measured at FVTPL under IFRS 9. A corresponding net remeasurement loss of CHF 286 million was recognized in *Retained earnings* related to these reclassifications. This remeasurement loss also included reversal of specific credit loss allowances (CHF 11 million).
4	Due to a change in the underlying business model, loans and advances to customers with a carrying amount of CHF 468 million as of 31 December 2017 have been reclassified to *Financial assets at fair value held for trading* as of 1 January 2018. A corresponding net remeasurement loss of CHF 15 million, which includes the reversal of specific IAS 39 credit loss allowances, was recognized in *Retained earnings* related to this reclassification. Irrevocable loan commitments that are contractually linked with these financial assets are now recognized as *Derivative financial instruments* (derivative liabilities) and are measured at FVTPL as of 1 January 2018. This reclassification resulted in a CHF 60 million loss with a corresponding entry to *Retained earnings*. Liabilities related to deferred fees of CHF 4 million related to these loan commitments recorded as *Other financial liabilities measured at amortized cost* at 31 December 2017 were derecognized with a corresponding entry to *Retained earnings*.
5	Financial assets with a carrying amount of CHF 14 million as of 31 December 2017 were reclassified to *Loans and advances to customers* from *Financial assets at fair value not held for trading* (CHF 8 million) and from *Financial assets at fair value held for trading* (CHF 6 million) given management's intent to hold these financial assets to collect contractual cash flows. Loan commitments related to these financial assets, which were recognized as derivative liabilities with a carrying value of CHF 2 million as of 31 December 2017, were accordingly derecognized on 1 January 2018 with a corresponding entry to *Retained earnings*.
6	Certain debt instruments with a carrying amount of CHF 555 million as of 31 December 2017 were formerly classified as available for sale and measured at FVOCI under IAS 39 but are measured at amortized cost under IFRS 9. Those positions, which are held to collect cash flows solely representing payment of principal and interest, are presented within *Other financial assets measured at amortized cost* as of 1 January 2018. The fair value of these assets was consistent with the amortized cost value as of 1 January 2018 and no remeasurement gain or loss has been recognized.
7	Upon adopting IFRS 9, UBS AG has elected to refine the assets classified within *Financial assets at fair value held for trading* to carve out those that are segregated from UBS AG's trading activities, where UBS AG's role is primarily to manage the assets on a fair value basis on behalf of others. Instead, such assets will be presented alongside others managed on a fair value basis within *Financial assets at fair value not held for trading*. As a consequence of this refinement, UBS AG has reclassified assets held to hedge unit linked investment contracts of CHF 11,316 million from *Financial assets at fair value held for trading* to *Financial assets at fair value not held for trading* as of 1 January 2018. No remeasurement gain or loss has been recognized.

Note 1 Basis of accounting (continued)

Table ref.	Description of classification or remeasurement changes on adoption of IFRS 9 as of 1 January 2018 (continued)
8	UBS AG holds certain global and local liquidity buffers that were determined to be managed on a fair value basis as management utilizes fair value information for reporting and decision making purposes. Therefore, assets previously classified as available for sale under IAS 39 with a carrying amount of CHF 620 million as of 31 December 2017 were reclassified to *Financial assets at fair value not held for trading*. An unrealized gain of CHF 5 million related to these positions was reclassified from *Other comprehensive income* to *Retained earnings*. Additionally, equity instruments and investment fund units previously classified as available for sale under IAS 39 with a carrying amount of CHF 736 million as of 31 December 2017 were reclassified to *Financial assets at fair value not held for trading* under the revised IFRS 9 measurement rules. A related unrealized gain in OCI of CHF 199 million has been reclassified to *Retained earnings*. Additionally, a net tax expense of CHF 131 million was transferred from OCI to *Retained earnings* related to the positions above which were reclassified out of the IAS 39 available-for-sale category.
9	Assets previously designated at FVTPL with a carrying amount of CHF 58,556 million as of 31 December 2017 are no longer designated as such under IFRS 9, as it was determined that these assets were either held in a business model that is managed on a fair value basis, did not meet the SPPI criteria, or did meet the SPPI criteria and are held in a hold to collect business model. Of the total, assets with a carrying amount of CHF 58,548 million are now mandatorily measured at FVTPL and included within *Financial assets at fair value not held for trading*. The remaining assets with a carrying amount of CHF 8 million have been de-designated and were reclassified to *Loans and advances to customers* given a change in business model to hold to collect (refer to footnote 5).
10	Certain debt instruments with a carrying amount of CHF 6,755 million as of 31 December 2017, were formerly classified as available for sale under IAS 39 and are measured at FVOCI under IFRS 9. These instruments include U.S. government bonds and U.S. government sponsored mortgage-backed securities and other debt that are held in a business model whose objective is achieved by both collecting contractual cash flows and selling, and that meet the SPPI criteria. These positions are now presented within *Financial assets measured at fair value through other comprehensive income*.
11	Deferred tax assets of CHF 122 million have been recognized in connection with the adoption of IFRS 9. Of the total effect, CHF 64 million relates to the recognition of ECL and CHF 58 million relates to classification and measurement changes upon adoption of IFRS 9.
12	Upon adoption of the ECL requirements of IFRS 9, a transition impact of CHF 348 million was recognized, consisting of CHF 144 million of stage 1 allowances, CHF 188 million of stage 2 allowances and an incremental increase in stage 3 allowances of CHF 16 million. The effect was mainly recognized within *Loans and advances to customers* (CHF 235 million), with effects also recognized in *Other financial assets measured at amortized cost* (CHF 35 million), *Loans and advances to banks* (CHF 3 million), *Receivables from securities financing transactions* (CHF 2 million) and *Provisions* (CHF 74 million).
13	Certain repurchase agreements with a carrying amount of CHF 5,081 million as of 31 December 2017 have been designated at FVTPL as they are managed in conjunction with reverse repurchase agreements that are mandatorily measured at FVTPL under IFRS 9. These amounts are included within *Other financial liabilities designated at fair value* as of 1 January 2018. A remeasurement gain of CHF 5 million has been recognized in *Retained earnings* as of 1 January 2018 related to this reclassification. CHF 7,730 million of forward starting repurchase agreements are newly accounted for as derivatives, prior to settlement, from 1 January 2018 as they are managed on a fair value basis. The fair value of the derivatives as of 1 January 2018 was immaterial.
14	To achieve measurement consistency with reclassified customer and prime brokerage receivables that are measured at FVTPL following adoption of IFRS 9, certain customer deposits with a carrying amount of CHF 5,268 million and prime brokerage payables with a carrying amount of CHF 29,646 million as of 31 December 2017 have been designated at FVTPL and are presented within *Brokerage payables designated at fair value* as of 1 January 2018. There was no difference between the amortized cost carrying amount and the fair value as of 1 January 2018 and therefore no remeasurement gain or loss has been recognized.
15	The adoption of IFRS 9 has resulted in a reduction to IFRS consolidated equity as of 1 January 2018 of CHF 577 million. This effect is comprised of classification and measurement changes of CHF 351 million on a pre-tax basis and CHF 293 million net of tax, as well as effects from the implementation of ECL credit loss methodology of CHF 348 million on a pre-tax basis and CHF 284 million net of tax. In addition, CHF 72 million has been reclassified from *Other comprehensive income* recognized directly in equity, net of tax, to *Retained earnings* (refer to footnote 8 above), with no overall impact on equity attributable to shareholders.

Note 1 Basis of accounting (continued)

Reconciliation of allowances and provisions on adoption of IFRS 9 as of 1 January 2018

The table below provides a reconciliation from the IAS 39 allowances / IAS 37 provisions to the IFRS 9 ECL allowances / provisions recognized as of 1 January 2018 upon adoption of IFRS 9.

Reconciliation of allowances and provisions on adoption of IFRS 9

	31.12.17		1.1.18	
CHF million	Loss allowances and provisions (IAS 39 / IAS 37)	Reversal of allowances (IAS 39)	Recognition of ECL (IFRS 9)[1]	Allowances for ECL / Provisions for ECL (IFRS 9)
On-balance sheet				
Cash and balances at central banks			0	0
Loans and advances to banks	(3)		(3)	(5)
Receivables from securities financing transactions			(2)	(2)
Cash collateral receivables on derivative instruments			0	0
Loans and advances to customers	(658)	26[2]	(235)[3]	(867)
Other financial assets measured at amortized cost	(101)[4]		(35)	(136)
Total on-balance sheet	(761)	26	(275)	(1,011)
Off-balance sheet financial instruments and other credit lines				
Guarantees	(29)		(8)	(37)
Loan commitments	(4)		(32)	(36)
Other credit lines			(34)	(34)
Total off-balance sheet financial instruments and other credit lines	(33)		(74)	(107)
Total	(794)	26	(348)	(1,117)
of which: Stage 1			*(144)*	*(144)*
of which: Stage 2			*(188)*	*(188)*
of which: Stage 3			*(16)*[5]	*(785)*

1 Includes stage 1 and stage 2 expected credit losses and additional stage 3 expected credit losses. 2 The reversal of CHF 26 million of IAS 39 loss allowances relates to instruments reclassified from amortized cost to fair value through profit or loss on transition to IFRS 9. Refer also to footnotes 3 and 4 to the table "Reclassification and remeasurement of carrying amounts and recognition of ECL upon adoption of IFRS 9." 3 Includes the reversal of collective allowances of CHF 13 million. 4 Includes CHF 82 million related to loans to financial advisors for which an allowance was reported as a direct reduction of the carrying amount as of 31 December 2017. 5 The incremental increase in stage 3 allowances of CHF 16 million arises from additional consideration of forward looking scenarios under IFRS 9.

Note 1 Basis of accounting (continued)

IFRS 9 transition impact on other comprehensive income and retained earnings as of 1 January 2018

The table below presents the transition effects recognized in OCI and retained earnings upon adoption of IFRS 9.

IFRS 9 impact on other comprehensive income and retained earnings

CHF million	
Other comprehensive income recognized directly in equity, net of tax	
Reclassification of financial assets (available for sale to fair value through profit or loss) – equity instruments	(199)
Reclassification of financial assets (available for sale to fair value through profit or loss) – debt instruments	(5)
Tax (expense) / benefit	131
Total change in other comprehensive income	(72)
Retained earnings	
Remeasurement of financial assets (reclassified from amortized cost to fair value through profit or loss)	(303)
Reclassification of financial assets (reclassified from available for sale to fair value through profit or loss)	204
Recognition of ECL for on-balance sheet financial assets	(275)
Remeasurement of financial liabilities (reclassified from amortized cost to designated at fair value through profit or loss)	5
Recognition of derivative loan commitments measured at fair value through profit or loss	(60)
Derecognition of liabilities for deferred fees on other loan commitments	4
Derecognition of derivative loan commitments measured at fair value through profit or loss	2
Recognition of ECL for off-balance sheet positions	(74)
Tax (expense) / benefit	(9)
Total change in retained earnings	(505)
Total change in equity due to the adoption of IFRS 9	(577)

Note 1 Basis of accounting (continued)

1.4.6 Information on IFRS 9 exposures and allowances / provisions as of 1 January 2018

Key balance sheet and off-balance sheet positions as of 1 January 2018

The opening balances for certain key balance sheet and off-balance sheet positions subject to ECL, broken down by segments and stages, are presented in Note 8b. UBS AG has established ECL disclosure segments or "ECL segments" to disaggregate portfolios based on shared risk characteristics and on the same or similar rating methods applied. These segments are presented in the table below.

Segment	Private clients with mortgages	Real estate financing	Large corporate clients	SME clients	Financial intermediaries and hedge funds[1]	Sovereigns and public non-profit organizations[1]	Lombard	Other[1]
Segment description	Lending to private clients secured by owner-occupied real estate and personal account overdrafts of those clients	Rental or income-producing real estate financing to corporate clients secured by real estate	Lending to large corporate and multinational clients	Lending to small- and medium-sized corporate clients	Financial institutions and pension funds, including exposures to broker-dealers and clearing houses	Public and (sub-) sovereign partners, including cantons, cities and non-profit organizations	Loans secured by pledges of marketable securities, guarantees and other forms of collateral	Remaining smaller segments including commodity trade finance, credit cards and aircraft lending
Description of credit risk sensitivity	Sensitive to the interest rate environment, employment status and influence from regional effects (e.g., property values)	Sensitive to GDP development, the interest rate environment and regional effects (e.g., property values)	Sensitive to GDP development, seasonality and business cycles, collateral values (diverse collateral including real estate and other collateral types)	Sensitive to GDP development, the interest rate environment and to some extent, seasonality and business cycles, collateral values (diverse collateral including real estate and other collateral types)	Sensitive to GDP development, the interest rate environment, regulatory changes and political risk	Sensitive to (geo-) political events and GDP development (through tax revenues)	Sensitive to the market (e.g., changes in collateral, as well as in invested assets)	Sensitivity based on specific lending conditions
Personal & Corporate Banking	●	●	●	●	●	●	●	●
Global Wealth Management	●	●					●	●
Investment Bank			●		●	●		●
Corporate Center					●			●

1 Not subject to separate disclosure in Note 8.

1.5 Other new accounting standards and changes in accounting policies effective first quarter 2018

IFRS 7, *Financial Instruments: Disclosures*

IFRS 7, *Financial Instruments: Disclosures* was updated in line with IFRS 9, *Financial Instruments*. UBS AG adopted the revised standard on 1 January 2018. Given the first quarter of 2018 includes the date of initial application of IFRS 9, and to meet the general disclosure requirements for interim periods to describe the nature and effects of changes to policies and methods made since the last annual reporting, UBS AG provides the IFRS 9 transition disclosures as set out by IFRS 7 in the first quarter of 2018. Those transition disclosures are presented in Note 1.4. A full set of disclosures as required by revised IFRS 7 will be provided in UBS AG's annual Financial Statements as of and for the year ended 31 December 2018.

In line with amendments to IFRS 7, from 1 January 2018, UBS AG separately presents hedging gains and losses recognized during the period in the statement of comprehensive income and the amounts reclassified to the income statement. More specifically, the effective portion of changes in fair value of hedging instruments designated in net investment hedges (before tax) recognized in other comprehensive income and the amounts reclassified to income statement, previously included within *Foreign currency translation movements, before tax* and *Foreign exchange amounts reclassified to the income statement from equity*, are now presented in *Effective portion of changes in fair value of hedging instruments designated in net investment hedges, before tax*, and *Effective portion of changes in fair value of hedging instruments designated in net investment hedge reclassified to income statement*, respectively. Furthermore, the line *Foreign exchange amounts reclassified to the income statement from equity* was renamed to *Foreign currency translation differences on foreign operations reclassified to income statement*, and the line *Income tax relating to foreign currency translation movements* was renamed to *Income tax relating to foreign currency translations, including the impact of net investment hedges.*

IFRS 15 *Revenue from Contracts with Customers*

Effective from 1 January 2018, UBS AG adopted IFRS 15, *Revenue from Contracts with Customers*, which replaces IAS 18, *Revenue* and establishes principles for revenue recognition that apply to all contracts with customers except those relating to financial instruments, leases and insurance contracts and requires an entity to recognize revenue as performance obligations are satisfied.

IFRS 15 now specifies that variable consideration is only recognized when the related performance obligation has been satisfied and to the extent that it is highly probable that a significant reversal will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

IFRS 15 also provides guidance on when revenues and expenses should be presented on a gross or net basis and establishes a cohesive set of disclosure requirements for information on the nature, amount, timing and uncertainty of revenue and cash flows from contracts with customers.

As permitted by the transitional provisions of IFRS 15, UBS AG elected not to restate comparative figures. Instead, the cumulative effect of initially applying the standard was recognized as an adjustment to the opening balance of retained earnings. A transition adjustment of CHF 27 million on a pre-tax basis and CHF 24 million net of tax was posted to retained earnings to reverse income recognized prior to 1 January 2018 under IAS 18 that must be deferred under IFRS 15 either due to the variable consideration constraint (asset management performance fees of CHF 16 million) or because UBS AG does not have an enforceable right to a specified amount of consideration (commission-sharing agreements for research services of CHF 11 million).

The adoption of IFRS 15 resulted in changes to UBS AG's accounting policies applicable from 1 January 2018. Accounting policies set out in Note 1.3.2 replace item 4 of Note 1a) in the UBS AG consolidated annual Financial Statements for the year ended 31 December 2017.

Following the adoption of IFRS 15, fee and commission income is presented in the income statement separately from fee and commission expense.

Where UBS AG is acting as principal as defined by IFRS 15, costs of fulfilling contracts are required by IFRS 15 to be presented separately in the income statement within fee and commission expense. Where UBS AG is acting as agent as defined by IFRS 15, costs of fulfilling contracts are required to be presented as a reduction in *Fee and commission income*. This resulted in a reclassification of certain brokerage fees paid in an agency capacity from *Fee and commission expense* to *Fee and commission income* from 1 January 2018**,** primarily relating to third-party execution costs for exchange traded derivative transactions and fees payable to third-party research providers on behalf of clients

Other presentational changes

In addition to the IFRS 15 changes, certain revenues, primarily distribution fees and fund management fees, presented within *Fee and commission income* have been reclassified between reporting lines in Note 3 to better reflect the nature of the revenues, with comparative period information restated accordingly. Also, certain expenses that are incremental and incidental to revenues have been reclassified prospectively from *General and administrative expenses* to *Fee and commission expense* to improve the alignment of transaction-based costs with the associated revenue stream, primarily affecting clearing costs, client loyalty costs, fund and custody expenses. As the effect of this reclassification was not material, prior-period information was not restated.

Note 1 Basis of accounting (continued)

Further information on the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers is provided in the accounting policy in item 1.3.

→ **Refer to Note 3 for more information**

IAS 28, *Investments in Associates and Joint Ventures*

In October 2017, the IASB issued an amendment to IAS 28, *Investments in Associates and Joint Ventures* that clarified that IFRS 9 must be applied when accounting for long-term interests in an associate or joint venture that are not accounted for under the equity method. The amendment is mandatorily effective for accounting periods beginning on or after 1 January 2019. UBS AG early adopted this amendment from 1 January 2018 to align with the mandatory application date of IFRS 9. The adoption of this amendment did not have a material effect on UBS AG's financial statements.

Amendments to IFRS 2, *Share-based Payment*

In June 2016, the IASB issued amendments to IFRS 2, *Share-based Payment*, which are mandatorily effective as of 1 January 2018. The amendments clarify that the approach used to account for vesting and non-vesting conditions when measuring cash-settled share-based payments is consistent with that used for equity-settled share-based payments. The amendments also clarify the classification of share-based payments settled net of withholding tax as well as the accounting consequences resulting from a modification of share-based payments from cash-settled to equity-settled. The adoption of these amendments did not have a material effect on UBS AG's financial statements.

IFRIC 22, *Foreign Currency Transactions and Advance Consideration*

In December 2016, the IFRS Interpretations Committee of the IASB issued IFRIC Interpretation 22, *Foreign Currency Transactions and Advance Consideration* (IFRIC 22), which clarifies that in circumstances when an advance consideration is received or paid before the recognition of an associated asset, expense or income, the exchange rate to be used on initial recognition of the related asset, expense or income is the rate determined as of the date of transaction – i.e., the date of initial recognition of the non-monetary asset or non-monetary liability arising from the receipt or payment of advance consideration. UBS AG, as required, applied IFRIC 22 from 1 January 2018. The adoption of this IFRS Interpretation did not have a material effect on UBS AG's financial statements.

Amendments to IAS 1, *Presentation of Financial Statements*

In line with amendments to IAS 1, *Presentation of Financial Statements*, from 1 January 2018, UBS AG presents interest income and interest expense, calculated using the effective interest method, on financial instruments measured at amortized cost and financial assets measured at FVOCI separately from interest income and expense on financial instruments measured at FVTPL in the income statement.

Conceptual Framework

In March 2018, the IASB issued a revised version of its Conceptual Framework for Financial Reporting (the "Framework"). The Framework sets out the fundamental concepts of financial reporting that guide the IASB in developing IFRS Standards. The amended Framework seeks to improve the concepts for reporting assets, liabilities, income and expenses, explains how to decide when asset and liabilities should be measured using historical cost and when they should be measured at current value, and provides up-to-date tools that will help the IASB in setting IFRS Standards. It underpins existing IFRS Standards but does not override them. Preparers use the Framework as a point of reference to develop accounting policies in rare instances where a particular business transaction is not covered by existing IFRS Standards.

The IASB and the IFRS Interpretations Committee will begin to use the new Framework immediately in developing new, or amending existing, financial reporting standards and interpretations. For UBS AG, the Framework becomes effective in annual periods beginning on 1 January 2020. UBS AG is currently assessing the effect of the amended Framework on its financial accounting policies.

Change in presentation of forward points of certain long duration foreign exchange contracts transacted as economic hedges

In addition to changes resulting from new or amended accounting standards, effective from 1 January 2018, UBS AG refined the presentation of forward points on certain long-duration foreign exchange contracts transacted as economic hedges, transferring the forward points from *Other net income from fair value changes on financial instruments* (prior to 1 January 2018: *Net trading income*) to *Interest income from financial instruments measured at fair value through profit or loss* to align with the presentation of forward points on certain short-dated foreign exchange contracts. The amount of forward points on certain long-duration foreign exchange contracts recognized in *Interest income from financial instruments measured at fair value through profit or loss* in the first quarter of 2018 did not have a material effect on UBS AG's financial statements and prior periods have not been restated.

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 of which are supported by Corporate Center. The four business divisions qualify as reportable segments for the purpose of segment reporting and, together with Corporate Center and its units, reflect the management structure of UBS AG. Corporate Center – Non-core and Legacy Portfolio is managed and reported as a separate reportable segment within Corporate Center. Refer to "Note 1a Significant accounting policies" item 2 and "Note 2 Segment reporting" in the "Consolidated financial statements" section of the Annual Report 2017 for more information on UBS AG's reporting segments.

	Global Wealth Management	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
CHF million					Services	Group ALM	Non-core and Legacy Portfolio	
For the quarter ended 31 March 2018[1]								
Net interest income	954	488	(7)	511	(85)	(142)	6	1,727
Non-interest income	3,183	454	444	1,916	141	(73)	56	6,121
Allocations from CC – Group ALM	55	18	4	(104)	23	19	(15)	0
Income	4,192	960	441	2,323	79	(196)	49	7,848
Credit loss (expense) / recovery	3	(13)	0	(15)	0	0	0	(25)
Total operating income	4,195	947	441	2,307	79	(196)	49	7,823
Personnel expenses	1,860	176	167	895	436	9	14	3,556
General and administrative expenses	301	60	50	157	1,658	10	0	2,236
Services (to) / from CC and other BDs	905	288	118	673	(2,030)	(1)	48	0
of which: services from CC – Services	*878*	*310*	*128*	*650*	*(2,050)*	*42*	*41*	*0*
Depreciation and impairment of property, equipment and software	1	3	0	2	226	0	0	232
Amortization and impairment of intangible assets	12	0	0	2	0	0	0	16
Total operating expenses	3,079	527	335	1,730	289	18	62	6,040
Operating profit / (loss) before tax	**1,117**	**420**	**106**	**577**	**(210)**	**(214)**	**(13)**	**1,783**
Tax expense / (benefit)								411
Net profit / (loss)								**1,371**
As of 31 March 2018								
Total assets	**193,522**	**135,907**	**27,079**	**252,667**	**19,422**	**251,149**	**40,533**	**920,280**
For the quarter ended 31 March 2017[1]								
Net interest income	864	457	(7)	383	(74)	58	6	1,688
Non-interest income	3,013	435	452	1,806	42	107	16	5,872
Allocations from CC – Group ALM	104	59	5	(86)	30	(88)	(23)	0
Income	3,981	951	450	2,105	(2)	77	0	7,560
Credit loss (expense) / recovery	(1)	7	0	(6)	0	0	0	0
Total operating income	3,979	958	450	2,099	(2)	77	0	7,560
Personnel expenses	1,886	212	162	827	933	8	15	4,044
General and administrative expenses	292	60	57	158	1,014	4	16	1,601
Services (to) / from CC and other BDs	873	264	127	664	(1,980)	(10)	61	0
of which: services from CC – Services	*844*	*292*	*135*	*640*	*(1,992)*	*29*	*51*	*0*
Depreciation and impairment of property, equipment and software	1	3	0	2	247	0	0	253
Amortization and impairment of intangible assets	12	0	1	3	5	0	0	21
Total operating expenses	3,064	539	347	1,655	219	1	92	5,919
Operating profit / (loss) before tax	**915**	**418**	**103**	**443**	**(222)**	**76**	**(93)**	**1,641**
Tax expense / (benefit)								364
Net profit / (loss)								**1,277**
As of 31 December 2017								
Total assets	**190,074**	**135,587**	**14,270**	**263,046**	**19,447**	**247,739**	**46,200**	**916,363**

1 Prior period information may not be comparable as a result of the adoption of IFRS 9, Financial Instruments and IFRS 15, Revenue from Contracts with Customers, both effective 1 January 2018. Refer to Note 1 for more information on these changes.

Note 3 Net fee and commission income[1]

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Underwriting fees	241	197	295
of which: equity underwriting fees	*118*	*104*	*161*
of which: debt underwriting fees	*123*	*93*	*134*
M&A and corporate finance fees	194	162	177
Brokerage fees	968	911	1,023
Investment fund fees	1,207	1,080	1,062
Portfolio management and related services	1,837	1,982	1,793
Other	452	441	457
Total fee and commission income[2]	4,900	4,772	4,807
of which: recurring	*3,071*		
of which: transaction-based	*1,811*		
of which: performance-based	*17*		
Brokerage fees paid	85	155	166
Other	324	323	271
Total fee and commission expense	409	478	436
Net fee and commission income	4,491	4,294	4,371
of which: net brokerage fees	*884*	*756*	*858*

1 Upon adoption of IFRS 15, certain brokerage fees paid in an agency capacity have been reclassified from Fee and commission expense to Fee and commission income on a prospective basis from 1 January 2018, primarily relating to third-party execution costs for exchange traded derivative transactions and fees payable to third-party research providers on behalf of clients. In addition to the IFRS 15 changes, certain revenues, primarily distribution fees and fund management fees, have been reclassified between reporting lines to better reflect the nature of the revenues with prior period information restated accordingly. This resulted in the following impacts: for the quarter ended 31 December 2017, CHF 77 million was reclassified from Underwriting fees to Brokerage fees and CHF 258 million was reclassified from Portfolio management and related services to Investment fund fees. For the quarter ended 31 March 2017, CHF 81 million was reclassified from total Underwriting fees to Brokerage fees and CHF 247 million was reclassified from Portfolio management and related services to Investment fund fees. Also, certain expenses that are incremental and incidental to revenues have been reclassified prospectively from General and administrative expenses to Fee and commission expense to improve the alignment of transaction-based costs with the associated revenue stream, primarily impacting clearing costs, client loyalty costs, fund and custody expenses. As the impact of this reclassification was not material, prior period information was not restated. 2 Reflects fee and commission income from third parties and affiliated entities for the first quarter of 2018 of CHF 2,891 million for Global Wealth Management, CHF 300 million for Personal & Corporate Banking, CHF 777 million for Asset Management, CHF 917 million for the Investment Bank and CHF 14 million for Corporate Center.

Note 4 Other income

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Associates, joint ventures and subsidiaries			
Net gains / (losses) from disposals of subsidiaries[1]	0	55	(4)
Share of net profits of associates and joint ventures	15	19	19
Total	15	74	15
Financial assets measured at fair value through other comprehensive income			
Net gains / (losses) from disposals	0	46	6
Impairments	0	(2)	(14)
Total	0	45	(8)
Net gains / (losses) from disposals of financial assets measured at amortized cost	0	(3)	17
Net income from properties (excluding net gains / (losses) from disposals)[2]	6	6	6
Income from shared services provided to UBS Group AG or its subsidiaries[3]	120[4]	126[4]	14
Other	23	146	16
Total other income	164	395	60

1 Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to disposed foreign subsidiaries and branches. 2 Includes net rent received from third parties and net operating expenses. 3 Relates to subsidiaries not in the UBS AG scope of consolidation. 4 The increase compared with the first quarter of 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG in the second quarter of 2017. Refer to the Annual Report 2017 for more information.

Note 5 Personnel expenses

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Salaries and variable compensation	2,211	1,884	2,434
Financial advisor variable compensation[1]	974	1,031	987
Contractors	41	65	93
Social security	189	170	198
Pension and other post-employment benefit plans	21	126	199
Other personnel expenses	120	144	133
Total personnel expenses	3,556[2]	3,420[2]	4,044

1 Financial advisor variable 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. 2 The decrease compared with the first quarter of 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG in the second quarter of 2017. Refer to the Annual Report 2017 for more information.

Changes to the Pension Fund of UBS in Switzerland

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 in Switzerland and UBS have agreed measures that will take effect from the start of 2019 to support the long-term financial stability of the Swiss pension fund. As a result, the conversion rate will be lowered, the regular retirement age and employee contributions will be increased, and savings contributions will start earlier. These measures will have no effect on current pensioners of UBS.

To mitigate the effects of the reduction of the conversion rate on future pensions, UBS AG will make a payment to employees' retirement assets in the Swiss pension fund of up to CHF 450 million in three installments in 2020, 2021 and 2022. In accordance with International Financial Reporting Standards (IFRS), these measures, including the portion of the payment to be made by UBS that is attributable to past service, have resulted in a reduction in the pension obligation recognized by UBS AG, resulting in a pre-tax gain of CHF 123 million recognized in the income statement in the first quarter of 2018, with no overall effect on total equity. The change has also resulted in a reduced pension service cost starting from January 2018. The gain was recognized as a reduction in personnel expense, with a corresponding effect in *Other comprehensive income* to reflect the effect of the IFRS asset ceiling. If the Swiss pension plan remains in an asset ceiling position, the annual payments adjusted for expected forfeitures are expected to reduce total equity by approximately CHF 130 million per year over the installment period, with no effect on the income statement.

Note 6 General and administrative expenses

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Occupancy	205	221	216
Rent and maintenance of IT and other equipment	76	84	144
Communication and market data services	124	125	154
Administration	1,293	1,450	222
of which: shared services costs charged by UBS Group AG or its subsidiaries[1]	*1,154*[2]	*1,209*[2]	*125*
of which: UK bank levy[3]	*0*	*88*	*(25)*
Marketing and public relations	70	107	92
Travel and entertainment	79	104	86
Professional fees	195	283	253
Outsourcing of IT and other services	176	240	370
Litigation, regulatory and similar matters[4]	(11)	181	33
Other	30	23	30
Total general and administrative expenses	2,236	2,817	1,601

1 Relates to subsidiaries not in the UBS AG scope of consolidation. 2 The increase compared with the first quarter of 2017 was mainly due to the transfer of shared services functions from UBS AG to UBS Business Solutions AG in the second quarter of 2017. Refer to the Annual Report 2017 for more information. 3 The credit presented for the first quarter of 2017 related to 2016. The net expense presented for the fourth quarter of 2017 included a CHF 11 million credit related to 2016. 4 Reflects the net increase / (decrease) in provisions for litigation, regulatory and similar matters recognized in the income statement. Refer to Note 14 for more information. Also includes recoveries from third parties (first quarter of 2018: CHF 17 million; fourth quarter of 2017: CHF 2 million; first quarter of 2017: CHF 1 million).

Note 7 Income taxes

UBS AG recognized an income tax expense of CHF 411 million for the first quarter of 2018 compared with an income tax expense of CHF 364 million for the first quarter of 2017.

Deferred tax expenses were CHF 228 million in the first quarter of 2018 compared with CHF 128 million in the first quarter of 2017 and mainly related to the amortization of deferred tax assets previously recognized in relation to tax losses carried forward and deductible temporary differences to reflect their offset against profits for the quarter.

The current tax expense was CHF 183 million compared with CHF 236 million in the same quarter a year earlier and related to taxable profits of UBS Switzerland AG and other subsidiaries and branches of UBS AG.

Note 8 Expected credit loss measurement

a) Expected credit losses in the period

Total net credit loss expenses amounted to CHF 25 million in the first quarter of 2018, reflecting net losses of CHF 15 million related to credit impaired (stage 3) positions and expected credit losses of CHF 10 million related to stages 1 and 2 positions. Stage 3 net losses of CHF 15 million were recognized across a number of defaulted positions and included a recovery of CHF 7 million on a position that was previously fully written-off.

Stage 1 and 2 expected credit losses (ECL) have been recognized in the period across P&C, GWM and IB primarily related to new loans and facilities.

There have not been any material changes to models used to calculate ECL and to determine stage allocation.

As outlined in Note 1.3, UBS uses four different economic scenarios in the ECL calculation: an upside, a baseline, a mild downside and a severe downside scenario. ECL as of 31 March 2018 have been determined based on the same scenario selection and scenario weights as of 1 January 2018, the date of transition to IFRS 9.

Economic scenarios and weights applied

ECL scenario	Assigned weights in % (31.3.18)
Upside	20.0
Baseline	42.5
Mild downside	30.0
Severe downside	7.5

Further, assumptions around the most important forward-looking economic factors for Switzerland, the US and other regions as applied in each of those economic scenarios to determine ECL at the reporting date have not changed from the date of transition to IFRS 9. The point-in-time probability of default values applied to the ECL calculation at the reporting date reflect, however, market data updates, such as house price and equity indices and foreign exchange rates. Details on assumptions applied around the most important forward-looking economic factors are discussed in Note 1.4.

b) ECL-relevant balance sheet and off-balance sheet positions including ECL allowances and provisions

The table on the next page provides information on financial instruments and certain non-financial instruments that are subject to ECL. For amortized cost instruments, the net carrying value 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 does not reduce the carrying value of these financial assets. The carrying value 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 notional amounts.

Note 8 Expected credit loss measurement (continued)

CHF million	31.3.18							
	Carrying amount				ECL allowance			
Financial assets measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	92,800	92,800	0	0	0	0	0	0
Loans and advances to banks	13,284	13,246	38	0	(5)	(3)	0	(2)
Receivables from securities financing transactions	77,016	77,016	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	24,271	24,271	0	0	0	0	0	0
Loans and advances to customers	318,394	289,306	27,543	1,545	(838)	(54)	(162)	(622)
of which: Private clients with mortgage	*120,535*	*104,614*	*15,149*	*772*	*(127)*	*(11)*	*(71)*	*(44)*
of which: Real estate financing	*36,003*	*26,415*	*9,553*	*36*	*(62)*	*(3)*	*(51)*	*(8)*
of which: Large corporate clients	*11,610*	*10,828*	*684*	*97*	*(62)*	*(7)*	*(2)*	*(54)*
of which: SME clients	*10,072*	*7,893*	*1,629*	*550*	*(281)*	*(9)*	*(24)*	*(248)*
of which: Lombard	*114,436*	*114,423*	*0*	*13*	*(86)*	*(4)*	*0*	*(82)*
Other financial assets measured at amortized cost	19,235	18,477	271	488	(146)	(35)	(5)	(106)
of which: loans to financial advisors	*3,326*	*3,104*	*74*	*149*	*(115)*	*(28)*	*(2)*	*(85)*
Total financial assets measured at amortized cost[1]	545,000	515,116	27,851	2,033	(992)	(94)	(168)	(730)
Financial assets measured at fair value through other comprehensive income	6,758	6,758	0	0	0	0	0	0
Total on-balance sheet financial assets in scope of ECL requirements	551,757	521,873	27,851	2,033	(992)	(94)	(168)	(730)

	Total exposure				ECL provision			
Off-balance sheet (in scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Guarantees	17,404	16,624	577	203	(40)	(7)	(2)	(31)
Irrevocable loan commitments	29,746	29,181	547	18	(32)	(24)	(7)	(1)
of which: Large corporate clients	*22,234*	*21,693*	*535*	*7*	*(26)*	*(20)*	*(5)*	*(1)*
Forward starting reverse repurchase and securities borrowing agreements	1,231	1,231	0	0	0	0	0	0
Committed unconditionally revocable credit lines	35,892	33,937	1,879	75	(34)	(17)	(17)	0
of which: Real estate financing	*2,942*	*2,134*	*808*	*0*	*(12)*	*(2)*	*(9)*	*0*
of which: SME clients	*4,617*	*4,065*	*496*	*56*	*(7)*	*(4)*	*(3)*	*0*
Irrevocable committed prolongation of existing loans	1,912	1,912	0	0	(1)	(1)	0	0
Total off-balance sheet financial instruments and other credit lines	86,184	82,885	3,003	296	(106)	(49)	(26)	(32)
Total allowances and provisions					(1,098)	(143)	(194)	(762)

1 The carrying value of financial assets at amortized cost are net of the respective ECL allowances.

Note 8 Expected credit loss measurement (continued)

CHF million	1.1.18							
	Carrying amount				ECL allowance			
Financial assets measured at amortized cost	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Cash and balances at central banks	87,775	87,775	0	0	0	0	0	0
Loans and advances to banks	13,673	13,654	18	0	(5)	(2)	0	(3)
Receivables from securities financing transactions	84,674	84,674	0	0	(2)	(2)	0	0
Cash collateral receivables on derivative instruments	23,434	23,434	0	0	0	0	0	0
Loans and advances to customers	312,602	283,256	27,855	1,491	(867)	(61)	(163)	(644)
of which: Private clients with mortgage	*119,560*	*103,867*	*15,006*	*686*	*(124)*	*(12)*	*(69)*	*(44)*
of which: Real estate financing	*35,896*	*26,210*	*9,657*	*29*	*(62)*	*(3)*	*(53)*	*(6)*
of which: Large corporate clients	*11,004*	*10,358*	*557*	*88*	*(69)*	*(6)*	*0*	*(63)*
of which: SME clients	*10,322*	*8,218*	*1,518*	*585*	*(287)*	*(8)*	*(23)*	*(256)*
of which: Lombard	*110,601*	*110,584*	*0*	*17*	*(84)*	*(5)*	*0*	*(79)*
Other financial assets measured at amortized cost	18,375	17,877	32	465	(136)	(29)	(1)	(106)
of which: loans to financial advisors	*3,086*	*2,874*	*32*	*179*	*(115)*	*(28)*	*(1)*	*(87)*
Total financial assets measured at amortized cost[1]	540,533	510,671	27,906	1,956	(1,011)	(95)	(164)	(752)
Financial assets measured at fair value through other comprehensive income	6,755	6,755	0	0	0	0	0	0
Total on-balance sheet financial assets in scope of ECL requirements	547,288	517,426	27,906	1,956	(1,011)	(95)	(164)	(752)

	Total exposure				ECL provision			
Off-balance sheet (in scope of ECL)	Total	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3
Guarantees	17,152	16,331	633	189	(37)	(6)	(2)	(29)
Irrevocable loan commitments	30,852	30,153	662	37	(36)	(24)	(8)	(4)
of which: Large corporate clients	*21,999*	*21,344*	*629*	*26*	*(27)*	*(19)*	*(4)*	*(4)*
Forward starting reverse repurchase and securities borrowing agreements	1,216	1,216	0	0	0	0	0	0
Committed unconditionally revocable credit lines	36,690	34,471	2,157	62	(34)	(19)	(15)	0
of which: Real estate financing	*3,103*	*2,097*	*1,007*	*0*	*(9)*	*(2)*	*(7)*	*0*
of which: SME clients	*4,770*	*4,311*	*406*	*53*	*(7)*	*(5)*	*(2)*	*0*
Irrevocable committed prolongation of existing loans	1,635	1,634	0	1	0	0	0	0
Total off-balance sheet financial instruments and other credit lines	87,545	83,805	3,452	288	(107)	(49)	(24)	(33)
Total allowances and provisions					(1,117)	(144)	(188)	(785)

1 The carrying value of financial assets at amortized cost are net of the respective ECL allowances.

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 22 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2017, which provides more information on 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.

Adoption of IFRS 9

Upon adoption of IFRS 9 on 1 January 2018, certain classification and measurement changes were made, primarily resulting in a reclassification of certain financial assets and liabilities from amortized cost to fair value through profit or loss. This included:

– Brokerage receivables and payables held in the Investment Bank and Global Wealth Management;
– Auction rate securities held in Corporate Center; and
– Certain loans held in the Investment Bank.

Certain financial assets and liabilities which have been newly classified at fair value through profit or loss are designated as Level 3 in the fair value hierarchy. Refer to the tables and text within this Note for more information.

An immaterial amount of financial assets were reclassified from *Financial assets at fair value held for trading* and *Financial assets at fair value not held for trading* to *Loans and advances to customers* upon adoption of IFRS 9. An immaterial amount of associated loan commitments, which were recognized as derivative liabilities as of 31 December 2017 were also derecognized. No material fair value gains and losses would have been recognized in the income statement in the first quarter of 2018 had those instruments not been reclassified. Similarly, no material fair value gains or losses would have been recognized in *Other comprehensive income* related to debt instruments that were reclassified from *Financial assets available for sale* to *Other financial assets measured at amortized cost* upon adoption of IFRS 9.

→ **Refer to Note 1.4 for more information on the adoption of IFRS 9**

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]

	31.3.18				31.12.17			
CHF 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	89,282	14,566	1,937	105,785	108,963	15,309	1,972	126,244
of which:								
Government bills / bonds	*13,769*	*1,115*	*0*	*14,885*	*11,935*	*918*	*0*	*12,854*
Corporate and municipal bonds	*342*	*8,379*	*233*	*8,953*	*37*	*8,072*	*552*	*8,662*
Loans	*0*	*3,005*	*606*	*3,611*	*0*	*3,346*	*501*	*3,847*
Investment fund units	*6,951*	*1,560*	*704*	*9,215*	*7,223*	*1,839*	*571*	*9,632*
Asset-backed securities	*0*	*169*	*157*	*326*	*0*	*194*	*174*	*368*
Equity instruments	*68,220*	*338*	*237*	*68,796*	*79,276*	*186*	*105*	*79,566*
Financial assets for unit-linked investment contracts[2]					*10,492*	*755*	*69*	*11,316*
Derivative financial instruments	853	111,136	1,344	113,334	458	116,222	1,549	118,229
of which:								
Interest rate contracts	*8*	*41,153*	*35*	*41,196*	*1*	*43,913*	*135*	*44,049*
Credit derivative contracts	*0*	*1,894*	*458*	*2,352*	*0*	*2,266*	*550*	*2,816*
Foreign exchange contracts	*385*	*42,026*	*239*	*42,650*	*207*	*46,749*	*189*	*47,145*
Equity / index contracts	*21*	*24,374*	*608*	*25,002*	*16*	*21,541*	*675*	*22,232*
Commodity contracts	*0*	*1,379*	*0*	*1,379*	*0*	*1,727*	*0*	*1,727*
Financial assets mandatorily measured at fair value on a recurring basis								
Brokerage receivables[3]	0	20,250	0	20,250				
Financial assets at fair value not held for trading	44,989	47,557	4,667	97,213	23,032	34,104	1,419	58,556
of which:								
Government bills / bonds	*24,255*	*3,646*	*0*	*27,901*	*22,062*	*3,900*	*0*	*25,961*
Corporate and municipal bonds	*760*	*23,265*	*0*	*24,025*	*765*	*20,702*	*0*	*21,467*
Financial assets for unit-linked investment contracts[2]	*19,655*	*4,528*	*0*	*24,183*				
Loans (including structured loans)	*0*	*8,353*	*1,924*	*10,277*	*0*	*9,385*	*758*	*10,143*
Structured securities financing transactions[4]	*0*	*7,621*	*140*	*7,760*	*0*	*118*	*173*	*291*
Auction-rate securities[3]	*0*	*0*	*1,713*	*1,713*				
Investment fund units	*167*	*96*	*107*	*370*	*205*	*0*	*0*	*205*
Equity instruments[5]	*151*	*47*	*369*	*567*				
Other	*0*	*1*	*413*	*415*	*0*	*0*	*489*	*489*
Financial assets measured at fair value through other comprehensive income on a recurring basis								
Financial assets measured at fair value through other comprehensive income	2,560	4,197	0	6,758	3,000	5,157	507	8,665
of which:								
Government bills / bonds	*2,515*	*118*	*0*	*2,634*	*2,733*	*133*	*0*	*2,866*
Corporate and municipal bonds	*45*	*428*	*0*	*473*	*121*	*1,060*	*9*	*1,189*
Asset-backed securities	*0*	*3,651*	*0*	*3,651*	*0*	*3,880*	*0*	*3,880*
Other[5]	*0*	*0*	*0*	*0*	*146*	*85*	*499*	*730*
Non-financial assets measured at fair value on a recurring basis								
Other non-financial assets								
Precious metals and other physical commodities	4,032	0	0	4,032	4,563	0	0	4,563
Non-financial assets measured at fair value on a non-recurring basis								
Other non-financial assets[6]	0	58	9	67	0	54	42	95
Total assets measured at fair value	141,716	197,764	7,957	347,438	140,017	170,848	5,489	316,353

Note 9 Fair value measurement (continued)

Determination of fair values from quoted market prices or valuation techniques (continued)[1]

	31.3.18				31.12.17			
CHF 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	29,657	4,999	91	34,747	26,037	4,309	117	30,463
of which:								
Government bills / bonds	*7,574*	*398*	*0*	*7,972*	*5,153*	*256*	*0*	*5,409*
Corporate and municipal bonds	*11*	*4,133*	*31*	*4,176*	*50*	*3,453*	*35*	*3,538*
Investment fund units	*291*	*67*	*4*	*362*	*541*	*263*	*16*	*820*
Equity instruments	*21,781*	*392*	*56*	*22,229*	*20,293*	*336*	*66*	*20,695*
Derivative financial instruments	837	108,437	2,671	111,945	398	112,929	2,807	116,134
of which:								
Interest rate contracts	*12*	*36,125*	*212*	*36,349*	*5*	*38,196*	*186*	*38,387*
Credit derivative contracts	*0*	*2,777*	*629*	*3,407*	*0*	*3,196*	*601*	*3,797*
Foreign exchange contracts	*343*	*41,891*	*118*	*42,353*	*213*	*45,151*	*122*	*45,486*
Equity / index contracts	*6*	*26,131*	*1,708*	*27,845*	*42*	*24,803*	*1,896*	*26,741*
Commodity contracts	*0*	*1,227*	*1*	*1,227*	*0*	*1,561*	*1*	*1,562*
Financial liabilities designated at fair value on a recurring basis								
Brokerage payables designated at fair value[3]	0	34,793	0	34,793				
Debt issued designated at fair value	0	40,213	11,846	52,059	0	38,617	10,885	49,502
Other financial liabilities designated at fair value	2	33,061	1,375	34,438	0	14,282	1,941	16,223
of which:								
Amounts due under unit-linked investment contracts	*0*	*24,348*	*0*	*24,348*	*0*	*11,523*	*0*	*11,523*
Structured securities financing transactions[4]	*0*	*5,812*	*1*	*5,812*	*0*	*372*	*4*	*376*
Over-the-counter debt instruments	*2*	*2,898*	*1,371*	*4,270*	*0*	*2,385*	*1,930*	*4,315*
Non-financial liabilities measured at fair value on a non-recurring basis								
Other non-financial liabilities	0	0	0	0	0	1	0	1
Total liabilities measured at fair value	30,495	221,504	15,984	267,983	26,435	170,139	15,750	212,324

1 Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. The fair value of these derivatives was not material for the periods presented. 2 Financial assets for unit-linked investment contracts were reclassified from Financial assets at fair value held for trading to Financial assets at fair value not held for trading as of 1 January 2018. Refer to Note 1.4 for more information. 3 Comparative period information is not disclosed for financial assets and liabilities that were measured at amortized cost prior to the adoption of IFRS 9. Refer to Note 1.4 for more information. 4 The increases in Structured securities financing transactions primarily relate to the reclassification of certain balances from amortized cost to fair value through profit or loss upon adoption of IFRS 9. Refer to Note 1.4 for more information. 5 Upon adoption of IFRS 9, equity instruments that were formerly classified as available for sale under IAS 39 have been reclassified to Financial assets at fair value not held for trading. Refer to Note 1.4 for more information. 6 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.

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.

Product description, valuation and classification in the fair value hierarchy for products newly classified at fair value upon adoption of IFRS 9

Product description, valuation and fair value hierarchy information is provided below for significant products classified at fair value which are not described in "Note 22 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2017.

Auction rate securities

There are two types of auction rate securities (ARS): auction preferred securities (APS) and auction rates certificates (ARC). ARC are issued by municipalities and are used by investors as tax-exempt alternatives to money market instruments. Interest rates for these instruments are reset through a periodic Dutch auction. APS are similar to ARC with the primary difference being that they are issued from closed-end funds. ARS are valued directly using market prices that reflect recent transactions after applying an adjustment for trade size or quoted dealer prices where available. Suitably deep and liquid pricing information is generally not available for ARS securities. As a result, these securities are classified as Level 3.

Brokerage receivables and payables

Callable, on-demand balances, including long cash credits, short cash debits, margin debit balances and short sale proceeds. The business model for these accounts is similar to any current or on demand account, with account holders using the account to house subscriptions, redemptions and billed amounts. Fair value is determined based on value of the underlying balances. Due to the on-demand nature of its underlying, these receivables and payables are designated as Level 2.

b) Valuation adjustments

Day-1 reserves

The table below summarizes the changes in deferred day-1 profit or loss reserves during the respective period.

Deferred day-1 profit or loss is generally released into *Other net income from fair value changes on financial instruments* when pricing of equivalent products or the underlying parameters become observable or when the transaction is closed out.

Deferred day-1 profit or loss

	For the quarter ended		
CHF million	31.3.18	31.12.17	31.3.17
Balance at the beginning of the period	329	351	371
Profit / (loss) deferred on new transactions	187	50	51
(Profit) / loss recognized in the income statement	(53)	(76)	(53)
Foreign currency translation	(6)	4	(3)
Balance at the end of the period	457	329	365

c) Transfers between Level 1 and Level 2

The amounts disclosed 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 the first three months of 2018 were not material. Assets totaling approximately CHF 0.5 billion, which were mainly comprised of financial assets at fair value held for trading, primarily equity instruments, were transferred from Level 1 to Level 2 during the first three months of 2018, generally due to diminished levels of trading activity observed within the market. Transfers of financial liabilities from Level 1 to Level 2 recorded during the first three months of 2018 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 significant inputs used in the valuation technique that are considered unobservable and a range of values for those unobservable inputs.

The range of values represents the highest- and lowest-level input used in the valuation techniques. Therefore, the range does not reflect the level of uncertainty regarding a particular input, but rather the different underlying characteristics of the relevant assets and liabilities. 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. Further, the ranges and weighted averages of unobservable inputs may differ across other financial institutions due to the diversity of the products in each firm's inventory.

The significant unobservable inputs disclosed in the table below are generally consistent with those included in "Note 22 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2017. 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 22 Fair value measurement" in the "Consolidated financial statements" section of the Annual Report 2017.

Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

	Fair value						Range of inputs						
	Assets		Liabilities				31.3.18			31.12.17			
CHF billion	31.3.18	31.12.17	31.3.18	31.12.17	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, Financial assets at fair value not held for trading[3]													
Corporate and municipal bonds	*0.2*	*0.6*	*0.0*	*0.0*	Relative value to market comparable	Bond price equivalent	0	132	91	0	133	92	points
Traded loans, loans mandatorily at fair value, loan commitments and guarantees	*2.9*	*1.7*	*0.0*	*0.0*	Relative value to market comparable	Loan price equivalent	20	101	98	50	102	98	points
					Discounted expected cash flows	Credit spread	118	153		23	124		basis points
					Market comparable and securitization model	Discount margin	0	14	2	0	14	2	%
Auction-rate securities[4]	*1.7*		*0.0*		Relative value to market comparable	Price	77	97					points
Investment fund units[5]	*0.8*	*0.7*	*0.0*	*0.0*	Relative value to market comparable	Net asset value							
Equity instruments[5]	*0.6*	*0.5*	*0.1*	*0.1*	Relative value to market comparable	Price							
Debt issued designated at fair value[6]			*11.8*	*10.9*									
Other financial liabilities designated at fair value[6]			*1.4*	*1.9*									
Derivative financial instruments													
Interest rate contracts	*0.0*	*0.1*	*0.2*	*0.2*	Option model	Volatility of interest rates[7]	53	76		28	70		basis points
Credit derivative contracts	*0.5*	*0.5*	*0.6*	*0.6*	Discounted expected cash flows	Credit spreads	5	303		6	550		basis points
						Bond price equivalent	1	103		2	102		points
Equity / index contracts	*0.6*	*0.7*	*1.7*	*1.9*	Option model	Equity dividend yields	0	13		0	13		%
						Volatility of equity stocks, equity and other indices	0	85		0	172		%
						Equity-to-FX correlation	(45)	71		(39)	70		%
						Equity-to-equity correlation	(50)	97		(50)	97		%

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 Comparative period information includes equity instruments that were formerly classified as available for sale under IAS 39 and have been reclassified to Financial assets at fair value not held for trading upon adoption of IFRS 9. Refer to Note 1.4 for more information. 4 Comparative period information is not disclosed for financial assets and liabilities that were measured at amortized cost prior to the adoption of IFRS 9. Refer to Note 1.4 for more information. 5 The range of inputs is not disclosed due to the dispersion of values given the diverse nature of the investments. 6 Valuation techniques, significant unobservable inputs and the respective input ranges for Debt issued designated at fair value and Other financial liabilities designated at fair value, which is primarily comprised of over-the-counter debt instruments, are the same as the equivalent derivative or structured financing instruments presented elsewhere in this table. 7 Effective 31 March 2018, the range of inputs reported for this significant unobservable input is based on normal volatility and the unit has been updated to basis points. Log-normal volatility with the unit as points was reported previously. Prior-period information has been restated to reflect this change in presentation.

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 structured financing instrument within the table below.

The sensitivity data presented represent 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. Further, 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

	31.3.18		31.12.17	
CHF million	Favorable changes	Unfavorable changes	Favorable changes	Unfavorable changes
Traded loans, loans measured at fair value, loan commitments and guarantees	83	(18)	79	(11)
Structured securities financing transactions	65	(65)	34	(34)
Auction-rate securities[1]	87	(87)		
Asset-backed securities	31	(26)	19	(15)
Equity instruments	134	(106)	79	(53)
Interest rate derivative contracts, net	12	(28)	13	(26)
Credit derivative contracts, net	33	(36)	64	(99)
Foreign exchange derivative contracts, net	8	(5)	12	(6)
Equity / index derivative contracts, net	189	(205)	190	(193)
Other	14	(14)	13	(13)
Total	656	(591)	502	(450)

1 Comparative period information is not disclosed for financial assets and liabilities that were measured at amortized cost prior to the adoption of IFRS 9. Refer to Note 1.4 for more information.

f) Level 3 instruments: movements during the period

Significant changes in Level 3 instruments

The table on the following pages presents additional information about 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 include the effect of related hedging activity. Furthermore, the realized and unrealized gains and losses presented within the table are not limited solely to those arising from Level 3 inputs, as valuations are generally derived from both observable and unobservable parameters.

Upon adoption of IFRS 9 on 1 January 2018, certain financial assets and liabilities were designated as Level 3 in the fair value hierarchy and are presented in the table on the following pages, including the associated effect upon adoption of IFRS 9 on 1 January 2018. This includes auction rate securities held in Corporate Center and certain loans held in the Investment Bank.

In addition to various financial assets and liabilities being newly classified at fair value through profit or loss, certain equity investments and investment fund units measured at fair value through other comprehensive income were reclassified to Financial assets at fair value not held for trading under the revised IFRS 9 measurement rules, which resulted in an opening balance reclassification between reporting lines in the table on the following pages.

Note 9 Fair value measurement (continued)

Movements of Level 3 instruments

CHF billion	**Balance as of 31 December 2016**	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 2017**
Financial assets at fair value held for trading	**1.7**	**0.1**	***0.0***	**0.3**	**(1.1)**	**0.6**	**0.0**	**0.1**	**(0.2)**	**0.0**	**1.5**
of which:											
Corporate and municipal bonds	*0.6*	*0.1*	*0.1*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.7*
Loans	*0.7*	*0.0*	*0.0*	*0.1*	*(0.9)*	*0.6*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.4*
Investment fund units	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Other	*0.4*	*0.0*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.1*	*0.0*	*0.3*
Financial assets at fair value not held for trading	**2.1**	**0.1**	***0.0***	**0.0**	**0.0**	**0.5**	**(1.0)**	**0.0**	**(0.1)**	**0.0**	**1.6**
of which:											
Loans (including structured loans)	*1.2*	*0.1*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.7)*	*0.0*	*(0.1)*	*0.0*	*0.6*
Auction-rate securities[3]											
Equity instruments											
Other	*0.9*	*0.0*	*0.0*	*0.0*	*0.0*	*0.4*	*(0.3)*	*0.0*	*0.0*	*0.0*	*1.0*
Financial assets measured at fair value through other comprehensive income	**0.5**	**0.0**	***0.0***	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.5**
Derivative financial instruments – assets	**2.5**	**(0.3)**	***(0.1)***	**0.0**	**0.0**	**1.1**	**(0.9)**	**0.2**	**(0.3)**	**0.0**	**2.3**
of which:											
Credit derivative contracts	*1.3*	*(0.1)*	*0.1*	*0.0*	*0.0*	*0.9*	*(0.7)*	*0.1*	*(0.2)*	*0.0*	*1.2*
Equity / index contracts	*0.7*	*0.0*	*0.0*	*0.0*	*0.0*	*0.2*	*(0.1)*	*0.0*	*(0.1)*	*0.0*	*0.7*
Other	*0.5*	*(0.2)*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*(0.1)*	*0.0*	*0.4*
Derivative financial instruments – liabilities	**4.0**	**0.0**	***0.1***	**0.0**	**0.0**	**0.5**	**(0.3)**	**0.0**	**(0.7)**	**0.0**	**3.6**
of which:											
Credit derivative contracts	*1.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.3*	*0.0*	*0.0*	*(0.3)*	*0.0*	*1.5*
Equity / index contracts	*1.9*	*0.1*	*0.1*	*0.0*	*0.0*	*0.2*	*(0.3)*	*0.0*	*(0.4)*	*0.0*	*1.6*
Other	*0.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.5*
Debt issued designated at fair value	**9.7**	**0.7**	***0.6***	**0.0**	**0.0**	**1.4**	**(1.1)**	**0.6**	**(1.1)**	**(0.1)**	**10.2**
Other financial liabilities designated at fair value	**1.3**	**0.3**	**0.2**	**0.0**	**0.0**	**1.1**	**(0.7)**	**0.2**	**0.0**	**0.0**	**2.1**

1 Net gains / losses included in comprehensive income comprise of Net interest income, Other net income from fair value changes on financial instruments and Other income. 2 Total Level 3 assets as of 31 March 2018 were CHF 8.0 billion (31 December 2017: CHF 5.5 billion). Total Level 3 liabilities as of 31 March 2018 were CHF 16.0 billion (31 December 2017: CHF 15.7 billion). 3 Comparative period information is not disclosed for items that were measured at amortized cost prior to the adoption of IFRS 9. Refer to Note 1.4 for more information.

Note 9 Fair value measurement (continued)

Balance as of 31 December 2017	Adoption of IFRS 9	Balance as of 1 January 2018	Total gains / losses included in comprehensive income: Net gains / losses included in income[1]	Total gains / losses included in comprehensive income: *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 2018[2]
2.0	0.4	2.4	(0.2)	*(0.1)*	0.4	(1.4)	0.4	0.0	0.3	0.0	0.1	1.9
0.6		*0.6*	*0.0*	*0.0*	*0.1*	*(0.5)*	*0.0*	*0.0*	*0.1*	*0.0*	*0.0*	*0.2*
0.5	*0.4*	*0.9*	*(0.1)*	*0.0*	*0.1*	*(0.8)*	*0.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.6*
0.6		*0.6*	*(0.2)*	*(0.2)*	*0.1*	*0.0*	*0.0*	*0.0*	*0.2*	*0.0*	*0.0*	*0.7*
0.3		*0.3*	*0.1*	*0.1*	*0.1*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.4*
1.4	2.9	4.3	(0.3)	*(0.3)*	0.8	(0.4)	0.0	0.0	0.1	0.0	0.2	4.7
0.8	*0.6*	*1.3*	*(0.3)*	*(0.2)*	*0.8*	*(0.1)*	*0.0*	*0.0*	*0.1*	*0.0*	*0.1*	*1.9*
	1.8	*1.8*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*1.7*
	0.4	*0.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.4*
0.7	*0.1*	*0.8*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.7*
0.5	(0.5)											
1.5		1.5	(0.1)	*(0.1)*	0.0	0.0	0.2	(0.4)	0.0	0.0	0.1	1.3
0.5		*0.5*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.5*
0.7		*0.7*	*0.0*	*(0.1)*	*0.0*	*0.0*	*0.2*	*(0.2)*	*0.0*	*0.0*	*0.0*	*0.6*
0.3		*0.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*(0.1)*	*0.0*	*0.0*	*0.0*	*0.3*
2.8	0.0	2.8	(0.2)	*(0.2)*	0.0	0.0	0.4	(0.6)	0.2	(0.1)	0.1	2.7
0.6		*0.6*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.6*
1.9		*1.9*	*(0.3)*	*(0.3)*	*0.0*	*0.0*	*0.4*	*(0.4)*	*0.1*	*(0.1)*	*0.1*	*1.7*
0.3	*0.0*	*0.3*	*0.1*	*0.1*	*0.0*	*0.0*	*0.0*	*(0.2)*	*0.1*	*0.0*	*0.0*	*0.3*
10.9		10.9	(0.3)	*(0.3)*		0.0	2.5	(1.5)	0.4	(0.6)	0.4	11.8
1.9		1.9	(0.3)	(0.3)	0.0	0.0	0.2	(0.6)	0.0	0.0	0.1	1.4

Note 9 Fair value measurement (continued)

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.

Assets transferred into Level 3 totaled CHF 0.4 billion and were primarily comprised of investment fund units and corporate and municipal bonds, mainly due to decreased observability of the respective net asset value and bond price equivalent inputs. Assets transferred out of Level 3 during the first three months of 2018 were not significant.

Liabilities transferred into and out of Level 3 totaled CHF 0.6 billion and CHF 0.7 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments and interest rate derivatives contracts, due to decreased observability of the respective equity volatility and rates volatility inputs. Transfers out of Level 3 were primarily comprised of equity-linked and credit-linked issued debt instruments resulting from changes in the availability of the observable equity volatility and credit spread inputs used to determine the fair value of the options embedded in these structures.

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

	31.3.18		31.12.17	
CHF billion	Carrying value	Fair value	Carrying value	Fair value
Assets				
Cash and balances at central banks	92.8	92.8	87.8	87.8
Loans and advances to banks	13.3	13.3	13.7	13.7
Receivables from securities financing transactions	77.0	77.0	89.6	89.6
Cash collateral receivables on derivative instruments	24.3	24.3	23.4	23.4
Loans and advances to customers	318.4	319.2	320.7	322.1
Other financial assets measured at amortized cost	19.2	19.0	36.9	36.8
Liabilities				
Amounts due to banks	9.0	9.0	7.5	7.5
Payables from securities financing transactions	9.2	9.2	17.0	17.0
Cash collateral payables on derivative instruments	29.4	29.4	30.2	30.2
Customer deposits	401.5	401.5	412.4	412.4
Funding from UBS Group AG and its subsidiaries	35.9	36.9	34.7	36.4
Debt issued measured at amortized cost	102.2	104.2	104.8	107.0
Other financial liabilities measured at amortized cost	6.4	6.4	37.1	37.1

The fair values included in the table above were calculated for disclosure purposes only. The fair value valuation techniques and assumptions 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 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 31.3.18, CHF billion	Derivative financial assets	Notional values related to derivative financial assets[3]	Derivative financial liabilities	Notional values related to derivative financial liabilities[3]	Other notional values[4]
Derivative financial instruments[1,2]					
Interest rate contracts	41.2	1,231	36.3	1,103	11,173
Credit derivative contracts	2.4	88	3.4	93	0
Foreign exchange contracts	42.7	2,548	42.4	2,445	0
Equity / index contracts	25.0	412	27.8	474	91
Commodity contracts	1.4	39	1.2	39	9
Unsettled purchases of non-derivative financial instruments[5]	0.4	36	0.3	15	
Unsettled sales of non-derivative financial instruments[5]	0.3	28	0.5	28	
Total derivative financial instruments, based on IFRS netting[6]	113.3	4,382	111.9	4,197	11,273
Further netting potential not recognized on the balance sheet[7]	(99.3)		(96.8)		
of which: netting of recognized financial liabilities / assets	*(80.7)*		*(80.7)*		
of which: netting with collateral received / pledged	*(18.6)*		*(16.1)*		
Total derivative financial instruments, after consideration of further netting potential	14.1		15.2		

As of 31.12.17, CHF billion	Derivative financial assets	Notional values related to derivative financial assets[3]	Derivative financial liabilities	Notional values related to derivative financial liabilities[3]	Other notional values[4]
Derivative financial instruments[1]					
Interest rate contracts	44.0	1,142	38.4	1,044	10,462
Credit derivative contracts	2.8	92	3.8	98	1
Foreign exchange contracts	47.1	2,389	45.5	2,193	0
Equity / index contracts	22.2	380	26.7	487	83
Commodity contracts	1.7	33	1.6	37	8
Unsettled purchases of non-derivative financial instruments[5]	0.1	12	0.1	11	
Unsettled sales of non-derivative financial instruments[5]	0.1	15	0.1	9	
Total derivative financial instruments, based on IFRS netting[6]	118.2	4,063	116.1	3,878	10,555
Further netting potential not recognized on the balance sheet[7]	(104.2)		(98.5)		
of which: netting of recognized financial liabilities / assets	*(83.5)*		*(83.5)*		
of which: netting with collateral received / pledged	*(20.7)*		*(15.0)*		
Total derivative financial instruments, after consideration of further netting potential	14.0		17.7		

1 Derivative financial liabilities as of 31 March 2018 include CHF 0.1 billion related to derivative loan commitments (31 December 2017: CHF 0.0 billion). No notional amounts related to these commitments are included in this table but are disclosed within Note 15 under Loan commitments with a committed amount of CHF 3.9 billion as of 31 March 2018 (31 December 2017: CHF 5.3 billion). 2 Upon adoption of IFRS 9 on 1 January 2018, certain forward starting transactions have been classified as measured at fair value through profit or loss and are recognized within derivative instruments. Derivative financial assets and Derivative financial liabilities each include CHF 0.0 billion as of 31 March 2018 related to forward starting transactions. No notional amounts related to these assets and liabilities are included in this table but are disclosed within Note 15 under Forward starting transactions. 3 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. 4 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. 5 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. 6 Financial assets and liabilities are presented net on the balance sheet if UBS 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. 7 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 24 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of the Annual Report 2017 for more information.

b) Cash collateral on derivative instruments

CHF billion	Receivables 31.3.18	Payables 31.3.18	Receivables 31.12.17	Payables 31.12.17
Cash collateral on derivative instruments, based on IFRS netting[1]	24.3	29.4	23.4	30.2
Further netting potential not recognized on the balance sheet[2]	(13.5)	(14.4)	(12.5)	(17.4)
of which: netting of recognized financial liabilities / assets	*(12.9)*	*(13.3)*	*(11.7)*	*(16.3)*
of which: netting with collateral received / pledged	*(0.6)*	*(1.2)*	*(0.7)*	*(1.2)*
Cash collateral on derivative instruments, after consideration of further netting potential	10.7	15.0	11.0	12.8

1 Financial assets and liabilities are presented net on the balance sheet if UBS 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 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 24 Offsetting financial assets and financial liabilities" in the "Consolidated financial statements" section of our Annual Report 2017 for more information.

Note 11 Other assets and liabilities

a) Other financial assets measured at amortized cost

CHF million	31.3.18	31.12.17
Prime brokerage receivables[1]		19,080
Debt securities	10,610	9,166
of which: government bills / bonds	*7,775*	*6,465*
Loans to financial advisors[2]	3,326	3,118
Fee and commission related receivables	1,694	1,748
Finance lease receivables	1,070	1,059
Settlement and clearing accounts	557	716
Accrued interest income	610	578
Other	1,368	1,470
Total other financial assets measured at amortized cost	**19,235**	**36,935**

1 Upon adoption of IFRS 9 on 1 January 2018, the classification of prime brokerage receivables and payables changed from amortized cost to fair value through profit or loss, and brokerage receivables and payables are now presented separately on the balance sheet. Refer to Note 1.4 for more information. 2 Related to financial advisors in the US and Canada.

b) Other non-financial assets

CHF million	31.3.18	31.12.17
Precious metals and other physical commodities	4,032	4,563
Bail deposit[1]	1,336	1,337
Prepaid expenses	834	819
VAT and other tax receivables	299	292
Properties and other non-current assets held for sale	67	95
Other	416	251
Total other non-financial assets	**6,984**	**7,358**

1 Refer to item 1 in Note 14b for more information.

Note 11 Other assets and liabilities (continued)

c) Other financial liabilities measured at amortized cost

CHF million	31.3.18	31.12.17
Prime brokerage payables[1]		29,646
Other accrued expenses	1,960	2,105
Accrued interest expenses	1,311	1,533
Settlement and clearing accounts	1,058	1,380
Other	2,043	2,468
Total other financial liabilities measured at amortized cost	**6,372**	**37,133**

1 Upon adoption of IFRS 9 on 1 January 2018, the classification of prime brokerage receivables and payables changed from amortized cost to fair value through profit or loss, and brokerage receivables and payables are now presented separately on the balance sheet. Refer to Note 1.4 for more information.

d) Other financial liabilities designated at fair value

CHF million	31.3.18	31.12.17
Amounts due under unit-linked investment contracts	24,348	11,523
Structured securities financing transactions	5,812	375
Over-the-counter debt instruments	4,270	4,317
of which: life-to-date own credit (gain) / loss	5	36
Loan commitments and guarantees	7	9
Total other financial liabilities designated at fair value	**34,438**	**16,223**

e) Other non-financial liabilities

CHF million	31.3.18	31.12.17
Compensation-related liabilities	3,130	4,909
of which: accrued expenses	*1,007*	*2,372*
of which: other deferred compensation plans	*1,296*	*1,613*
of which: net defined benefit pension and post-employment liabilities	*827*	*925*
Current and deferred tax liabilities	867	844
VAT and other tax payables	501	378
Deferred income	243	150
Other	67	53
Total other non-financial liabilities	**4,808**	**6,335**

Note 12 Debt issued designated at fair value

CHF million	31.3.18	31.12.17
Issued debt instruments		
Equity-linked[1]	36,107	34,162
Rates-linked	5,972	5,811
Credit-linked	2,933	2,937
Fixed-rate	4,187	3,921
Other	2,860	2,671
Total debt issued designated at fair value	52,059	49,502
of which: life-to-date own credit (gain) / loss	*14*	*159*

1 Includes investment fund unit-linked instruments issued.

Note 13 Debt issued measured at amortized cost

CHF million	31.3.18	31.12.17
Certificates of deposit	18,779	23,831
Commercial paper	23,304	23,532
Other short-term debt	4,078	3,590
Short-term debt[1]	46,162	50,953
Senior unsecured debt	34,729	32,268
Covered bonds	4,105	4,112
Subordinated debt	8,791	8,985
of which: low-trigger loss-absorbing tier 2 capital instruments	*8,097*	*8,286*
of which: non-Basel III-compliant tier 2 capital instruments	*694*	*700*
Debt issued through the Swiss central mortgage institutions	8,349	8,345
Other long-term debt	77	87
Long-term debt[2]	56,051	53,796
Total debt issued measured at amortized cost[3]	102,213	104,749

1 Debt with an original maturity of less than one year. 2 Debt with 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. 3 Net of bifurcated embedded derivatives, the fair value of which was not material for the periods presented.

Note 14 Provisions and contingent liabilities

a) Provisions

The table below presents an overview of total provisions recognized under both IAS 37 and IFRS 9.

CHF million	31.3.18	31.3.17
Provisions recognized under IAS 37	2,893	3,051
Provisions for off-balance sheet financial instruments[1]	72	33
Provisions for other credit lines[1]	35	0
Total provisions	2,999	3,084

1 Provisions recognized as of 31 March 2018 relate to exposures in the scope of the expected credit loss requirements of IFRS 9. Refer to Notes 1.4 and 8 for more information. Comparative period provisions for off-balance sheet financial instruments relate to loss provisions recognized under IAS 37.

The following table presents additional information for provisions recognized under IAS 37.

CHF million	Operational risks[1]	Litigation, regulatory and similar matters[2]	Restructuring	Real estate	Employee benefits[5]	Other	Total
Balance as of 31 December 2017	43	2,444	294	125	55	89	3,051
Increase in provisions recognized in the income statement	5	37	31	0	1	6	80
Release of provisions recognized in the income statement	(2)	(31)	(6)	0	(2)	(4)	(44)
Provisions used in conformity with designated purpose	(5)	(81)	(58)	0	0	(7)	(151)
Foreign currency translation / unwind of discount	0	(39)	(4)	1	(1)	0	(43)
Balance as of 31 March 2018	41	2,331	257[3]	126[4]	54	83	2,893

1 Comprises provisions for losses resulting from security risks and transaction processing risks. 2 Comprises provisions for losses resulting from legal, liability and compliance risks. 3 Primarily consists of personnel-related restructuring provisions of CHF 41 million as of 31 March 2018 (31 December 2017: CHF 54 million) and provisions for onerous lease contracts of CHF 212 million as of 31 March 2018 (31 December 2017: CHF 235 million). 4 Consists of reinstatement costs for leasehold improvements of CHF 86 million as of 31 March 2018 (31 December 2017: CHF 86 million) and provisions for onerous lease contracts of CHF 40 million as of 31 March 2018 (31 December 2017: CHF 39 million). 5 Includes provisions for sabbatical and anniversary awards as well as provisions for severance that are not part of restructuring provisions.

Restructuring provisions primarily relate to onerous lease contracts and severance payments. The use of onerous lease provisions is driven by the maturities of the underlying lease contracts. Severance-related provisions are used within a short time period, usually within six months, but potential changes in amount may be triggered when natural staff attrition reduces the number of people affected by a restructuring and therefore the estimated costs.

Information on provisions and contingent liabilities in respect of litigation, regulatory and similar matters, as a class, is included in Note 14b. 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.

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.

Note 14 Provisions and contingent liabilities (continued)

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 14a 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 us 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 we therefore cannot provide a numerical estimate of the future losses that could arise from litigation, regulatory and similar matters, we believe 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) described in item 5 of this Note, which we entered into with the US Department of Justice (DOJ), Criminal Division, Fraud Section in connection with our 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 we 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 is subject to probation through January 2020. A guilty plea to, or conviction of, a crime could have material consequences for UBS. 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 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 our capital requirements. Information concerning our capital requirements and the calculation of operational risk for this purpose is included in the "Capital management" section of this report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit[1]

CHF million	Global Wealth Manage-ment	Personal & Corporate Banking	Asset Manage-ment	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
Balance as of 31 December 2017	555	79	1	345	240	0	1,224	2,444
Increase in provisions recognized in the income statement	35	0	0	2	0	0	0	37
Release of provisions recognized in the income statement	(4)	0	0	(3)	(24)	0	0	(31)
Provisions used in conformity with designated purpose	(33)	0	0	(15)	0	0	(33)	(81)
Foreign currency translation / unwind of discount	(8)	0	0	(6)	0	0	(26)	(39)
Balance as of 31 March 2018	546	79	1	323	216	0	1,166	2,331

1 Provisions, if any, for the matters described in this Note are recorded in Global Wealth Management (item 3 and item 4), the Investment Bank (item 7) and Corporate Center – Non-core and Legacy Portfolio (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, Corporate Center – Services and Corporate Center – Non-core and Legacy Portfolio.

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.

Since 2013, UBS (France) S.A. and UBS AG and certain former employees have been under investigation in France for alleged complicity in having illicitly solicited clients on French territory and regarding the laundering of proceeds of tax fraud and of 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.

In February 2016, the investigating judges notified UBS AG and UBS (France) S.A. that they have closed their investigation. In July 2016, UBS AG and UBS (France) S.A. received the National Financial Prosecutor's recommendation ("*réquisitoire*"). In March 2017, the investigating judges issued the trial order ("*ordonnance de renvoi*") that charges UBS AG and UBS (France) S.A., as well as various former employees, with illicit solicitation of clients on French territory and with participation in the laundering of the proceeds of tax fraud, and which transfers the case to court. The trial schedule has not yet been announced. In October 2017, the Investigation Chamber of the Court of Appeals decided that UBS (France) S.A. shall not be constituted as a civil party in the guilty plea proceedings against the former UBS (France) S.A. Head of Front Office. UBS (France) S.A. has appealed this decision to the French Supreme Court ("*Cour de cassation*"). The appeal is pending, although the criminal court subsequently found the individual's guilty plea to be invalid.

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 and of banking, financial solicitation by unauthorized persons and serious tax fraud.

UBS has, and reportedly numerous other financial institutions have, received inquiries from authorities concerning accounts relating to the Fédération Internationale de Football Association (FIFA) and other constituent soccer associations and related persons and entities. UBS is cooperating with authorities in these inquiries.

Our balance sheet at 31 March 2018 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. A subsidiary of UBS, UBS Real Estate Securities Inc. (UBS RESI), acquired pools of residential mortgage loans from originators and (through an affiliate) deposited them into securitization trusts. In this manner, from 2004 through 2007, UBS RESI sponsored approximately USD 80 billion in RMBS, based on the original principal balances of the securities issued.

UBS RESI also sold pools of loans acquired from originators to third-party purchasers. These whole loan sales during the period 2004 through 2007 totaled approximately USD 19 billion in original principal balance.

UBS was not a significant originator of US residential loans. A branch of UBS originated approximately USD 1.5 billion in US residential mortgage loans during the period in which it was active from 2006 to 2008, and securitized less than half of these loans.

Note 14 Provisions and contingent liabilities (continued)

Lawsuits related to contractual representations and warranties concerning mortgages and RMBS: When UBS acted as an RMBS sponsor or mortgage seller, it generally made certain representations relating to the characteristics of the underlying loans. In the event of a material breach of these representations, UBS was in certain circumstances contractually obligated to repurchase the loans to which the representations related or to indemnify certain parties against losses. In 2012, certain RMBS trusts filed an action (Trustee Suit) in the US District Court for the Southern District of New York (SDNY) seeking to enforce UBS RESI's obligation to repurchase loans in the collateral pools for three RMBS securitizations with an original principal balance of approximately USD 2 billion. Approximately 9,000 loans were at issue in a bench trial in the SDNY in 2016, following which the court issued an order ruling on numerous legal and factual issues and applying those rulings to 20 exemplar loans. The court further ordered that a lead master be appointed to apply the court's rulings to the loans that remain at issue following the trial. In October 2017, UBS and certain holders of the RMBS in the Trustee Suit entered into an agreement under which UBS has agreed to pay an aggregate of USD 543 million into the relevant RMBS trusts, plus certain attorneys' fees. A portion of UBS's settlement costs will be borne by other parties that indemnified UBS. The agreement was subject to the trustee for the RMBS trusts becoming a party thereto by 9 March 2018. The trustee for the RMBS trusts has informed UBS that it would not accept the proposed settlement under the agreement between UBS and the RMBS holders. UBS has been in discussions with the trustee about the terms on which it would become a party to a settlement, although there can be no assurance that the trustee will agree to a settlement on terms that are acceptable to UBS. Other than the Trustee Suit, 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.

Mortgage-related regulatory matters: In 2014, UBS received a subpoena from the US Attorney's Office for the Eastern District of New York issued pursuant to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA), which seeks documents and information related to UBS's RMBS business from 2005 through 2007. In 2015, the Eastern District of New York identified a number of transactions that are the focus of their inquiry, and subsequently provided a revised list of transactions. UBS has provided information in response to this subpoena. UBS also received and responded to subpoenas from the New York State Attorney General (NYAG) and other state attorneys general relating to UBS's RMBS business. In March 2018, UBS and the NYAG reached an agreement to resolve the NYAG's investigation, whereby UBS will pay USD 41 million and provide consumer relief in a stated amount of USD 189 million calculated as set forth in the settlement agreement. UBS has also responded to inquiries from both the Special Inspector General for the Troubled Asset Relief Program (SIGTARP) (who is working in conjunction with the US Attorney's Office for Connecticut and the DOJ) and the US Securities and Exchange Commission (SEC) relating to trading practices in connection with purchases and sales of mortgage-backed securities in the secondary market from 2009 through 2014. UBS is cooperating with the authorities in these matters.

Our balance sheet at 31 March 2018 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 (CSSF). 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 aggregating 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 fraudulent conveyances and preference payments. In 2016, the Bankruptcy Court dismissed the remaining claims against the UBS entities. The BMIS Trustee appealed. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to those made by the BMIS Trustee, and seeking unspecified damages. These claims have either been voluntarily withdrawn or dismissed on the basis that the courts did not have jurisdiction to hear the claims against the UBS entities. In 2016, the plaintiff in one of those claims appealed the dismissal. In February 2018, the United States Court of Appeals for the Second Circuit affirmed the dismissal of the plaintiff's claim.

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) have led to multiple regulatory inquiries, as well as customer complaints and arbitrations with aggregate claimed damages of USD 2.5 billion, of which claims with aggregate claimed damages of USD 1.5 billion have been resolved through settlements, arbitration or withdrawal of the claim. The claims are 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. Defendants' requests for permission to appeal that ruling were denied by the Puerto Rico Court of Appeals and the Puerto Rico Supreme Court. In 2014, a federal class action complaint also was filed against various UBS entities, certain members of UBS PR senior management and the co-manager of certain of the funds, seeking damages for investor losses in the funds during the period from May 2008 through May 2014. In 2016, defendants' motion to dismiss was granted in part and denied in part. In 2015, a class action was filed in Puerto Rico state court against UBS PR seeking equitable relief in the form of a stay of any effort by UBS PR to collect on non-purpose loans it acquired from UBS Bank USA in December 2013 based on plaintiffs' allegation that the loans are not valid. The trial court denied defendant's motion for summary judgment based on a forum selection clause in the loan agreements. The Puerto Rico Supreme Court reversed that decision and remanded the case back to the trial court for reconsideration. On reconsideration the trial court granted defendant's motion and dismissed the action.

In 2014, UBS reached a settlement with the Office of the Commissioner of Financial Institutions for the Commonwealth of Puerto Rico (OCFI) in connection with OCFI's examination of UBS's operations from January 2006 through September 2013, pursuant to which UBS is paying up to an aggregate of USD 7.7 million in investor education contributions and restitution.

In 2015, the SEC and the Financial Industry Regulatory Authority (FINRA) announced settlements with UBS PR of their separate investigations stemming from the 2013 market events. Without admitting or denying the findings in either matter, UBS PR agreed in the SEC settlement to pay USD 15 million and USD 18.5 million in the FINRA matter. We also understand that the DOJ is conducting a criminal inquiry into the impermissible reinvestment of non-purpose loan proceeds. We are cooperating with the authorities in this inquiry.

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.

Note 14 Provisions and contingent liabilities (continued)

Beginning in 2015, and continuing through 2017, certain agencies and public corporations of the Commonwealth of Puerto Rico (Commonwealth) defaulted on certain interest payments on Puerto Rico bonds. The funds hold significant amounts of those bonds and the defaults on interest payments have had, and are expected to continue to have, an adverse effect on dividends from the funds. Executive orders of the Governor that have diverted funds to pay for essential services instead of debt payments and stayed any action to enforce creditors' rights on the Puerto Rico bonds continue to be in effect. 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 creditors' rights. In May and June 2017, the oversight board placed certain of the bonds into a bankruptcy-like proceeding under the supervision of a Federal District Judge. These events, further defaults, any further legislative action to create a legal means of restructuring Commonwealth obligations or to impose additional oversight on the Commonwealth's finances, or any restructuring of the Commonwealth's obligations may increase the number of claims against UBS concerning Puerto Rico securities, as well as potential damages sought.

Our balance sheet at 31 March 2018 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: Following an initial media report in 2013 of widespread irregularities in the foreign exchange markets, UBS immediately commenced an internal review of its foreign exchange business, which includes our precious metals and related structured products businesses. Numerous authorities commenced investigations concerning possible manipulation of foreign exchange markets and precious metals prices. In 2014 and 2015, UBS reached settlements with the UK Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission (CFTC) in connection with their foreign exchange investigations, FINMA issued an order concluding its formal proceedings relating to UBS's foreign exchange and precious metals businesses, and the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Connecticut Department of Banking issued a Cease and Desist Order and assessed monetary penalties against UBS AG. In addition, the DOJ's Criminal Division (Criminal Division) terminated the 2012 Non-Prosecution Agreement (NPA) with UBS AG related to UBS's submissions of benchmark interest rates and UBS AG pleaded guilty to one count of wire fraud, paid a fine and is subject to probation through January 2020. In January 2018, UBS reached a settlement with the CFTC in connection with the CFTC's precious metals investigations. As part of that settlement, UBS paid a USD 15 million civil monetary penalty. UBS has ongoing obligations to cooperate with these authorities and to undertake certain remediation. UBS has also been granted conditional immunity by the Antitrust Division of the DOJ (Antitrust Division) 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 and precious metals 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. They allege collusion by the defendants and assert claims under the antitrust laws and for unjust enrichment. In 2015, additional putative class actions were filed in federal court in New York against UBS and other banks on behalf of a putative class of persons who entered into or held any foreign exchange futures contracts and options on foreign exchange futures contracts since 2003. The complaints assert claims under the Commodity Exchange Act (CEA) and the US antitrust laws. In 2015, a consolidated complaint was filed on behalf of both putative classes of persons covered by the US federal court class actions described above. UBS has entered into a settlement agreement that would resolve all of these US federal court class actions. The settlement agreement, which has been preliminarily approved by the court and is subject to final court approval, requires, among other things, that UBS pay an aggregate of USD 141 million and provide cooperation to the settlement classes.

A putative class action has been filed in federal court in New York against UBS and other banks on behalf of participants, beneficiaries and named fiduciaries of plans qualified under the Employee Retirement Income Security Act of 1974 (ERISA) for whom a defendant bank provided foreign currency exchange transactional services, exercised discretionary authority or discretionary control over management of such ERISA plan, or authorized or permitted the execution of any foreign currency exchange transactional services involving such plan's assets. The complaint asserts claims under ERISA. The parties filed a stipulation to dismiss the case with prejudice. The plaintiffs have appealed the dismissal. The appeals court heard oral argument in June 2017.

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 their 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 2016, a putative class action was 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. The complaint asserts claims under federal and state antitrust laws. In response to defendants' motion to dismiss, plaintiffs agreed to dismiss their complaint. In 2017, two new putative class actions were filed in federal court in New York against UBS and numerous other banks on behalf of different proposed classes of indirect purchasers of currency, and a consolidated complaint was filed in June 2017. In March 2018, the court dismissed the consolidated complaint. Plaintiffs have filed a motion seeking leave to file an amended complaint. Putative class actions are also pending against UBS and other banks in federal court in New York and other jurisdictions on behalf of putative classes of persons who had bought or sold physical precious metals and various precious metal products and derivatives. The complaints in these lawsuits assert claims under the antitrust laws and the CEA, and other claims. In 2016, the court in New York granted UBS's motions to dismiss the putative class actions relating to gold and silver. Plaintiffs in those cases sought to amend their complaints to add new allegations about UBS, which the court granted. The plaintiffs filed amended complaints in 2017. In March 2017, the court in New York granted UBS's motion to dismiss the platinum and palladium action. In May 2017, plaintiffs in the platinum and palladium action filed an amended complaint that did not allege claims against UBS.

LIBOR and other benchmark-related regulatory matters: Numerous government agencies, including the SEC, the CFTC, the DOJ, the FCA, the UK Serious Fraud Office (SFO), the Monetary Authority of Singapore (MAS), the Hong Kong Monetary Authority (HKMA), FINMA, various state attorneys general in the US and competition authorities in various jurisdictions, have conducted or are continuing to conduct investigations regarding potential improper attempts by UBS, among others, to manipulate LIBOR and other benchmark rates at certain times. In 2012, UBS reached settlements relating to benchmark interest rates with the FSA, the CFTC and the Criminal Division of the DOJ, and FINMA issued an order in its proceedings with respect to UBS relating to benchmark interest rates. In addition, UBS entered into settlements with the European Commission (EC) and with the Swiss Competition Commission (WEKO) regarding its investigation of bid-ask spreads in connection with Swiss franc interest rate derivatives. UBS has ongoing obligations to cooperate with the authorities with whom we have reached resolutions and to undertake certain remediation 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 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. Investigations by certain governmental authorities remain ongoing notwithstanding these resolutions.

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 individual 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, USD and SGD SIBOR and SOR, Australian BBSW and USD ISDAFIX, and seek unspecified compensatory and other damages under varying legal theories.

Note 14 Provisions and contingent liabilities (continued)

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. 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 preliminary court approval and remains subject to final approval. In 2018, the district court denied plaintiffs' motions for class certification in the USD class actions for claims pending against UBS, and plaintiffs have sought permission to appeal that ruling to the Second Circuit.

Other benchmark class actions and ISDAFIX class action in the US. In 2014, the court in one of the Euroyen TIBOR lawsuits dismissed certain of the plaintiff's claims, including federal antitrust claims for lack of standing. In 2015, this court dismissed plaintiff's federal racketeering claims on the same basis and affirmed its previous dismissal of plaintiff's antitrust claims against UBS. In 2017, this court also dismissed the other Yen LIBOR / Euroyen TIBOR action in its entirety on standing grounds, as did the court in the CHF LIBOR action. Also in 2017, the courts in the EURIBOR and the SIBOR / SOR lawsuits dismissed the cases as to UBS and certain other foreign defendants for lack of personal jurisdiction. Plaintiffs in the CHF LIBOR and SIBOR / SOR actions have filed amended complaints following the dismissals, which UBS and other defendants have moved to dismiss. UBS and other defendants have also moved to dismiss the GBP LIBOR and Australian BBSW actions. In 2017, the district court preliminarily approved a settlement agreement under which UBS would pay USD 14 million to resolve putative class actions filed in federal court in New York and New Jersey against UBS and other financial institutions, among others, on behalf of parties who entered into interest rate derivative transactions linked to ISDAFIX.

Government bonds: Putative class actions have been filed in US federal courts against UBS and other banks on behalf of persons who participated in markets for US Treasury securities since 2007. The complaints generally allege that the banks colluded with respect to, and manipulated prices of, US Treasury securities sold at auction. They assert claims under the antitrust laws and the CEA and for unjust enrichment. The cases have been consolidated in the SDNY, and a consolidated complaint was filed in 2017. Following filing of these complaints, UBS and reportedly other banks are responding to investigations and requests for information from various authorities regarding US Treasury securities and other 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 2018 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.

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 has 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 2018 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.

7. Investigation of UBS's role in initial public offerings in Hong Kong

The Hong Kong Securities and Futures Commission (SFC) has been conducting investigations into UBS's role as a sponsor of certain initial public offerings listed on the Hong Kong Stock Exchange. The SFC has previously indicated that it intended to take enforcement action against UBS and certain employees in relation to certain of these offerings. In March 2018, the SFC issued a decision notice in relation to one of the offerings under investigation. The notice provides for a fine of HKD 119 million and a suspension of UBS Securities Hong Kong Limited's ability to act as a sponsor for Hong Kong-listed initial public offerings for 18 months. UBS has appealed the decision.

Note 15 Guarantees, commitments and forward starting transactions

The table below presents the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

	31.3.18			31.12.17		
CHF million	Gross	Sub-participations	Net	Gross	Sub-participations	Net
Total guarantees	19,009	(2,923)	16,086	18,854	(2,867)	15,987
Loan commitments	34,534	(866)	33,667	39,069	(1,074)	37,995
Forward starting transactions[1]						
Reverse repurchase agreements	16,905			12,683		
Securities borrowing agreements	35			23		
Repurchase agreements	13,763			8,187		

1 Cash to be paid in the future by either UBS or the counterparty.

Note 16 Currency translation rates

The following table shows the rates of the main currencies used to translate the financial information of UBS's foreign operations into Swiss francs.

	Spot rate			Average rate[1]		
	As of			For the quarter ended		
	31.3.18	31.12.17	31.3.17	31.3.18	31.12.17	31.3.17
1 USD	0.95	0.97	1.00	0.94	0.98	1.00
1 EUR	1.17	1.17	1.07	1.16	1.17	1.07
1 GBP	1.34	1.32	1.25	1.32	1.32	1.25
100 JPY	0.90	0.86	0.90	0.88	0.87	0.89

1 Monthly income statement items of foreign operations with a functional currency other than the Swiss franc are translated with month-end rates into Swiss francs. Disclosed average rates for a quarter represent an average of three month-end rates, weighted according to the income and expense volumes of all foreign 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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