

## 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 Put Warrants relating to the Hang Seng China Enterprises Index**

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

---

**Issue Price: S\$0.254 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 China Enterprises 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 6 December 2017.

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 AG 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.

5 December 2017

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 Put Warrants contained in the Base Listing Document. Terms not defined herein shall have the meanings ascribed thereto in the Conditions.

**Table of Contents**

	Page
<b>Terms and Conditions of the Warrants</b>	<b>5</b>
<b>Terms and Conditions of the European Style Index Put Warrants</b>	<b>8</b>
<b>Summary of the Issue</b>	<b>16</b>
<b>Risk Factors</b>	<b>18</b>
<b>Information Relating to the Index</b>	<b>22</b>
<b>Information Relating to the Designated Market Maker</b>	<b>26</b>
<b>Placing and Sale</b>	<b>28</b>
<b>Supplemental Information Relating to the Issuer</b>	<b>30</b>
<b>Supplemental General Information</b>	<b>31</b>
<b>Appendix I</b>	
<b>Appendix II</b>	

## 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 Put 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 Put Warrants relating to the Hang Seng China Enterprises Index (“ <b>Index</b> ”)
Index:	Hang Seng China Enterprises Index (Reuters Instrument Code: .HSCE)
Index Sponsor:	Hang Seng Indexes Company Limited
Conversion Ratio (number of Index units per Warrant):	0.002 (i.e. every 500 Warrants initially relate to one Index unit)
Reference Level <sup>1</sup> and Source:	11,807.99 (out of the money) (Reuters)
Strike Level:	11,200
Gearing <sup>1</sup> :	5.93x
Premium <sup>1</sup> :	11.39%
Volatility <sup>1</sup> :	Implied: 28.00% Historical: 25.00%
Launch Date:	28 November 2017
Closing Date:	5 December 2017
Dealing Commencement Date:	6 December 2017
Last Trading Date:	The fifth Business Day immediately preceding the Expiry Date, currently being 21 June 2018
Expiry Date:	28 June 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

---

<sup>1</sup> 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:	Warrantheolders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by the Closing Level of the Index. If the Strike Level is greater than the Closing Level of the Index 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 Strike Level is less than or equal to the Closing Level of the Index 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 Warrantheolders 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:  $[(\text{Strike Level} - \text{Closing Level}) \times \text{Conversion Ratio} \times \text{Index Currency Amount}] \div \text{Exchange Rate}$
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 (“ <b>HKEx</b> ”), 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 (" <b>SGX-ST</b> ") 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 (" <b>CDP</b> ")
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 Put 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 PUT 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 Warrantheader, 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 Strike Level LESS (ii) the Closing 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.* Warrantheaders 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 Warrantheaders 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 Warrantheaders 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.* Warrantheaders shall not be required to deliver an exercise notice. Exercise of Warrants shall be determined by the Closing Level of the Index. If the Strike Level is greater than the Closing Level of the Index 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 Strike Level is less than or equal to the Closing Level of the Index 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 Warranholders shall not be entitled to receive any payment from the Issuer in respect of the Warrants.

- (c) *Settlement.* In respect of Warrants which are exercised automatically in accordance with Condition 4(b), the Issuer will pay to the Warrant Agent who will then pay to the relevant Warranholder the Cash Settlement Amount (if any) in the Settlement Currency. The aggregate Cash Settlement Amount (less any Exercise Expenses) shall be despatched 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 Warranholder only (or, in the case of joint Warranholders, the first-named Warranholder) 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 Warranholder and posted to the Warranholder's address appearing in the records maintained by CDP (or, in the case of joint Warranholders, to the address of the first-named Warranholder 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 Warrantheolders generally (without considering the circumstances of any individual Warrantheolder 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 Warrantheolders. The Issuer will give, or procure

that there is given, notice as soon as practicable of any determination 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 Warranholders; Modification

- (a) *Meetings of Warranholders.* The Master Warrant Agent Agreement or Warrant Agent Agreement contains provisions for convening meetings of the Warranholders 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 Warranholders.

Such a meeting may be convened by the Issuer or by Warranholders 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 Warranholders 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 Warranholders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Warranholders shall be binding on all the Warranholders 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 Warranholders, effect (i) any modification of the provisions of the Warrants or the Instrument which is not materially prejudicial to the interests of the Warranholders 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 Warranholders 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 China Enterprises Index
The Warrants:	European Style Index Put 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 5 December 2017 (the “ <b>Instrument</b> ”) and executed by the Issuer and a master warrant agent agreement dated 27 February 2008 (the “ <b>Master Warrant Agent Agreement</b> ”) and made between the Issuer and the Warrant Agent.
Conversion Ratio (number of Index units per Warrant):	0.002 (i.e. every 500 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:  $\frac{[(\text{Strike Level} - \text{Closing Level}) \times \text{Conversion Ratio} \times \text{Index Currency Amount}] \div \text{Exchange Rate}}$
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 Strike Level is greater than the Closing Level of the Index 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 Strike Level is less than or equal to the Closing Level of the Index 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 6 December 2017.
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 Warrantheader 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 Warrantheader 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 Warrantheader. 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 Warrantheaders (as defined in the Conditions) may, in certain circumstances, sustain a total loss of their investment if the level of the Index is equal to or higher than 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 Warrantheader must tender a specified number of Warrants at any one time in order to exercise. Thus, Warrantheaders 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 Warranholders 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 Warranholders prior to such expiry date. Accordingly, if on such expiry date the Cash Settlement Amount (where applicable) is zero or negative, a Warranholder 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 Warrantheolders. In the event that the commission payable by Warrantheolders 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 Warrantheolders 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 likelihood 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](http://www.hsi.com.hk).

### Description of the Index

The Hang Seng China Enterprises Index (“**HSCEI**” or the “**Index**”) made its debut on 8 August 1994, one year after the first H-share company was listed on the Stock Exchange of Hong Kong (“**SEHK**”). With market capitalisation and turnover of H shares in the Hong Kong stock market both increasing significantly in recent years, the Index has become a major market benchmark.

### Constituent Stocks

Constituent Stocks of the HSCEI (effective from 4 December 2017):

<b>No.</b>	<b>Company Name</b>	<b>Stock Code</b>
1)	Agricultural Bank of China Limited	1288
2)	Air China Limited	753
3)	Anhui Conch Cement Company Limited	914
4)	Bank of China Limited	3988
5)	Bank of Communications Co., Ltd.	3328
6)	BYD Co. Ltd.	1211
7)	CGN Power Co., Ltd.	1816
8)	China Cinda Asset Management Co., Ltd.	1359
9)	China CITIC Bank Corporation Limited	998
10)	China Communications Construction Company Limited	1800
11)	China Construction Bank Corporation	939
12)	China Galaxy Securities Co., Ltd.	6881
13)	China Life Insurance Company Limited	2628
14)	China Merchants Bank Co., Ltd.	3968
15)	China Minsheng Banking Corp., Ltd.	1988
16)	China Railway Construction Corporation Ltd. – H Shares	1186
17)	China Pacific Insurance (Group) Co., Ltd.	2601
18)	China Petroleum & Chemical Corporation	386
19)	China Railway Group Limited	390
20)	China Shenhua Energy Company Limited	1088
21)	China Telecom Corporation Limited	728
22)	China Vanke Co., Ltd.	2202
23)	CITIC Securities Co. Ltd.	6030
24)	CRRC Corporation Ltd. - H Shares	1766
25)	Dongfeng Motor Group Company Limited	489
26)	GF Securities Co., Ltd.	1776

27)	Great Wall Motor Co. Ltd.	2333
28)	Guangzhou Automobile Group Co., Ltd. – H Shares	2238
29)	Haitong Securities Co., Ltd.	6837
30)	Huaneng Power International, Inc.	902
31)	Huatai Securities Co., Ltd.	6886
32)	Industrial and Commercial Bank of China Limited	1398
33)	New China Life Insurance Co. Ltd.	1336
34)	PetroChina Company Limited	857
35)	PICC Property and Casualty Company Limited	2328
36)	Ping An Insurance (Group) Company of China, Limited	2318
37)	Sinopharm Group Co. Ltd.	1099
38)	The People’s Insurance Company (Group) of China Limited	1339
39)	Postal Savings Bank of China Co., Ltd. - H Shares	1658
40)	Zhuzhou CRRC Times Electric Co., Ltd.	3898

### **Selection Criteria**

#### **Eligibility Screening**

Stocks in the Universe passing the following eligibility screening will be included in the Eligibility List for constituent selection:

#### **Listing History Requirement**

Stocks should be listed for at least one month by the review cut-off date.

#### **Turnover Screening**

1. Turnover velocity in each of the past 12 months is calculated for each stock based on the following formula:

$$\text{Turnover Velocity} = \frac{\text{Median of Daily Traded Shares in Specific Calendar Month}}{\text{Freefloat-adjusted Issued Shares at Month End}}$$

Minimum requirement of turnover velocity is 0.1%.

2. Turnover velocity of a new constituent entering the Index must meet the minimum requirement for at least 10 out of the past 12 months and for all of the latest three months.
3. Turnover velocity of an existing constituent entering the Index must meet the minimum requirement for at least 10 out of the past 12 months.

#### **Selection**

1. All stocks on the Eligibility List are ranked by each of the following:
  - (i) Full market capitalisation, in terms of average month-end market capitalisation in the past 12 months

- (ii) Freefloat-adjusted market capitalisation, in terms of 12-month average market capitalisation after freefloat adjustment

Average of the past month-end market capitalisation will be used for stocks with a listing history of less than 12 months

2. A combined market capitalisation ranking is calculated for each stock based on the following formula:

$$\text{Combined Market Capitalisation Ranking} = \frac{\text{Full Market Capitalisation}}{\text{Freefloat-adjusted Market Capitalisation}} \times \frac{\text{Ranking}}{\text{Weighting}}$$

Full Market Capitalisation      x      50%  
 +  
 Freefloat-adjusted Market Capitalisation      x      50%

The 40 stocks that have the highest combined market capitalisation ranking will be selected as constituents of the Index.

The Index is reviewed quarterly.

### **Index Calculation**

The Index is freefloat-adjusted market value weighted with a 10% cap on individual stocks.

The formula of the Index is set out below:

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

Where:

- $P_t$  = Closing Price at Day t  
 $P_{t-1}$  = Closing Price at Day (t-1)  
 IS = Issued Shares  
 FAF = Freefloat Adjusted Factor, which is between 0 and 1  
 CF = Capping Factor, which is between 0 and 1

The Index is a price index without adjustment for cash dividends or warrant bonuses.

### **Further information on the Index and its constituent stocks**

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

- (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](http://www.hsi.com.hk). The Index Sponsor may not always maintain a website and may change or add a new website. Intending investors should conduct their own web searches to ensure that they are viewing the most up to date version of the Index Sponsor's website. The Issuer takes no responsibility for the contents of the Index Sponsor's website and makes no representation as to its accuracy or completeness and expressly disclaims any liability whatsoever for any



loss howsoever arising from or in reliance upon the whole or any part of the contents of the Index Sponsor's website.

### **Index Disclaimer**

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

### INFORMATION RELATING TO THE DESIGNATED MARKET MAKER

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

- (a) Maximum bid and offer spread : 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 places.

### 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 unaudited consolidated financial statements of UBS AG and its subsidiaries for the third quarter ended 30 September 2017.

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](mailto: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 2016.
  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 five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank. UBS's strategy is centered on its leading wealth management businesses 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 30 September 2017, UBS Group's common equity tier 1 ("**CET1**") capital ratio was 13.7% on a fully applied basis and 15.1% on a phase-in basis and the CET1 leverage ratio was 3.7% on a fully applied basis and 4.1% on a phase-in basis, the gone concern loss-absorbing capacity ratio was 15.5% on a fully applied basis and 12.1% on a phase-in basis, and the gone concern leverage ratio was 4.2% on a fully applied basis and 3.3% on a phase-in basis.<sup>1</sup> On the same date, invested assets stood at CHF 3,067 billion, equity attributable to UBS Group AG shareholders was CHF 53,493 million and market capitalization was CHF 63,757 million. On the same date, UBS employed 60,796 people<sup>2</sup>.

On 30 September 2017, UBS AG consolidated CET1 capital ratio was 14.0% on a fully applied basis and 15.4% on a phase-in basis and the CET1 leverage ratio was 3.8% on a fully applied basis and 4.1% on a phase-in basis, the gone concern loss-absorbing capacity ratio was 15.9% on a fully applied basis and 12.6% on a phase-in basis, and the gone concern leverage ratio was 4.3% on a fully applied basis and 3.4% on a phase-in basis.<sup>1</sup> On the same date, invested assets stood at CHF 3,067 billion and equity attributable to UBS AG shareholders was CHF 53,246 million. On the same date, UBS AG Group employed 48,949 people<sup>2</sup>.

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 AG ("**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 (outlook: stable) from

---

<sup>1</sup> 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 2016, the UBS Group Third Quarter 2017 Report and the UBS AG Third Quarter 2017 Report, as defined herein, for more information.

<sup>2</sup> Full-time equivalents.

Moody's, long-term issuer default rating of AA- (outlook: stable) from Fitch Ratings and issuer rating of AA- (outlook: stable) from Scope Ratings.

An explanation of the significance of ratings may be obtained from the rating agencies. Generally, rating agencies base their ratings on such material and information, and such of their own investigations, studies and assumptions, as they deem appropriate. The ratings of UBS AG should be evaluated independently from similar ratings of other entities, and from the rating, if any, of its 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 4 May 2016 ("**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 five business divisions (Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank) and a Corporate Center.

Since 2014, UBS has undertaken a series of measures to improve the resolvability of the Group in response to too big to fail requirements in Switzerland and other countries in which the Group operates.

In December 2014, UBS Group AG completed an exchange offer for the shares of UBS AG and became the holding company of the UBS Group. During 2015, UBS Group AG completed a court procedure under the Swiss Stock Exchange and Securities Trading Act resulting in the cancellation of the shares of the remaining minority shareholders of UBS AG. As a result, UBS Group AG owns 100% of the outstanding shares of UBS AG.

In June 2015, UBS AG transferred its Personal & Corporate Banking and Wealth Management businesses booked in Switzerland to UBS Switzerland AG, a banking subsidiary of UBS AG in Switzerland. Also in 2015, UBS implemented a more self-sufficient business and operating model for UBS Limited, UBS's investment banking subsidiary in the UK, and established UBS Business Solutions AG as a direct subsidiary of UBS Group AG to act as the Group service company. The purpose of the service company structure is to improve the resolvability of the Group by enabling UBS to maintain operational continuity of critical services should a recovery or resolution event occur.

In the second half of 2015, UBS transferred the ownership of the majority of its existing service subsidiaries outside the US to UBS Business Solutions AG. As of 1 January 2017, UBS completed the transfer of the shared service employees in the US to the US service company, UBS Business Solutions US LLC, a subsidiary of UBS AG. In the second quarter of 2017, UBS transferred shared services functions in Switzerland from UBS AG to UBS Business Solutions AG. UBS expects to complete the transfer of shared services functions in the UK in the fourth quarter of 2017.

As of 1 July 2016, UBS Americas Holding LLC was designated as intermediate holding company for UBS's US subsidiaries as required under the enhanced prudential standards regulations pursuant to the Dodd-Frank Act. UBS Americas Holding LLC holds all of UBS's US subsidiaries and is subject to US capital requirements, governance requirements and other prudential regulation.

In addition, UBS transferred the majority of the operating subsidiaries of Asset Management to UBS Asset Management AG during 2016. Furthermore, UBS 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's new European legal entity which is headquartered in Frankfurt, Germany.

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 the transfer of operating subsidiaries of UBS AG to become direct subsidiaries of UBS Group AG, further consolidation of operating subsidiaries in the EU and adjustments to the booking entity or location of products and services. These structural

changes are being discussed on an ongoing basis with the Swiss Financial Market Supervisory Authority (“**FINMA**”) and other regulatory authorities and remain subject to a number of uncertainties that may affect their feasibility, scope or timing.

UBS Group AG’s interests in subsidiaries and other entities as of 31 December 2016, 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 2016 published on 10 March 2017 (“**Annual Report 2016**”).

UBS AG’s interests in subsidiaries and other entities as of 31 December 2016, 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 2016.

UBS AG is the parent company of, and conducts a significant portion of its operations through, 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 five business divisions (Wealth Management, Wealth Management Americas, 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 2016; 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 2016.

### **3.2.1 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 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.

### **3.2.2 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 business booked in the US.

### **3.2.3 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 a central element of UBS's universal bank delivery model in Switzerland. Personal & Corporate Banking works with the wealth management, investment bank and asset management businesses to ensure that clients receive the best products and solutions for their specific financial needs. Personal & Corporate Banking is also an important source of growth for 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.

#### *3.2.4 Asset Management*

Asset Management provides investment management products and services, platform solutions and advisory support to institutions, wholesale intermediaries and wealth management clients around the world, with an onshore presence in 22 countries. Asset Management's global investment capabilities include all major traditional and alternative asset classes.

#### *3.2.5 Investment Bank*

The Investment Bank is present in over 35 countries, with principal offices in all major financial centers, providing investment advice, financial solutions and capital markets access. It serves corporate, institutional and wealth management clients across the globe and forms a synergetic partnership 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.

#### *3.2.6 Corporate Center*

Corporate Center is comprised of Services, Group Asset and Liability Management ("**Group ALM**") and Non-core and Legacy Portfolio. Services consists of the Group Chief Operating Officer area (Group Corporate Services, Group Operations, Group Sourcing, Group Technology), Group Finance, Group Legal, Group Human Resources, Group Risk Control, Group Communications and Branding, Group Regulatory and 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 better matching assets and liabilities within the context of the Group's liquidity, funding and capital targets. 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 is comprised of the positions from businesses that were part of the Investment Bank prior to its restructuring and is overseen by a committee chaired by the Group Chief Risk Officer.

### **3.3 Competition**

The financial services industry is characterised 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 2016, 2015 and 2014, except where indicated, from the Annual Report 2016, which contains the audited consolidated financial statements of UBS AG, as well as additional unaudited consolidated financial information, for the year ended 31 December 2016 and comparative figures for the years ended 31 December 2015 and 2014. The selected consolidated financial information included in the table below for the nine months ended 30 September 2017 and 30 September 2016 was derived from the UBS AG Third Quarter 2017 Report, which contains UBS AG interim consolidated financial statements (unaudited), as well as additional unaudited consolidated financial information, for the nine months ended 30 September 2017 and comparative figures for the nine months ended 30 September 2016.

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 2016, 2015 and 2014 which is indicated as being unaudited in the table below was included in the Annual Report 2016, 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 section “*Measurement of performance*” of the Annual Report 2016 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 document, the Annual Report 2016 and the UBS AG Third Quarter 2017 Report, and should not rely solely on the summarized information set out below:

CHF million, except where indicated	As of or for the nine months ended		As of or for the year ended		
	30.9.17	30.9.16	31.12.16	31.12.15	31.12.14
	unaudited		audited, except where indicated		
<b>Results</b>					
Operating income	22,237	21,303	28,421	30,605	28,026
Operating expenses	17,993	17,979	24,352	25,198	25,557
Operating profit / (loss) before tax	4,244	3,324	4,069	5,407	2,469
Net profit / (loss) attributable to shareholders	3,257	2,568	3,207	6,235	3,502
<b>Key performance indicators</b>					
<b>Profitability</b>					
Return on tangible equity (%) <sup>1</sup>	9.6	7.3	6.9*	13.5*	8.2*
Cost / income ratio (%) <sup>2</sup>	80.8	84.3	85.6*	82.0*	90.9*
<b>Growth</b>					
Net profit growth (%) <sup>3</sup>	26.8	(51.4)	(48.6)*	78.0*	10.4*
Net new money growth for combined wealth management businesses (%) <sup>4</sup>	1.9	3.2	2.1*	2.2*	2.5*
<b>Resources</b>					
Common equity tier 1 capital ratio (fully applied, %) <sup>5,6</sup>	14.0	14.8	14.5*	15.4*	14.2*
Going concern leverage ratio (fully applied, %) <sup>7,8</sup>	4.2	4.1	4.2*	-	-

## Additional information

<b>Profitability</b>					
Return on equity (RoE) (%) <sup>9</sup>	8.3	6.3	5.9*	11.7*	7.0*
Return on risk-weighted assets, gross (%) <sup>10</sup>	12.9	13.3	13.2*	14.3*	12.6*
Return on leverage ratio denominator, gross (%) <sup>11</sup>	3.4	3.2	3.2*	-	-
<b>Resources</b>					
Total assets	914,551	935,683	935,353	943,256	1,062,327
Equity attributable to shareholders	53,246	53,556	53,662	55,248	52,108
Common equity tier 1 capital (fully applied) <sup>6</sup>	33,337	32,110	32,447	32,042	30,805
Common equity tier 1 capital (phase-in) <sup>6</sup>	36,736	38,994	39,474	41,516	44,090
Risk-weighted assets (fully applied) <sup>6</sup>	237,322	217,297	223,232*	208,186*	217,158*
Common equity tier 1 capital ratio (phase-in, %) <sup>5,6</sup>	15.4	17.7	17.5*	19.5*	19.9*
Going concern capital ratio (fully applied, %) <sup>8</sup>	15.6	16.5	16.3*	-	-
Going concern capital ratio (phase-in, %) <sup>8</sup>	19.7	23.0	22.6*	-	-
Going concern loss-absorbing capacity ratio (fully applied, %) <sup>8</sup>	15.9	12.6	13.3*	-	-
Leverage ratio denominator (fully applied) <sup>12</sup>	885,896	877,926	870,942*	898,251*	999,124*
Common equity tier 1 leverage ratio (fully applied, %) <sup>12</sup>	3.8	3.7	3.7*	3.6*	3.1*
Going concern leverage ratio (phase-in, %) <sup>7,8</sup>	5.3	5.7	5.8*	-	-
Going concern leverage ratio (fully applied, %) <sup>8</sup>	4.3	3.1	3.4*	-	-
<b>Other</b>					
Invested assets (CHF billion) <sup>13</sup>	3,067	2,747	2,821	2,689	2,734
Personnel (full-time equivalents)	48,949	57,012	56,208*	58,131*	60,155*

\* unaudited

<sup>1</sup> 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.

<sup>2</sup> Operating expenses / operating income before credit loss (expense) or recovery.

<sup>3</sup> 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. Not meaningful and not included if either the reporting period or the comparison period is a loss period.

<sup>4</sup> Net new money growth for combined wealth management businesses is calculated as the aggregate of the net new money for the period (annualized as applicable) of the business divisions Wealth Management and Wealth Management Americas / aggregate invested assets at the beginning of the period of the business divisions Wealth Management and Wealth Management Americas. Net new money and invested assets are each derived from the "Wealth Management" and "Wealth Management Americas" sections of the management report contained in the UBS Group Third Quarter 2017 Report, under "UBS business divisions and Corporate Center", and in the Annual Report 2016, under "Financial and operating performance". Net new money growth for combined wealth management businesses is based on adjusted net new money, which excludes the negative effect on net new money in 2015 of CHF 9.9 billion in Wealth Management from UBS's balance sheet and capital optimization program.

<sup>5</sup> Common equity tier 1 capital / risk-weighted assets.

<sup>6</sup> Based on the Basel III framework as applicable for Swiss systemically relevant banks.

<sup>7</sup> Total going concern capital / leverage ratio denominator.

<sup>8</sup> Based on the revised Swiss SRB framework that became effective on 1 July 2016. Figures for prior periods are not available.

<sup>9</sup> Net profit attributable to shareholders (annualized as applicable) / average equity attributable to shareholders.

<sup>10</sup> Based on fully applied risk-weighted assets. Figures as of 31 December 2015 and 31 December 2014 were derived from the UBS Group 2016 Form 20-F and do not correspond to the figures contained in the UBS Group 2015 Form 20-F, which were calculated based on phase-in risk-weighted assets.

<sup>11</sup> Based on the 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 figures for the periods ended on 31 December 2015 and 31 December 2014 are not presented as they are not available on a fully comparable basis.

<sup>12</sup> Calculated in accordance with Swiss SRB rules. From 31 December 2015 onward, the leverage ratio denominator calculation is aligned with the Basel III rules. Figures for periods prior to 31 December 2015 are calculated in accordance with former Swiss SRB rules and are therefore not fully comparable.

<sup>13</sup> Includes invested assets for Personal & Corporate Banking.

### 3.4.2 Regulatory and legal developments

#### *Postponed implementation of NSFR and revision of LCR in Switzerland*

In September 2017, the Swiss Federal Department of Finance informed banks that the net stable funding ratio (NSFR) requirements will not be finalized in 2017. Taking international developments into account, the Swiss Federal Council is expected to decide on next steps at the end of 2018.

UBS expects that proposed changes to liquidity coverage ratio (LCR) requirements will take effect on 1 January 2018, subject to approval by the Swiss Federal Council; however, the final version of the changes has not yet been published.

#### *Increase in gone concern requirement rebate*

Under the Swiss SRB framework, banks are eligible for a rebate of up to 2% of the leverage ratio denominator (“**LRD**”)-based gone concern capital requirement if they take actions that facilitate recovery and resolvability beyond the minimum requirement. FINMA has communicated its annual assessment and has increased UBS’s rebate to approximately one-third of the maximum based on actions UBS completed in 2016 to improve resolvability. The rebate will be phased in until 1 January 2020. As UBS completes additional measures to improve the resolvability of the Group, it expects to qualify for a larger rebate and therefore aims to operate with a gone concern ratio of less than 4% of the LRD on completion of the phase-in period.

Refer to “*Regulatory and legal developments*” in the UBS Group AG third quarter 2017 report, published on 27 October 2017, (“**UBS Group Third Quarter 2017 Report**”) for information on further recent regulatory and legal developments.

### **3.5 Trend Information**

As indicated in the UBS Group Third Quarter 2017 Report, UBS expects the global economic recovery to strengthen further, but geopolitical tensions and macroeconomic uncertainty still pose risks to client sentiment. In particular, high asset prices, uncertainty over central bank balance sheet and interest rate policies, seasonality factors and the persistence of low volatility may continue to affect overall client activity. Low and negative interest rates, particularly in Switzerland and the eurozone, put pressure on net interest margins, which may be partly offset by the effect of a further normalization of US monetary policy. Implementing Switzerland’s new bank capital standards and further changes to national and international regulatory frameworks for banks will result in increased capital requirements, funding and operating costs. UBS is well positioned to mitigate these challenges and benefit from further improvements in market conditions.

Refer to “*Current market climate and industry trends*” and “*Risk factors*” in the “*Operating environment and strategy*” section of the Annual Report 2016 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 well as with the NYSE standards as a foreign company with debt securities listed on the NYSE.



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. The supervision and control of the EB remains with the BoD. The Articles of Association and the Organization Regulations of UBS AG with their annexes govern the authorities and responsibilities of the two bodies.

#### 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	2018	Chairman of the Board of Directors of UBS Group AG; board member of the Swiss Bankers Association; member of the Board of Trustees 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; President of the International Monetary Conference; member of the European Financial Services Round Table; member of the European Banking Group; member of the Monetary Economics and International Advisory Panel, Monetary Authority of Singapore; member of the Group of Thirty, Washington, D.C.; Chairman of the DIW Berlin Board of Trustees; Advisory Board member of the Department of Economics at the University of Zurich; member of the Trilateral Commission.
Michel Demaré	Independent Vice Chairman	2018	Independent Vice-Chairman of the Board of Directors of UBS Group AG; Vice Chairman of the board of Syngenta; board member of Louis-Dreyfus Commodities Holdings BV; Vice Chairman of the Supervisory Board of IMD, Lausanne; Chairman of the Syngenta Foundation for Sustainable Agriculture; Advisory Board member of the Department of Banking and Finance at the University of Zurich.
David Sidwell	Member	2018	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; Director of the National Council on Aging, Washington D.C.
Reto Francioni	Member	2018	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	2018	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); board member of British American Tobacco plc.

William G. Parrett	Member	2018	Member of the Board of Directors of UBS Group AG; board member of the Eastman Kodak Company (chairman of the audit and finance committee); board member of the Blackstone Group LP (chairman of the audit committee and chairman of the conflicts committee); board member of Thermo Fisher Scientific Inc. (chairman of the audit committee); Chairman of the Board of Conduent Inc; member of the Committee on Capital Markets Regulation; member of the Carnegie Hall Board of Trustees; Past Chairman of the board of the United States Council for International Business; Past Chairman of United Way Worldwide.
Julie G. Richardson	Member	2018	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 Arconic Inc.; board member of Vereit, Inc. (chairman of the compensation committee).
Isabelle Romy	Member	2018	Member of the Board of Directors of UBS Group AG; partner and board member at Frieriep 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	2018	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	2018	Member of the Board of Directors of UBS Group AG; distinguished fellow at INSEAD in Singapore (on leave from the University of Mainz); 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	2018	Member of the Board of Directors of UBS Group AG; CFO at Allianz SE; Administrative Board member of Allianz Asset Management AG and Allianz Investment Management SE, both Allianz Group mandates; member of the CFO Forum; member of the Systemic Risk Working Group of the European Central Bank and the Bank for International Settlements; Chairman of the Economic & Finance Committee of Insurance Europe; 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 William G. Parrett (Chairperson), Michel Demaré, Ann F. Godbehere, Isabelle Romy and Beatrice Weder di Mauro.

## 4.2 Executive Board

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  UBS AG, Bahnhofstrasse 45, CH- 8001 Zurich	President of the Executive Board	Member of the Group Executive Board and Group Chief Executive Officer of UBS Group AG; Member of the Board of Directors of UBS Switzerland AG; Chairman of the Board of Directors of UBS Business Solutions AG; Chairman of the UBS Optimus 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.
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	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; Foundation Board member of the

UBS AG, Bahnhofstrasse 45, CH-8001 Zurich		International Red Cross and Red Crescent Museum; member of the Professional Ethics Commission of the Association of Swiss Corporate Lawyers.
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	Head Human Resources	Member of the Group Executive Board and Group Head Human Resources of UBS Group 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 of 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.
Axel P. Lehmann  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 and President of the Executive Board of UBS Business Solutions AG; Co-Chair of the Global Future Council of the Future of Financial and Monetary Systems of the World Economic Forum; Chairman of the board of the Institute of Insurance Economics at the University of St. Gallen; member of the International and Alumni Advisory Board at the University of St. Gallen; member of the Swiss-American Chamber of Commerce Chapter Doing Business in USA; Adjunct Professor of Business Administration and Service Management at the University of St. Gallen.
Tom Naratil  UBS AG, 1200 Harbor Boulevard, Weehawken, NJ 07086 USA	President Wealth Management Americas and President UBS Americas	Member of the Group Executive Board and President Wealth Management Americas and President UBS Americas of UBS Group AG; Chairman 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 Consultants 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 of 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).
Jürg Zeltner  UBS AG, Bahnhofstrasse 45, CH-8001 Zurich	President Wealth Management	Member of the Group Executive Board and President Wealth Management of UBS Group AG; board member of the German-Swiss Chamber of Commerce; member of the IMD Foundation Board, Lausanne.

### 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 7 May 2015, 4 May 2016 and 2 March 2017, 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 2016 is available in the section "*UBS AG consolidated financial statements*" of the Annual Report 2016 and in the UBS AG's standalone financial statements for the year ended 31 December 2016 (the "**Standalone Financial Statements**"), respectively; and for financial year 2015 it is available in the "*Consolidated financial statements*" and "*Legal entity financial and regulatory information*" sections of the UBS Group AG and UBS AG annual report 2015, in English, published on 18 March 2016 ("**Annual Report 2015**"). The consolidated and standalone financial accounts are closed on 31 December of each year.

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: 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).

With respect to the financial year 2015, reference is made to the following parts of the Annual Report 2015:

- (i) the UBS AG consolidated financial statements, in particular to the Income statement on page 568, the Balance sheet on page 571, the Statement of changes in equity on pages 572-575 (inclusive), the Statement of cash flows on pages 577-578 (inclusive) and the Notes to the consolidated financial statements on pages 579-738 (inclusive); and
- (ii) the UBS AG standalone financial statements, in particular to the Income statement on page 772, the Balance sheet on page 773-774, the Statement of appropriation of retained earnings and proposed dividend distribution on page 775, and the Notes to the UBS AG standalone financial statements on pages 776-792 (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 of UBS AG and the standalone financial statements of UBS AG for financial years 2016 and 2015 were audited by Ernst & Young. The reports of the auditors on the consolidated financial statements can be found on pages 471-477 (inclusive) of the Annual Report 2016 and on pages 566-567 (inclusive) of the Annual Report 2015. The reports of the auditors on the standalone financial statements of UBS AG can be found on pages 22-25 (inclusive) of the Standalone Financial Statements and on pages 793-794 (inclusive) of the Annual Report 2015.

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 2016 and 31 December 2015.

## **7.3 Interim Financial Information**

Reference is also made to (i) the UBS Group AG first quarter 2017 report published on 28 April 2017 ("**UBS Group First Quarter 2017 Report**") and the UBS AG first quarter 2017 report, published on 3 May 2017 ("**UBS AG First Quarter 2017 Report**"), which contain information on the financial condition and results of operations, including the interim consolidated financial statements, of UBS Group AG consolidated and UBS AG consolidated, respectively, as of and for the period ended 31 March 2017; to (ii) the UBS Group AG second quarter 2017 report, published on 28 July 2017 ("**UBS Group Second Quarter 2017 Report**") and the UBS AG second quarter 2017 report, published on 3 August 2017 ("**UBS AG Second Quarter 2017 Report**"), which contain information on the financial

condition and results of operations, including the interim consolidated financial statements, of UBS Group AG consolidated and UBS AG consolidated, respectively, as of and for the period ended 30 June 2017; and to (iii) the UBS Group Third Quarter 2017 Report and the UBS AG third quarter 2017 report, published on 1 November 2017 ("**UBS AG Third Quarter 2017 Report**"), which contain information on the financial condition and results of operations, including the interim consolidated financial statements, of UBS Group AG consolidated and UBS AG consolidated, respectively, as of and for the period ended 30 September 2017. 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 13a Provisions*” to the UBS AG’s interim consolidated financial statements included in the UBS AG Third Quarter 2017 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 USD 203 million fine and is subject to a three-year term of probation. A guilty plea to, or conviction of, a crime (including as a result of termination of the NPA) 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 Third Quarter 2017 Report.

Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit <sup>1</sup>

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	UBS
<b>Balance as of 31 December 2016</b>	292	425	78	5	616	259	0	1,585	3,261
<b>Balance as of 30 June 2017</b>	249	361	77	5	391	253	0	1,110	2,446
Increase in provisions recognized in the income statement	20	10	0	0	2	248	0	31	<b>310</b>



Release of provisions recognized in the income statement	0	(3)	0	(5) <sup>2</sup>	(47)	(1)	0	(7)	<b>(63)</b>
Provisions used in conformity with designated purpose	(1)	(46)	0	0	(5)	(259)	0	(1)	<b>(313)</b>
Foreign currency translation / unwind of discount	11	3	1	0	3	1	0	11	<b>30</b>
<b>Balance as of 30 September 2017</b>	<b>279</b>	<b>325</b>	<b>78</b>	<b>0</b>	<b>344</b>	<b>241</b>	<b>0</b>	<b>1,144</b>	<b>2,410</b>

1 Provisions, if any, for the matters described in this section are recorded in Wealth Management (item 3), Wealth Management Americas (item 4), the Investment Bank (item 8), Corporate Center – Services (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 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. 2 In the third quarter of 2017, a release of CHF 5 million was recognized in Provisions for litigation, regulatory and similar matters, with a corresponding increase in Other provisions.

### 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 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 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.

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 30 September 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 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 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. The security holders who are parties to the settlement agreement have requested that the trustee conduct a vote of security holders to approve or reject the settlement, and each of these security holders has agreed to vote its securities in favor of the settlement. Giving effect to this settlement, 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 has subsequently provided a revised list of transactions. UBS has provided and continues to provide information. UBS continues to respond to the FIRREA subpoena and to subpoenas from the New York State Attorney General and other state attorneys general relating to its RMBS business. In addition, UBS has also been responding 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 30 September 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 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 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 now face severe losses, and the Luxembourg funds are in liquidation. The last reported net asset value of the two Luxembourg funds before revelation of the Madoff scheme was approximately USD 1.7 billion in the aggregate although that figure likely includes fictitious profit reported by BMIS. 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. UBS Europe SE, Luxembourg branch, and

certain other UBS subsidiaries are responding to inquiries by Luxembourg investigating authorities, without, however, being named as parties in those investigations.

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims on behalf of the funds against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees. The amounts claimed are approximately EUR 890 million and EUR 305 million, respectively. The liquidators have filed supplementary claims for amounts that the funds may possibly be held liable to pay the trustee for the liquidation of BMIS ("**BMIS Trustee**"). These amounts claimed by the liquidator are approximately EUR 564 million and EUR 370 million, respectively.

In addition, a large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff scheme. The majority of these cases are pending in Luxembourg, where appeals were filed by the claimants against the 2010 decisions of the court in which the claims in a number of test cases were held to be inadmissible. The Luxembourg Court of Appeal has found in favor of UBS and dismissed all of these test case appeals, confirming that the claims are inadmissible. The Luxembourg Supreme Court has also dismissed a further appeal brought by the claimant in one of the test cases.

In the US, the BMIS Trustee filed claims in 2010 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. The SDNY dismissed all of the BMIS Trustee's claims other than claims for recovery of fraudulent conveyances and preference payments that were allegedly transferred to UBS on the ground that the BMIS Trustee lacks standing to bring such claims. The SDNY decision was affirmed on appeal and is now final. In 2016, the bankruptcy court issued an opinion dismissing the remaining claims for recovery of transfers of fraudulent conveyances and preference payments on the ground that the US Bankruptcy Code does not apply to transfers that occurred outside the US. The BMIS Trustee has appealed that ruling. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to the ones made by the BMIS Trustee, seeking unspecified damages. One claim was voluntarily withdrawn by the plaintiff. In 2015, the SDNY dismissed the two remaining claims on the basis that the New York courts did not have jurisdiction to hear the claims against the UBS entities. The plaintiff in one of those claims has appealed the dismissal.

In Germany, certain clients of UBS are exposed to Madoff-managed positions through third-party funds and funds administered by UBS entities in Germany. A small number of claims have been filed with respect to such funds. In 2015, a court of appeal ordered UBS to pay EUR 49 million, plus interest of approximately EUR 15.3 million.

#### 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 2.2 billion, of which claims with aggregate claimed damages of USD 1.2 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 to dismiss the action 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.

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 December 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 March 2017, the court denied defendants' motion to dismiss the amended complaint.

Also, in 2013, an SEC Administrative Law Judge dismissed a case brought by the SEC against two UBS executives, finding no violations. The charges had stemmed from the SEC's investigation of UBS's sale of closed-end funds in 2008 and 2009, which UBS settled in 2012. Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain of the 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 based on allegations similar to those in the SEC action. 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 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.

UBS's balance sheet at 30 September 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 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 to UBS AG. In addition, the DOJ's Criminal Division ("**Criminal Division**") terminated the December 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. 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 numerous authorities, including the CFTC, 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 January 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.

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 has been 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 FX 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 October 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 their 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 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. 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. 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. UBS and other defendants in other lawsuits including those related to GBP LIBOR and Australian BBSW have filed motions to dismiss. 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 complaints,



which have since been consolidated into an amended complaint, allege that the defendants conspired to manipulate ISDAFIX rates from January 2006 through June 2013, in violation of US antitrust laws and certain state laws, and seek unspecified compensatory damages, including treble damages. On 12 July 2017, the court overseeing the ISDAFIX class action preliminarily approved a settlement agreement between UBS AG and the plaintiffs, whereby UBS AG agreed to 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. 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 order referred to above, UBS's balance sheet at 30 September 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 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 30 September 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 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. 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. Of the remaining BRL 732 million in indemnification claims, administrative courts have ruled in favor of BTG in respect of BRL 455 million of assessments related to profit-sharing plans, with the remainder of the assessments pending at various levels of the administrative or judicial court system.

## 8. 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. In 2016, the SFC informed UBS that it intends to commence action against UBS and certain UBS employees with respect to sponsorship work in those offerings, which could result in financial ramifications for UBS, including fines and obligations to pay investor compensation, and suspension of UBS's ability to provide corporate finance advisory services in Hong Kong for a period of time.

In January 2017, a writ was filed by the SFC with Hong Kong's High Court in which UBS was named as one of six defendants from whom the SFC was seeking investor compensation in an unspecified amount for losses incurred by certain shareholders of China Forestry Holdings Company Limited, for whom UBS acted as a sponsor in connection with their 2009 listing application. In August 2017, the SFC filed an amended writ that did not name UBS and some of the other defendants, thereby discontinuing this action against UBS.

The specific litigation, regulatory and other matters described above under items (1) to (8) 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 13 Provisions and contingent liabilities*" to the UBS AG interim consolidated financial statements included in the UBS AG Third Quarter 2017 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) which 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. UBS has indemnification rights against

surviving third-party issuers or originators for losses or liabilities incurred by UBS in connection with certain of these matters.

## **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**

As indicated in "*Note 17 Events after the reporting period*" to the UBS AG's interim consolidated financial statements included in the UBS AG Third Quarter 2017 Report, on 1 October 2017, UBS AG Group 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 approximately CHF 140 million. This gain will be recognized in the income statement within Asset Management in the fourth quarter of 2017. Other than this, there has been no significant change in the financial or trading position of UBS AG or UBS AG Group since 30 September 2017, which is the end of the last financial period for which interim 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 2016.

## **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 (a) CHF 13,620,031.20, comprising 136,200,312 registered shares with a par value of CHF 0.10 each that can be issued upon exercise of employee options; and (b) 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 2015, 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 "Report of the statutory auditor and the independent registered public accounting firm on the consolidated financial statements"), (6) Legal entity financial and regulatory information (including the "Report of the statutory auditor on the financial statements"), (7) Additional regulatory information, and the Appendix;
- 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 UBS Group First Quarter 2017 Report and the UBS AG First Quarter 2017 Report;
- The UBS Group Second Quarter 2017 Report and the UBS AG Second Quarter 2017 Report;
- The UBS Group Third Quarter 2017 Report and the UBS AG Third Quarter 2017 Report; and
- 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](http://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](http://www.ubs.com/governance).

**APPENDIX II**

**EXTRACT OF  
THE UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS OF  
UBS AG AND ITS SUBSIDIARIES  
FOR THE THIRD QUARTER ENDED 30 SEPTEMBER 2017**

# UBS AG interim consolidated financial statements (unaudited)

## Income statement

CHF million	Note	For the quarter ended			% change from		Year-to-date	
		30.9.17	30.6.17	30.9.16	2Q17	3Q16	30.9.17	30.9.16
Interest income		3,611	3,590	3,305	1	9	10,593	10,258
Interest expense		(1,881)	(2,186)	(1,538)	(14)	22	(5,771)	(5,626)
Net interest income		1,729	1,404	1,767	23	(2)	4,822	4,633
Credit loss (expense) / recovery		7	(46)	(4)			(39)	(13)
Net interest income after credit loss expense		1,736	1,358	1,763	28	(2)	4,783	4,619
Net fee and commission income	3	4,252	4,296	4,075	(1)	4	12,920	12,283
Net trading income		1,090	1,459	1,099	(25)	(1)	3,990	4,001
Other income	4	200	285	113	(30)	77	544	401
Total operating income		7,279	7,398	7,049	(2)	3	22,237	21,303
Personnel expenses	5	3,598	3,611	3,907	0	(8)	11,253	11,759
General and administrative expenses	6	2,282	2,111	1,985	8	15	5,993	5,423
Depreciation and impairment of property, equipment and software		221	220	246	0	(10)	694	727
Amortization and impairment of intangible assets		16	16	23	0	(30)	53	70
Total operating expenses		6,117	5,957	6,161	3	(1)	17,993	17,979
Operating profit / (loss) before tax		1,161	1,441	888	(19)	31	4,244	3,324
Tax expense / (benefit)	7	256	317	41	(19)	524	937	675
Net profit / (loss)		905	1,124	847	(19)	7	3,307	2,649
Net profit / (loss) attributable to preferred noteholders		0	0	0			46	78
Net profit / (loss) attributable to non-controlling interests		2	1	1	100	100	3	3
<b>Net profit / (loss) attributable to shareholders</b>		<b>904</b>	<b>1,123</b>	<b>846</b>	<b>(20)</b>	<b>7</b>	<b>3,257</b>	<b>2,568</b>

**Statement of comprehensive income**

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
<b>Comprehensive income attributable to shareholders</b>					
<b>Net profit / (loss)</b>	<b>904</b>	1,123	846	3,257	2,568
<b>Other comprehensive income that may be reclassified to the income statement</b>					
<b>Foreign currency translation</b>					
Foreign currency translation movements, before tax	375	(992)	(172)	(990)	(814)
Foreign exchange amounts reclassified to the income statement from equity	2	21	4	27	153
Income tax relating to foreign currency translation movements	226	1	107	229	110
Subtotal foreign currency translation, net of tax	602	(969)	(61)	(735)	(552)
<b>Financial assets available for sale</b>					
Net unrealized gains / (losses) on financial assets available for sale, before tax	57	10	6	110	375
Impairment charges reclassified to the income statement from equity	0	(1)	1	13	4
Realized gains reclassified to the income statement from equity	(13)	(135)	(18)	(156)	(273)
Realized losses reclassified to the income statement from equity	2	5	0	9	19
Income tax relating to net unrealized gains / (losses) on financial assets available for sale	(22)	6	(9)	(24)	(53)
Subtotal financial assets available for sale, net of tax	24	(115)	(21)	(47)	72
<b>Cash flow hedges</b>					
Effective portion of changes in fair value of derivative instruments designated as cash flow hedges, before tax	60	165	(175)	195	1,270
Net (gains) / losses reclassified to the income statement from equity	(209)	(211)	(235)	(640)	(812)
Income tax relating to cash flow hedges	30	11	84	93	(90)
Subtotal cash flow hedges, net of tax	(118)	(35)	(326)	(351)	367
<b>Total other comprehensive income that may be reclassified to the income statement, net of tax</b>	<b>508</b>	(1,119)	(408)	(1,133)	(113)
<b>Other comprehensive income that will not be reclassified to the income statement</b>					
<b>Defined benefit plans</b>					
Gains / (losses) on defined benefit plans, before tax	135	115	(186)	299	(575)
Income tax relating to defined benefit plans	(7)	0	(23)	(4)	(16)
Subtotal defined benefit plans, net of tax	128	115	(209)	295	(590)
<b>Own credit on financial liabilities designated at fair value</b>					
Gains / (losses) from own credit on financial liabilities designated at fair value, before tax	(36)	(72)	(30)	(288)	(135)
Income tax relating to own credit on financial liabilities designated at fair value	0	(1)	4	(1)	5
Subtotal own credit on financial liabilities designated at fair value, net of tax	(36)	(73)	(25)	(290)	(130)
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>92</b>	42	(235)	5	(720)
<b>Total other comprehensive income</b>	<b>600</b>	(1,077)	(643)	(1,128)	(833)
<b>Total comprehensive income attributable to shareholders</b>	<b>1,504</b>	46	203	2,129	1,735

## Statement of comprehensive income (continued)

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
<b>Comprehensive income attributable to preferred noteholders</b>					
Net profit / (loss)	0	0	0	46	78
<b>Other comprehensive income that will not be reclassified to the income statement</b>					
Foreign currency translation movements, before tax	30	16	4	44	283
Income tax relating to foreign currency translation movements	0	0	0	0	0
Subtotal foreign currency translation, net of tax	30	16	4	44	283
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>30</b>	<b>16</b>	<b>4</b>	<b>44</b>	<b>283</b>
<b>Total comprehensive income attributable to preferred noteholders</b>	<b>30</b>	<b>16</b>	<b>4</b>	<b>90</b>	<b>361</b>
<b>Comprehensive income attributable to non-controlling interests</b>					
Net profit / (loss)	2	1	1	3	3
<b>Other comprehensive income that will not be reclassified to the income statement</b>					
Foreign currency translation movements, before tax	0	(2)	1	(1)	1
Income tax relating to foreign currency translation movements	0	0	0	0	0
Subtotal foreign currency translation, net of tax	0	(2)	1	(1)	1
<b>Total other comprehensive income that will not be reclassified to the income statement, net of tax</b>	<b>0</b>	<b>(2)</b>	<b>1</b>	<b>(1)</b>	<b>1</b>
<b>Total comprehensive income attributable to non-controlling interests</b>	<b>1</b>	<b>(2)</b>	<b>3</b>	<b>2</b>	<b>4</b>
<b>Total comprehensive income</b>					
Net profit / (loss)	905	1,124	847	3,307	2,649
<b>Other comprehensive income</b>	<b>630</b>	<b>(1,064)</b>	<b>(638)</b>	<b>(1,085)</b>	<b>(549)</b>
<i>of which: other comprehensive income that may be reclassified to the income statement</i>	<i>508</i>	<i>(1,119)</i>	<i>(408)</i>	<i>(1,133)</i>	<i>(113)</i>
<i>of which: other comprehensive income that will not be reclassified to the income statement</i>	<i>121</i>	<i>55</i>	<i>(229)</i>	<i>48</i>	<i>(437)</i>
<b>Total comprehensive income</b>	<b>1,535</b>	<b>60</b>	<b>210</b>	<b>2,221</b>	<b>2,100</b>



**Balance sheet**

CHF million	Note	30.9.17	30.6.17	31.12.16	% change from	
					30.6.17	31.12.16
<b>Assets</b>						
Cash and balances with central banks		94,563	100,071	107,767	(6)	(12)
Due from banks		15,017	14,390	13,125	4	14
Cash collateral on securities borrowed		16,614	15,081	15,111	10	10
Reverse repurchase agreements		87,889	75,324	66,246	17	33
Trading portfolio assets	8	114,424	107,738	96,661	6	18
<i>of which: assets pledged as collateral which may be sold or repledged by counterparties</i>		33,418	32,679	30,260	2	10
Positive replacement values	8, 9	119,462	121,910	158,411	(2)	(25)
Cash collateral receivables on derivative instruments	9	24,928	22,687	26,664	10	(7)
Loans		316,658	310,366	307,004	2	3
Financial assets designated at fair value	8	50,374	51,436	65,024	(2)	(23)
Financial assets available for sale	8	13,043	14,114	15,676	(8)	(17)
Financial assets held to maturity		9,005	8,710	9,289	3	(3)
Investments in associates		987	972	963	2	2
Property, equipment and software		7,931	7,716	8,297	3	(4)
Goodwill and intangible assets		6,388	6,226	6,556	3	(3)
Deferred tax assets		12,603	12,303	13,144	2	(4)
Other assets	10	24,665	22,717	25,412	9	(3)
<b>Total assets</b>		<b>914,551</b>	<b>891,763</b>	<b>935,353</b>	<b>3</b>	<b>(2)</b>

## Balance sheet (continued)

CHF million	Note	30.9.17	30.6.17	31.12.16	% change from	
					30.6.17	31.12.16
<b>Liabilities</b>						
Due to banks		10,639	11,598	10,645	(8)	0
Cash collateral on securities lent		2,435	2,538	2,818	(4)	(14)
Repurchase agreements		17,535	11,286	6,612	55	165
Trading portfolio liabilities	8	30,622	25,321	22,825	21	34
Negative replacement values	8, 9	115,457	119,027	153,810	(3)	(25)
Cash collateral payables on derivative instruments	9	31,899	31,520	35,472	1	(10)
Due to customers		439,590	438,309	450,199	0	(2)
Financial liabilities designated at fair value	8, 11	56,585	54,215	55,017	4	3
Debt issued	12	98,861	90,757	78,998	9	25
Provisions	13	3,098	3,167	4,169	(2)	(26)
Other liabilities	10	53,839	51,596	60,443	4	(11)
<b>Total liabilities</b>		<b>860,562</b>	<b>839,335</b>	<b>881,009</b>	<b>3</b>	<b>(2)</b>
<b>Equity</b>						
Share capital		386	386	386	0	0
Share premium		26,960	26,953	29,505	0	(9)
Retained earnings		31,527	30,532	28,265	3	12
Other comprehensive income recognized directly in equity, net of tax		(5,627)	(6,136)	(4,494)	(8)	25
<b>Equity attributable to shareholders</b>		<b>53,246</b>	<b>51,735</b>	<b>53,662</b>	<b>3</b>	<b>(1)</b>
Equity attributable to preferred noteholders		687	657	642	5	7
Equity attributable to non-controlling interests		56	37	40	51	40
<b>Total equity</b>		<b>53,989</b>	<b>52,428</b>	<b>54,343</b>	<b>3</b>	<b>(1)</b>
<b>Total liabilities and equity</b>		<b>914,551</b>	<b>891,763</b>	<b>935,353</b>	<b>3</b>	<b>(2)</b>

**Statement of changes in equity**

<i>CHF million</i>	Share capital	Share premium	Retained earnings
<b>Balance as of 1 January 2016</b>	<b>386</b>	<b>29,477</b>	<b>29,433</b>
Issuance of share capital			
Premium on shares issued and warrants exercised		4	
Tax (expense) / benefit		7	
Dividends			(3,434)
Preferred notes			
New consolidations / (deconsolidations) and other increases / (decreases)		(4)	(1)
Total comprehensive income for the period			1,848
<i>of which: net profit / (loss)</i>			<i>2,568</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>			
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>			<i>(590)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>			<i>(130)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>			
<b>Balance as of 30 September 2016</b>	<b>386</b>	<b>29,485</b>	<b>27,846</b>
<b>Balance as of 1 January 2017</b>	<b>386</b>	<b>29,505</b>	<b>28,265</b>
Issuance of share capital			
Premium on shares issued and warrants exercised		6	
Tax (expense) / benefit		12	
Dividends		(2,250)	
Preferred notes			
New consolidations / (deconsolidations) and other increases / (decreases)		(313) <sup>2</sup>	
Total comprehensive income for the period			3,262
<i>of which: net profit / (loss)</i>			<i>3,257</i>
<i>of which: other comprehensive income (OCI) that may be reclassified to the income statement, net of tax</i>			
<i>of which: OCI that will not be reclassified to the income statement, net of tax – defined benefit plans</i>			<i>295</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – own credit</i>			<i>(290)</i>
<i>of which: OCI that will not be reclassified to the income statement, net of tax – foreign currency translation</i>			
<b>Balance as of 30 September 2017</b>	<b>386</b>	<b>26,960</b>	<b>31,527</b>

<sup>1</sup> Excludes defined benefit plans and own credit that are recorded directly in Retained earnings. <sup>2</sup> 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 15 Changes in organization" for more information.

Other comprehensive income recognized directly in equity, net of tax <sup>1</sup>	<i>foreign currency translation</i>	<i>of which: financial assets available for sale</i>	<i>of which: cash flow hedges</i>	Total equity attributable to shareholders	Preferred noteholders	Non-controlling interests	Total equity
<b>(4,047)</b>	<b>(5,857)</b>	<b>172</b>	<b>1,638</b>	<b>55,248</b>	<b>1,954</b>	<b>41</b>	<b>57,243</b>
				0			0
				4			4
				7			7
				(3,434)	(78)	(5)	(3,517)
				0	(1,584)		(1,584)
				(4)		0	(4)
(113)	(552)	72	367	1,735	361	4	2,100
				2,568	78	3	2,649
(113)	(552)	72	367	(113)			(113)
				(590)			(590)
				(130)			(130)
				0	283	1	284
<b>(4,160)</b>	<b>(6,409)</b>	<b>243</b>	<b>2,005</b>	<b>53,556</b>	<b>654</b>	<b>40</b>	<b>54,250</b>
<b>(4,494)</b>	<b>(5,564)</b>	<b>98</b>	<b>972</b>	<b>53,662</b>	<b>642</b>	<b>40</b>	<b>54,343</b>
				0			0
				6			6
				12			12
				(2,250)	(46)	(4)	(2,300)
				0	1		1
				(313)		19	(294)
(1,133)	(735)	(47)	(351)	2,129	90	2	2,221
				3,257	46	3	3,307
(1,133)	(735)	(47)	(351)	(1,133)			(1,133)
				295			295
				(290)			(290)
				0	44	(1)	43
<b>(5,627)</b>	<b>(6,299)</b>	<b>51</b>	<b>621</b>	<b>53,246</b>	<b>687</b>	<b>56</b>	<b>53,989</b>

**Statement of cash flows**

	Year-to-date	
<i>CHF million</i>	<b>30.9.17</b>	30.9.16
<b>Cash flow from / (used in) operating activities</b>		
Net profit / (loss)	3,307	2,649
<b>Non-cash items included in net profit and other adjustments:</b>		
Depreciation and impairment of property, equipment and software	694	727
Amortization and impairment of intangible assets	53	70
Credit loss expense / (recovery)	39	13
Share of net profits of associates	(49)	(89)
Deferred tax expense / (benefit)	296	88
Net loss / (gain) from investing activities	85	(783)
Net loss / (gain) from financing activities	583	7,721
Other net adjustments	(342)	(82)
<b>Net change in operating assets and liabilities:</b>		
Due from / to banks	27	(475)
Cash collateral on securities borrowed and reverse repurchase agreements	(23,429)	(80)
Cash collateral on securities lent and repurchase agreements	10,485	(2,886)
Trading portfolio and replacement values	(7,436)	9,746
Financial assets designated at fair value	15,526	(65,541)
Cash collateral on derivative instruments	(2,199)	(3,996)
Loans	(11,627)	2,060
Due to customers	(17,054)	25,849
Other assets, provisions and other liabilities	(6,499)	(10,533)
Income taxes paid, net of refunds	(857)	(421)
<b>Net cash flow from / (used in) operating activities</b>	<b>(38,397)</b>	<b>(35,963)</b>
<b>Cash flow from / (used in) investing activities</b>		
Purchase of subsidiaries, associates and intangible assets	(100)	(25)
Disposal of subsidiaries, associates and intangible assets <sup>1</sup>	148	92
Purchase of property, equipment and software	(1,064)	(1,359)
Disposal of property, equipment and software	27	193
Purchase of financial assets available for sale	(7,829)	(10,581)
Disposal and redemption of financial assets available for sale	10,559	58,935
Net (purchase) / redemption of financial assets held to maturity	11	(7,077)
<b>Net cash flow from / (used in) investing activities</b>	<b>1,752</b>	<b>40,179</b>

Table continues on the next page.

## Statement of cash flows (continued)

Table continued from previous page.

<i>CHF million</i>	Year-to-date	
	30.9.17	30.9.16
<b>Cash flow from / (used in) financing activities</b>		
Net short-term debt issued / (repaid)	21,855	11,127
Distributions paid on UBS AG shares	(2,250)	(3,434)
Issuance of long-term debt, including financial liabilities designated at fair value	40,066	28,481
Repayment of long-term debt, including financial liabilities designated at fair value	(32,346)	(30,460)
Dividends paid and repayments of preferred notes	(45)	(1,366)
Net changes in non-controlling interests	(5)	(5)
<b>Net cash flow from / (used in) financing activities</b>	<b>27,275</b>	<b>4,344</b>
<b>Total cash flow</b>		
<b>Cash and cash equivalents at the beginning of the period</b>	<b>121,107</b>	<b>102,962</b>
Net cash flow from / (used in) operating, investing and financing activities	(9,370)	8,560
Effects of exchange rate differences on cash and cash equivalents	(324)	(1,528)
<b>Cash and cash equivalents at the end of the period<sup>2</sup></b>	<b>111,413</b>	<b>109,993</b>
<i>of which: cash and balances with central banks</i>	<i>94,563</i>	<i>94,617</i>
<i>of which: due from banks</i>	<i>13,753</i>	<i>13,986</i>
<i>of which: money market paper<sup>3</sup></i>	<i>3,097</i>	<i>1,391</i>
<b>Additional information</b>		
Net cash flow from / (used in) operating activities includes:		
Interest received in cash	9,132	8,953
Interest paid in cash	5,127	4,619
Dividends on equity investments, investment funds and associates received in cash <sup>4</sup>	1,465	1,323

<sup>1</sup> Includes dividends received from associates. <sup>2</sup> CHF 2,559 million and CHF 3,932 million of cash and cash equivalents (mainly reflected in Due from banks) were restricted as of 30 September 2017 and 30 September 2016, respectively. Refer to Note 23 in the Annual Report 2016 for more information. <sup>3</sup> Money market paper is included in the balance sheet under Trading portfolio assets, Financial assets available for sale and Financial assets designated at fair value. <sup>4</sup> 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

---

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. 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 2016, except for the changes described in "Note 1 Basis of accounting" in the "Consolidated financial statements" section of the first quarter 2017 report. 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 2016. 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 2016.

### **IFRS 9, *Financial Instruments***

UBS AG will adopt IFRS 9, *Financial Instruments* on 1 January 2018. UBS AG has made significant progress during 2017 in developing an appropriate expected credit loss (ECL) methodology and related reporting processes for all in-scope financial and non-financial instruments, including loans, financial

guarantees and loan commitments. In addition, the changes driven by the IFRS 9 classification and measurement requirements have been confirmed. In the fourth quarter of 2017, UBS AG will finalize the definition and implementation of residual risk methodology approaches and governance frameworks, and complete various parallel runs.

UBS AG continues to believe that the impact on its equity and regulatory capital on adoption of IFRS 9 will not be material based on its current expectations of the macroeconomic environment and of the composition of its portfolio as of 1 January 2018.

On 1 January 2018, UBS AG will also early adopt the *Amendment to IFRS 9: Prepayment Features with Negative Compensation* issued in October 2017, allowing UBS AG to continue to apply amortized cost accounting for Swiss private mortgages and corporate loans that provide for two-way compensation if a prepayment occurs.

UBS AG will not adopt the optional IFRS 9 hedge accounting requirements pending completion of the IASB's project on macro hedge accounting strategies.

### **IFRS 15, *Revenue from Contracts with Customers***

UBS AG will adopt IFRS 15, *Revenue from Contracts with Customers* on 1 January 2018. IFRS 15 will not have a material impact on its financial statements. However, the timing of recognition of certain performance-based fees and the presentation in the income statement of certain revenues and expenses will change.

### **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 entities must apply IFRS 9 in 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, earlier application is available with the adoption of IFRS 9, *Financial Instruments* on 1 January 2018. UBS AG intends to early adopt this amendment, which is not expected to have a significant effect on its financial statements.

## Note 2 Segment reporting

UBS AG's businesses are organized globally into five business divisions: Wealth Management, Wealth Management Americas, Personal & Corporate Banking, Asset Management and the Investment Bank, all of which are supported by Corporate Center. The five 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 item 2 Segment reporting" and "Note 2 Segment reporting" in the "Consolidated financial statements" section of the Annual Report 2016 for more information on UBS AG's reporting segments.

	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	Corporate Center			UBS AG
						Services	Group ALM	Non-core and Legacy Portfolio	
<i>CHF million</i>									
<b>For the nine months ended 30 September 2017</b>									
Net interest income	1,532	1,161	1,427	(23)	855	(265)	112	22	4,822
Non-interest income	3,999	4,941	1,320	1,432	5,344	329	39	52	17,454
Allocations from CC – Group ALM	195	80	139	14	(264)	89	(199)	(54)	0
Income	5,726	6,182	2,886	1,422	5,935	153	(50)	19	22,276
Credit loss (expense) / recovery	0	(3)	(23)	0	(10)	0	0	(3)	(39)
Total operating income	5,726	6,180	2,864	1,422	5,925	153	(50)	16	22,237
Personnel expenses	1,789	3,846	646	542	2,306	2,064	25	34	11,253
General and administrative expenses	430	487	205	162	447	4,267	14	(19)	5,993
Services (to) / from CC and other BDs	1,707	934	817	374	2,008	(5,997)	(10)	167	0
<i>of which: services from CC – Services</i>	<i>1,648</i>	<i>919</i>	<i>885</i>	<i>402</i>	<i>1,940</i>	<i>(6,038)</i>	<i>100</i>	<i>144</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	2	1	9	1	7	674	0	0	694
Amortization and impairment of intangible assets	3	31	0	3	9	6	0	0	53
Total operating expenses <sup>1</sup>	3,931	5,299	1,677	1,083	4,777	1,015	29	183	17,993
<b>Operating profit / (loss) before tax</b>	<b>1,795</b>	<b>881</b>	<b>1,186</b>	<b>340</b>	<b>1,148</b>	<b>(861)</b>	<b>(79)</b>	<b>(167)</b>	<b>4,244</b>
Tax expense / (benefit)									937
<b>Net profit / (loss)</b>									<b>3,307</b>
<b>As of 30 September 2017</b>									
<b>Total assets</b>	<b>118,380</b>	<b>65,344</b>	<b>137,526</b>	<b>12,603</b>	<b>248,386</b>	<b>22,189</b>	<b>260,454</b>	<b>49,668</b>	<b>914,551</b>
<b>For the nine months ended 30 September 2016</b>									
Net interest income	1,439	986	1,421	(25)	597	(242)	466	(10)	4,633
Non-interest income	3,773	4,652	1,359	1,450	5,262	161	(84)	109	16,684
Allocations from CC – Group ALM	302	70	261	6	(182)	37	(414)	(80)	0
Income	5,514	5,709	3,042	1,432	5,676	(44)	(32)	20	21,317
Credit loss (expense) / recovery	(4)	(2)	2	0	(6)	0	0	(3)	(13)
Total operating income	5,510	5,706	3,043	1,432	5,670	(44)	(32)	17	21,303
Personnel expenses	1,806	3,572	636	563	2,339	2,770	23	50	11,759
General and administrative expenses	404	428	186	172	574	3,105	10	544	5,423
Services (to) / from CC and other BDs	1,727	923	825	386	2,072	(6,110)	(33)	210	0
<i>of which: services from CC – Services</i>	<i>1,664</i>	<i>913</i>	<i>902</i>	<i>404</i>	<i>2,009</i>	<i>(6,139)</i>	<i>80</i>	<i>167</i>	<i>0</i>
Depreciation and impairment of property, equipment and software	2	1	11	1	18	693	0	0	727
Amortization and impairment of intangible assets	3	39	0	3	9	16	0	0	70
Total operating expenses <sup>1</sup>	3,942	4,964	1,657	1,125	5,013	475	(1)	805	17,979
<b>Operating profit / (loss) before tax</b>	<b>1,568</b>	<b>742</b>	<b>1,386</b>	<b>307</b>	<b>658</b>	<b>(519)</b>	<b>(32)</b>	<b>(787)</b>	<b>3,324</b>
Tax expense / (benefit)									675
<b>Net profit / (loss)</b>									<b>2,649</b>
<b>As of 31 December 2016</b>									
<b>Total assets</b>	<b>115,539</b>	<b>65,882</b>	<b>139,945</b>	<b>12,026</b>	<b>242,388</b>	<b>23,813</b>	<b>267,275</b>	<b>68,485</b>	<b>935,353</b>

<sup>1</sup> Refer to Note 15 for information on restructuring expenses.



**Note 3 Net fee and commission income**

CHF million	For the quarter ended			% change from		Year-to-date	
	30.9.17	30.6.17	30.9.16	2Q17	3Q16	30.9.17	30.9.16
Underwriting fees	312	359	232	(13)	34	1,047	761
of which: equity underwriting fees	205	224	124	(8)	65	667	374
of which: debt underwriting fees	107	135	109	(21)	(2)	380	387
M&A and corporate finance fees	174	170	162	2	7	521	477
Brokerage fees	803	862	843	(7)	(5)	2,607	2,691
Investment fund fees	789	795	774	(1)	2	2,398	2,367
Portfolio management and advisory fees	2,155	2,107	2,031	2	6	6,300	5,965
Other	460	453	456	2	1	1,373	1,320
<b>Total fee and commission income</b>	<b>4,694</b>	<b>4,745</b>	<b>4,498</b>	<b>(1)</b>	<b>4</b>	<b>14,246</b>	<b>13,582</b>
Brokerage fees paid	162	179	173	(9)	(6)	506	562
Other	280	270	251	4	12	821	737
<b>Total fee and commission expense</b>	<b>442</b>	<b>449</b>	<b>423</b>	<b>(2)</b>	<b>4</b>	<b>1,327</b>	<b>1,299</b>
<b>Net fee and commission income</b>	<b>4,252</b>	<b>4,296</b>	<b>4,075</b>	<b>(1)</b>	<b>4</b>	<b>12,920</b>	<b>12,283</b>
of which: net brokerage fees	641	683	671	(6)	(4)	2,101	2,129

**Note 4 Other income**

CHF million	For the quarter ended			% change from		Year-to-date	
	30.9.17	30.6.17	30.9.16	2Q17	3Q16	30.9.17	30.9.16
<b>Associates and subsidiaries</b>							
Net gains / (losses) from disposals of subsidiaries <sup>1</sup>	3	(18)	(5)			(19)	(177)
Share of net profits of associates	14	17	49	(18)	(71)	49	89
<b>Total</b>	<b>17</b>	<b>(2)</b>	<b>44</b>		<b>(61)</b>	<b>30</b>	<b>(88)</b>
<b>Financial assets available for sale</b>							
Net gains / (losses) from disposals	11	129	18	(91)	(39)	147	255
Impairment charges	0	1	(1)	(100)	(100)	(13)	(4)
<b>Total</b>	<b>10</b>	<b>131</b>	<b>17</b>	<b>(92)</b>	<b>(41)</b>	<b>133</b>	<b>250</b>
Net income from properties (excluding net gains / (losses) from disposals) <sup>2</sup>	6	6	5	0	20	18	19
Net gains / (losses) from disposals of properties held for sale	0	0	1		(100)	(1)	121
Net gains / (losses) from disposals of loans and receivables	2	(2)	(3)			17	(4)
Other	165	152	50	9	230	346	103
<b>Total other income</b>	<b>200</b>	<b>285</b>	<b>113</b>	<b>(30)</b>	<b>77</b>	<b>544</b>	<b>401</b>

<sup>1</sup> Includes foreign exchange gains / (losses) reclassified from other comprehensive income related to disposed foreign subsidiaries and branches. <sup>2</sup> Includes net rent received from third parties and net operating expenses.

**Note 5 Personnel expenses**

CHF million	For the quarter ended			% change from		Year-to-date	
	30.9.17	30.6.17	30.9.16	2Q17	3Q16	30.9.17	30.9.16
Salaries and variable compensation	2,103	2,125	2,391	(1)	(12)	6,661	7,236
Wealth Management Americas: Financial advisor compensation <sup>1</sup>	976	992	913	(2)	7	2,956	2,733
Contractors	83	72	103	15	(19)	247	321
Social security	183	166	210	10	(13)	547	546
Pension and other post-employment benefit plans	132	133	158	(1)	(16)	464	507
Other personnel expenses	122	123	133	(1)	(8)	377	417
<b>Total personnel expenses<sup>2</sup></b>	<b>3,598</b>	<b>3,611</b>	<b>3,907</b>	<b>0</b>	<b>(8)</b>	<b>11,253</b>	<b>11,759</b>

<sup>1</sup> Financial advisor compensation consists of grid-based compensation based directly on compensable revenues generated by financial advisors and supplemental compensation calculated on the basis of financial advisor productivity, firm tenure, assets and other variables. It also includes expenses related to compensation commitments with financial advisors entered into at the time of recruitment that are subject to vesting requirements. <sup>2</sup> Includes restructuring expenses. Refer to Note 15 for more information.

## Note 6 General and administrative expenses

CHF million	For the quarter ended			% change from		Year-to-date	
	30.9.17	30.6.17	30.9.16	2Q17	3Q16	30.9.17	30.9.16
Occupancy	204	208	225	(2)	(9)	628	675
Rent and maintenance of IT and other equipment	91	97	113	(6)	(19)	331	379
Communication and market data services	129	126	153	2	(16)	409	476
Administration <sup>1</sup>	882	1,005	220	(12)	301	2,109	623
Marketing and public relations	66	67	101	(1)	(35)	225	328
Travel and entertainment	87	97	84	(10)	4	270	311
Professional fees	275	253	268	9	3	781	866
Outsourcing of IT and other services	320	218	374	47	(14)	908	1,182
Provisions for litigation, regulatory and similar matters <sup>2</sup>	197	9	419		(53)	239	530
Other	32	31	27	3	19	93	55
<b>Total general and administrative expenses<sup>3</sup></b>	<b>2,282</b>	<b>2,111</b>	<b>1,985</b>	<b>8</b>	<b>15</b>	<b>5,993</b>	<b>5,423</b>

<sup>1</sup> Includes credits related to the UK bank levy of CHF 71 million for the first nine months of 2017, of which CHF 46 million was recorded in the second quarter of 2017 and CHF 25 million in the first quarter of 2017. <sup>2</sup> Reflects the net increase in provisions for litigation, regulatory and similar matters recognized in the income statement. The third quarter of 2017 included an indemnification payment of CHF 245 million to BTG Investments. Refer to Note 13 for more information. Also includes recoveries from third parties (third quarter of 2017: CHF 50 million; second quarter of 2017: CHF 1 million; third quarter of 2016: CHF 0 million). <sup>3</sup> Includes restructuring expenses. Refer to Note 15 for more information.

## Note 7 Income taxes

UBS AG recognized a net income tax expense of CHF 256 million for the third quarter of 2017 compared with a net income tax expense of CHF 41 million for the third quarter of 2016.

The third quarter 2017 net income tax expense included tax expenses of CHF 430 million in respect of current-year taxable profits. This included current tax expenses of CHF 217 million and deferred tax expenses of CHF 213 million, the latter mainly representing amortization of prior-year Swiss tax loss and temporary difference deferred tax assets (DTAs).

The third quarter 2017 net income tax expense also included a net upward revaluation of DTAs of CHF 174 million. This net benefit reflected an increase in US DTAs of CHF 224 million, partly offset by a net write-down of Swiss DTAs of CHF 50 million. The increase in US DTAs was primarily driven by higher profit forecasts for Wealth Management Americas. The write-down of Swiss DTAs primarily reflected a reduction in the effective tax rate at which the Swiss DTAs are measured, resulting from a change in the mix of forecast profits principally between operating income and dividends.

## Note 8 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 2016, which provides more information on valuation

The interim Financial Statements have been prepared on the basis that UBS Limited is able to offset part of its taxable profits with prior-year tax losses transferred from UBS AG in 2014 and 2015. During 2016, the UK tax authorities indicated that they do not agree with this tax return filing position, but the authorities have recently advised UBS that they accept that a transfer can occur and will now proceed to examine the amount of losses to be transferred. UBS believes that any differences between the final transfer amount to be agreed with the UK tax authorities and the original tax return filing position will not be material to the financial statements.

In the fourth quarter of 2017, we expect to recognize a further net upward revaluation of DTAs, representing approximately 25% of the full-year revaluation, as adjusted for any further revaluations that may be required following the finalization of the business plans in the quarter.

principles, valuation governance, valuation techniques, valuation adjustments, fair value hierarchy classification, valuation inputs, sensitivity of fair value measurements and methods applied to calculate fair values for financial instruments not measured at fair value.

**Note 8 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<sup>1</sup>**

CHF million	30.9.17				30.6.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value on a recurring basis</b>												
Financial assets held for trading <sup>2</sup>	91,067	17,118	1,974	110,159	87,651	14,011	1,593	103,255	76,046	14,377	1,689	92,112
<i>of which:</i>												
Government bills / bonds	14,331	1,420	0	15,751	14,244	992	0	15,236	10,500	1,319	0	11,820
Corporate and municipal bonds	60	8,224	543	8,827	55	7,173	788	8,016	58	6,722	591	7,371
Loans	0	3,173	1,109	4,282	0	1,371	502	1,873	0	1,356	681	2,037
Investment fund units	5,080	2,911	17	8,009	5,242	2,946	25	8,213	6,114	3,521	63	9,698
Asset-backed securities	0	271	157	428	0	340	146	486	0	470	215	685
Equity instruments	62,684	282	80	63,046	58,971	517	62	59,549	50,916	397	65	51,378
Financial assets for unit-linked investment contracts	8,912	837	67	9,816	9,140	672	69	9,881	8,459	591	74	9,123
Positive replacement values	599	117,307	1,556	119,462	699	119,292	1,919	121,910	434	155,428	2,549	158,411
<i>of which:</i>												
Interest rate contracts	2	45,213	149	45,364	1	47,589	161	47,751	8	57,703	278	57,988
Credit derivative contracts	0	2,724	613	3,338	0	2,245	777	3,023	0	2,562	1,313	3,875
Foreign exchange contracts	320	47,410	193	47,923	278	51,601	182	52,062	263	75,607	222	76,092
Equity / index contracts	9	20,231	600	20,840	18	16,568	799	17,385	1	17,274	729	18,003
Commodity contracts	0	1,495	0	1,495	0	1,249	0	1,250	0	2,269	8	2,277
Financial assets designated at fair value	18,864	29,904	1,605	50,374	21,488	28,367	1,580	51,436	39,641	23,304	2,079	65,024
<i>of which:</i>												
Government bills / bonds	17,994	3,208	0	21,201	20,579	3,916	0	24,494	39,439	4,361	0	43,799
Corporate and municipal bonds	686	21,142	0	21,828	730	20,575	0	21,306	15	16,860	0	16,875
Loans (including structured loans)	0	5,406	539	5,945	0	3,809	483	4,293	0	2,043	1,195	3,238
Structured reverse repurchase and securities borrowing agreements	0	149	547	696	0	65	577	643	0	40	644	684
Other	185	0	519	704	179	1	520	701	187	0	240	427
Financial assets available for sale	7,437	5,087	520	13,043	7,675	5,969	470	14,114	6,299	8,891	486	15,676
<i>of which:</i>												
Government bills / bonds	5,165	225	0	5,391	5,510	261	0	5,771	5,444	450	0	5,894
Corporate and municipal bonds	2,108	1,090	7	3,206	2,000	2,097	12	4,109	646	4,939	12	5,596
Investment fund units	0	70	115	184	0	69	99	168	0	51	126	177
Asset-backed securities	0	3,687	0	3,687	0	3,527	0	3,527	0	3,381	0	3,381
Equity instruments	163	15	398	576	165	14	359	539	204	71	336	611
Non-financial assets												
Precious metals and other physical commodities	4,283	0	0	4,283	4,508	0	0	4,508	4,583	0	0	4,583
<b>Assets measured at fair value on a non-recurring basis</b>												
Other assets <sup>3</sup>	0	58	34	92	0	61	34	95	5,060	131	56	5,248
<b>Total assets measured at fair value</b>	<b>122,250</b>	<b>169,475</b>	<b>5,688</b>	<b>297,413</b>	<b>122,021</b>	<b>167,702</b>	<b>5,596</b>	<b>295,318</b>	<b>132,064</b>	<b>202,132</b>	<b>6,860</b>	<b>341,056</b>

## Note 8 Fair value measurement (continued)

### Determination of fair values from quoted market prices or valuation techniques (continued)<sup>1</sup>

CHF million	30.9.17				30.6.17				31.12.16			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Liabilities measured at fair value on a recurring basis</b>												
Trading portfolio liabilities	24,760	5,797	65	30,622	20,539	4,695	87	25,321	18,808	3,898	119	22,825
<i>of which:</i>												
Government bills / bonds	7,178	731	0	7,909	6,378	591	0	6,969	5,573	648	0	6,221
Corporate and municipal bonds	32	4,513	21	4,565	39	3,799	6	3,844	12	2,927	37	2,976
Investment fund units	729	257	0	986	547	51	0	599	484	91	20	595
Equity instruments	16,821	295	45	17,160	13,574	254	80	13,908	12,740	227	62	13,028
Negative replacement values	564	112,391	2,502	115,457	650	115,528	2,849	119,027	539	149,255	4,016	153,810
<i>of which:</i>												
Interest rate contracts	9	38,885	405	39,298	1	41,046	317	41,365	12	51,990	475	52,476
Credit derivative contracts	0	3,824	340	4,164	0	2,997	963	3,960	0	3,269	1,538	4,807
Foreign exchange contracts	293	46,178	125	46,596	287	50,996	138	51,421	274	71,668	148	72,089
Equity / index contracts	5	22,159	1,630	23,794	11	19,341	1,430	20,783	1	20,254	1,854	22,109
Commodity contracts	0	1,236	1	1,237	0	1,116	0	1,116	0	2,040	1	2,041
Financial liabilities designated at fair value	5	44,386	12,194	56,585	10	42,074	12,131	54,215	2	44,007	11,008	55,017
<i>of which:</i>												
Issued debt instruments	4	39,181	10,358	49,543	9	37,693	10,228	47,930	0	40,242	9,688	49,930
Over-the-counter debt instruments	2	4,672	1,781	6,455	2	3,994	1,850	5,846	2	3,611	1,050	4,663
Structured repurchase agreements	0	529	51	580	0	381	48	429	0	130	266	395
Loan commitments and guarantees	0	4	4	8	0	6	4	10	0	25	5	29
Other liabilities – amounts due under unit-linked investment contracts	0	9,893	0	9,893	0	10,099	0	10,099	0	9,286	0	9,286
<b>Liabilities measured at fair value on a non-recurring basis</b>												
Other liabilities <sup>3</sup>	0	2	0	2	0	5	0	5	0	5,213	0	5,213
<b>Total liabilities measured at fair value</b>	<b>25,329</b>	<b>172,469</b>	<b>14,762</b>	<b>212,560</b>	<b>21,199</b>	<b>172,402</b>	<b>15,067</b>	<b>208,667</b>	<b>19,349</b>	<b>211,660</b>	<b>15,143</b>	<b>246,152</b>

<sup>1</sup> Bifurcated embedded derivatives are presented on the same balance sheet lines as their host contracts and are excluded from this table. As of 30 September 2017, net bifurcated embedded derivative assets held at fair value totaling CHF 26 million (of which CHF 31 million were net Level 2 assets and CHF 5 million net Level 2 liabilities) were recognized on the balance sheet within Due to customers and Debt issued. As of 30 June 2017, net bifurcated embedded derivative assets held at fair value totaling CHF 31 million (of which CHF 36 million were net Level 2 assets and CHF 5 million net Level 2 liabilities) were recognized on the balance sheet within Due to customers and Debt issued. As of 31 December 2016, net bifurcated embedded derivative assets held at fair value totaling CHF 50 million (of which CHF 58 million were net Level 2 assets and CHF 8 million net Level 2 liabilities) were recognized on the balance sheet within Due to customers and Debt issued. <sup>2</sup> Financial assets held for trading exclude precious metals and other physical commodities. <sup>3</sup> 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.

All financial and non-financial assets and liabilities measured or disclosed at fair value are categorized into one of three fair value hierarchy levels. In certain cases, the inputs used to measure fair value may fall within different levels of the fair value hierarchy. For disclosure purposes, the level in the hierarchy within which the instrument is classified in its entirety is based on the lowest level input that is significant to the position's fair value measurement:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets and liabilities;
- Level 2 – valuation techniques for which all significant inputs are, or are based on, observable market data; or
- Level 3 – valuation techniques for which significant inputs are not based on observable market data.

**Note 8 Fair value measurement (continued)****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 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**

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
<b>Balance at the beginning of the period</b>	<b>349</b>	365	444	371	421
Profit / (loss) deferred on new transactions	<b>76</b>	65	67	192	227
(Profit) / loss recognized in the income statement	<b>(79)</b>	(66)	(105)	(199)	(216)
(Profit) / loss recognized in other comprehensive income	<b>0</b>	0	0	0	(23)
Foreign currency translation	<b>5</b>	(15)	(2)	(13)	(7)
<b>Balance at the end of the period</b>	<b>351</b>	349	403	351	403

**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 totaling approximately CHF 0.7 billion, which were mainly comprised of financial assets designated at fair value and trading portfolio assets, primarily corporate and municipal bonds as well as investment fund units, were transferred from Level 2 to Level 1 during the first nine months of 2017, generally due to increased levels of trading activity observed within the market.

Liabilities transferred from Level 2 to Level 1 during the first nine months of 2017 were negligible.

Assets totaling approximately CHF 0.2 billion, which were mainly comprised of financial assets available for sale, largely government bills / bonds, were transferred from Level 1 to Level 2 during the first nine months of 2017, generally due to diminished levels of trading activity observed in the market. Liabilities transferred from Level 1 to Level 2 during the first nine months of 2017 were negligible.

## Note 8 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 and weighted averages will vary from period to period and from 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 2016. 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 2016.

#### Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) <sup>1</sup>	Range of inputs						unit <sup>1</sup>
	Assets		Liabilities				30.9.17			31.12.16			
	30.9.17	31.12.16	30.9.17	31.12.16			low	high	weighted average <sup>2</sup>	low	high	weighted average <sup>2</sup>	
<b>Financial assets held for trading / Trading portfolio liabilities, Financial assets / liabilities designated at fair value and Financial assets available for sale</b>													
<i>Corporate and municipal bonds</i>	0.6	0.6	0.0	0.0	Relative value to market comparable	Bond price equivalent	0	133	88	0	128	88	points
<i>Traded loans, loans designated at fair value, loan commitments and guarantees</i>	2.1	2.0	0.0	0.0	Relative value to market comparable	Loan price equivalent	82	102	93	39	103	94	points
					Discounted expected cash flows	Credit spread	29	177		71	554		basis points
					Market comparable and securitization model	Discount margin	0	14	2	0	16	2	%
<i>Structured (reverse) repurchase agreements</i>	0.5	0.6	0.1	0.3	Discounted expected cash flows	Funding spread	15	195		15	195		basis points
<i>Issued and over-the-counter debt instruments<sup>3</sup></i>			12.1	10.7									

**Note 8 Fair value measurement (continued)****Valuation techniques and inputs used in the fair value measurement of Level 3 assets and liabilities (continued)**

CHF billion	Fair value				Valuation technique(s)	Significant unobservable input(s) <sup>1</sup>	Range of inputs						unit <sup>1</sup>
	Assets		Liabilities				30.9.17			31.12.16			
	30.9.17	31.12.16	30.9.17	31.12.16			low	high	weighted average <sup>2</sup>	low	high	weighted average <sup>2</sup>	
<b>Replacement values</b>													
<i>Interest rate contracts</i>	<i>0.1</i>	<i>0.3</i>	<i>0.4</i>	<i>0.5</i>	Option model	Volatility of interest rates	24	136		26	176	%	
						Rate-to-rate correlation	84	94		84	94	%	
						Intra-curve correlation	73	100		36	94	%	
						Discounted expected cash flow based on modeled defaults and recoveries						basis points	
<i>Credit derivative contracts</i>	<i>0.6</i>	<i>1.3</i>	<i>0.3</i>	<i>1.5</i>		Credit spreads	0	689		0	791	%	
						Upfront price points	1	70		1	13	%	
						Recovery rates	15	50		0	50	%	
						Discount margin	0	13		(1)	68	%	
						Discounted cash flow projection on underlying bond						%	
						Constant prepayment rate	6	12		1	15	%	
						Constant default rate	1	5		1	8	%	
						Loss severity	40	90		40	100	%	
						Discount margin	1	6		0	11	%	
						Bond price equivalent	3	161		3	100	points	
<i>Equity / index contracts</i>	<i>0.6</i>	<i>0.7</i>	<i>1.6</i>	<i>1.9</i>	Option model	Equity dividend yields	0	15		0	15	%	
						Volatility of equity stocks, equity and other indices	0	225		0	150	%	
						Equity-to-FX correlation	(38)	82		(45)	82	%	
						Equity-to-equity correlation	(50)	98		12	98	%	

<sup>1</sup> 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). <sup>2</sup> 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. <sup>3</sup> 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.

## Note 8 Fair value measurement (continued)

### 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 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 through 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

CHF million	30.9.17		30.6.17		31.12.16	
	Favorable changes <sup>1</sup>	Unfavorable changes <sup>1</sup>	Favorable changes <sup>1</sup>	Unfavorable changes <sup>1</sup>	Favorable changes <sup>1</sup>	Unfavorable changes <sup>1</sup>
Corporate and municipal bonds	17	(16)	15	(20)	34	(39)
Traded loans, loans designated at fair value, loan commitments and guarantees	83	(12)	80	(8)	82	(10)
Equity instruments	67	(45)	71	(50)	67	(47)
Interest rate derivative contracts, net	31	(47)	22	(40)	41	(42)
Credit derivative contracts, net	98	(126)	119	(136)	131	(183)
Foreign exchange derivative contracts, net	11	(6)	12	(6)	17	(8)
Equity / index derivative contracts, net	64	(63)	73	(81)	63	(63)
Issued and over-the-counter debt instruments	92	(92)	85	(89)	96	(93)
Other	26	(24)	23	(23)	29	(31)
<b>Total</b>	<b>489</b>	<b>(431)</b>	<b>499</b>	<b>(452)</b>	<b>560</b>	<b>(517)</b>

<sup>1</sup> Of the total favorable changes, CHF 74 million as of 30 September 2017 (30 June 2017: CHF 72 million; 31 December 2016: CHF 75 million) related to financial assets available for sale. Of the total unfavorable changes, CHF 53 million as of 30 September 2017 (30 June 2017: CHF 51 million; 31 December 2016: CHF 55 million) related to financial assets available for sale.

### f) Level 3 instruments: movements during the period

#### Significant changes in Level 3 instruments

The table on the following pages presents additional information about material Level 3 assets and liabilities measured at fair value on a recurring basis. Level 3 assets and liabilities may be hedged with instruments classified as Level 1 or Level 2 in the fair value hierarchy, and, as a result, realized and unrealized gains and losses included in the table may not 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 0.7 billion and CHF 1.0 billion, respectively. Transfers into Level 3 were primarily comprised of equity / index contracts and equity

instruments, and were mainly due to decreased observability of the respective equity volatility and market pricing inputs. Transfers out of Level 3 were primarily comprised of equity / index and credit derivative contracts, reflecting increased observability of the respective equity volatility and credit spread inputs.

Liabilities transferred into and out of Level 3 totaled CHF 0.8 billion and CHF 2.7 billion, respectively. Transfers into Level 3 were primarily comprised of equity-linked issued debt instruments, 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, credit derivative and equity / index 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 8 Fair value measurement (continued)****Movements of Level 3 instruments**

CHF billion	Balance as of 31 December 2015	Total gains / (losses) included in comprehensive income						Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 30 September 2016
		Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>	Purchases	Sales	Issuances	Settlements				
<b>Financial assets held for trading</b>	<b>2.1</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.8</b>	<b>(4.2)</b>	<b>2.9</b>	<b>0.0</b>	<b>0.5</b>	<b>(0.3)</b>	<b>(0.1)</b>	<b>1.7</b>
<i>of which:</i>											
Corporate and municipal bonds	0.7	0.1	0.0	0.5	(0.6)	0.0	0.0	0.1	(0.1)	(0.1)	0.7
Loans	0.8	0.0	0.0	0.1	(3.0)	2.9	0.0	0.1	(0.2)	0.0	0.6
Other	0.6	(0.1)	(0.1)	0.2	(0.6)	0.0	0.0	0.4	0.0	0.0	0.4
<b>Financial assets designated at fair value</b>	<b>3.3</b>	<b>(0.1)</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.6</b>	<b>(1.5)</b>	<b>0.4</b>	<b>(0.1)</b>	<b>(0.1)</b>	<b>2.5</b>
<i>of which:</i>											
Loans (including structured loans)	1.7	(0.2)	(0.2)	0.0	0.0	0.5	(0.6)	0.4	(0.1)	(0.1)	1.7
Structured reverse repurchase and securities borrowing agreements	1.5	0.0	0.0	0.0	0.0	0.1	(0.9)	0.0	0.0	0.0	0.7
Other	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
<b>Financial assets available for sale</b>	<b>0.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.6</b>
<b>Positive replacement values</b>	<b>2.9</b>	<b>(0.2)</b>	<b>(0.2)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.4)</b>	<b>0.9</b>	<b>(0.1)</b>	<b>(0.1)</b>	<b>2.6</b>
<i>of which:</i>											
Credit derivative contracts	1.3	(0.1)	(0.1)	0.0	0.0	0.3	(0.5)	0.2	0.0	(0.1)	1.1
Equity / index contracts	1.0	(0.1)	(0.1)	0.0	0.0	0.3	(0.4)	0.2	(0.1)	0.0	0.8
Other	0.6	(0.1)	(0.1)	0.0	0.0	0.2	(0.5)	0.5	0.0	0.0	0.7
<b>Negative replacement values</b>	<b>3.3</b>	<b>0.8</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.3)</b>	<b>0.9</b>	<b>(0.4)</b>	<b>0.1</b>	<b>3.9</b>
<i>of which:</i>											
Credit derivative contracts	1.3	0.7	0.7	0.0	0.0	0.0	(0.4)	0.1	(0.1)	0.0	1.6
Equity / index contracts	1.4	(0.1)	(0.2)	0.0	0.0	0.6	(0.4)	0.2	(0.2)	0.0	1.5
Other	0.6	0.2	0.2	0.0	0.0	0.0	(0.4)	0.7	(0.1)	0.1	0.9
<b>Financial liabilities designated at fair value</b>	<b>10.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>3.1</b>	<b>(2.5)</b>	<b>1.2</b>	<b>(2.3)</b>	<b>(0.2)</b>	<b>10.5</b>
<i>of which:</i>											
Issued debt instruments	9.3	0.6	0.5	0.0	0.0	2.6	(1.6)	1.1	(2.3)	(0.2)	9.6
Over-the-counter debt instruments	0.8	0.0	0.0	0.0	0.0	0.4	(0.5)	0.1	0.0	0.0	0.7
Structured repurchase agreements	0.6	0.0	0.0	0.0	0.0	0.1	(0.4)	0.0	0.0	0.0	0.3

<sup>1</sup> Total Level 3 assets as of 30 September 2017 were CHF 5.7 billion (30 June 2017: CHF 5.6 billion; 31 December 2016: CHF 6.9 billion). Total Level 3 liabilities as of 30 September 2017 were CHF 14.8 billion (30 June 2017: CHF 15.1 billion; 31 December 2016: CHF 15.1 billion).

## Note 8 Fair value measurement (continued)

Balance as of 31 December 2016	Total gains / (losses) included in comprehensive income			Purchases	Sales	Issuances	Settlements	Transfers into Level 3	Transfers out of Level 3	Foreign currency translation	Balance as of 30 September 2017 <sup>1</sup>
	Net interest income, net trading income and other income	<i>of which: related to Level 3 instruments held at the end of the reporting period</i>									
<b>1.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	<b>(2.4)</b>	<b>2.2</b>	<b>0.0</b>	<b>0.3</b>	<b>(0.2)</b>	<b>0.0</b>	<b>2.0</b>	
0.6	0.0	0.0	0.3	(0.4)	0.0	0.0	0.1	0.0	0.0	0.5	
0.7	0.1	0.0	0.0	(1.8)	2.2	0.0	0.0	(0.1)	0.0	1.1	
0.4	(0.1)	0.0	0.1	(0.2)	0.0	0.0	0.1	(0.1)	0.0	0.3	
<b>2.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	<b>(0.8)</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>1.6</b>	
1.2	0.1	0.1	0.0	0.0	0.0	(0.7)	0.0	(0.1)	0.0	0.5	
0.6	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	0.0	0.0	0.5	
0.2	(0.1)	(0.1)	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.5	
<b>0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.5</b>	
<b>2.5</b>	<b>(0.2)</b>	<b>(0.3)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>(1.0)</b>	<b>0.2</b>	<b>(0.7)</b>	<b>0.0</b>	<b>1.6</b>	
1.3	(0.2)	(0.2)	0.0	0.0	0.0	(0.4)	0.0	(0.3)	0.0	0.6	
0.7	(0.1)	(0.1)	0.0	0.0	0.6	(0.4)	0.1	(0.4)	0.0	0.6	
0.5	0.0	(0.1)	0.0	0.0	0.0	(0.2)	0.0	(0.1)	0.0	0.3	
<b>4.0</b>	<b>0.1</b>	<b>(0.1)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>(0.9)</b>	<b>0.2</b>	<b>(1.3)</b>	<b>0.0</b>	<b>2.5</b>	
1.5	0.0	(0.1)	0.0	0.0	0.1	(0.5)	0.0	(0.8)	0.0	0.3	
1.9	0.1	0.1	0.0	0.0	0.3	(0.3)	0.1	(0.5)	0.0	1.6	
0.6	0.0	(0.1)	0.0	0.0	0.1	(0.1)	0.1	0.0	0.0	0.5	
<b>11.0</b>	<b>1.1</b>	<b>0.8</b>	<b>0.0</b>	<b>0.0</b>	<b>5.2</b>	<b>(4.0)</b>	<b>0.6</b>	<b>(1.4)</b>	<b>(0.2)</b>	<b>12.2</b>	
9.7	1.0	0.8	0.0	0.0	3.8	(3.3)	0.6	(1.2)	(0.2)	10.4	
1.1	0.1	0.0	0.0	0.0	1.3	(0.6)	0.0	0.0	0.0	1.8	
0.3	0.0	0.0	0.0	0.0	0.0	(0.1)	0.0	(0.2)	0.0	0.1	

**Note 8 Fair value measurement (continued)****g) Financial instruments not measured at fair value**

The table below reflects the estimated fair values of financial instruments not measured at fair value.

**Financial instruments not measured at fair value**

<i>CHF billion</i>	30.9.17		30.6.17		31.12.16	
	Carrying value	Fair value	Carrying value	Fair value	Carrying value	Fair value
<b>Assets</b>						
Cash and balances with central banks	94.6	94.6	100.1	100.1	107.8	107.8
Due from banks	15.0	15.0	14.4	14.4	13.1	13.1
Cash collateral on securities borrowed	16.6	16.6	15.1	15.1	15.1	15.1
Reverse repurchase agreements	87.9	87.9	75.3	75.3	66.2	66.2
Cash collateral receivables on derivative instruments	24.9	24.9	22.7	22.7	26.7	26.7
Loans	316.7	318.9	310.4	312.5	307.0	310.4
Financial assets held to maturity	9.0	8.9	8.7	8.6	9.3	9.1
Other assets	23.2	23.2	21.2	21.2	18.5	18.5
<b>Liabilities</b>						
Due to banks	10.6	10.6	11.6	11.6	10.6	10.6
Cash collateral on securities lent	2.4	2.4	2.5	2.5	2.8	2.8
Repurchase agreements	17.5	17.5	11.3	11.3	6.6	6.6
Cash collateral payables on derivative instruments	31.9	31.9	31.5	31.5	35.5	35.5
Due to customers	439.6	441.1	438.3	439.7	450.2	450.6
Debt issued	98.9	101.0	90.8	92.8	79.0	81.1
Other liabilities	38.0	38.0	36.2	36.2	39.0	39.0

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 9 Derivative instruments

### a) Derivative instruments

<i>As of 30.9.17, CHF billion</i>	Positive replacement values	Notional values related to positive replacement values <sup>1</sup>	Negative replacement values	Notional values related to negative replacement values <sup>1</sup>	Other notional values <sup>2</sup>
<b>Derivative instruments</b>					
Interest rate contracts	45.4	1,123	39.3	1,036	10,312
Credit derivative contracts	3.3	109	4.2	110	1
Foreign exchange contracts	47.9	2,364	46.6	2,211	2
Equity / index contracts	20.8	383	23.8	455	83
Commodity contracts	1.5	36	1.2	33	8
Unsettled purchases of non-derivative financial instruments <sup>3</sup>	0.3	29	0.1	21	
Unsettled sales of non-derivative financial instruments <sup>3</sup>	0.2	29	0.3	23	
<b>Total derivative instruments, based on IFRS netting<sup>4</sup></b>	<b>119.5</b>	<b>4,073</b>	<b>115.5</b>	<b>3,890</b>	<b>10,405</b>
Further netting potential not recognized on the balance sheet <sup>5</sup>	(104.4)		(98.8)		
<i>of which: netting of recognized financial liabilities / assets</i>	<i>(83.4)</i>		<i>(83.4)</i>		
<i>of which: netting with collateral received / pledged</i>	<i>(21.0)</i>		<i>(15.4)</i>		
<b>Total derivative instruments, after consideration of further netting potential</b>	<b>15.1</b>		<b>16.7</b>		

*As of 30.6.17, CHF billion*

<b>Derivative instruments</b>					
Interest rate contracts	47.8	1,065	41.4	976	10,324
Credit derivative contracts	3.0	107	4.0	116	2
Foreign exchange contracts	52.1	2,292	51.4	2,144	8
Equity / index contracts	17.4	302	20.8	367	65
Commodity contracts	1.2	33	1.1	32	8
Unsettled purchases of non-derivative financial instruments <sup>3</sup>	0.2	24	0.2	29	
Unsettled sales of non-derivative financial instruments <sup>3</sup>	0.2	36	0.2	15	
<b>Total derivative instruments, based on IFRS netting<sup>4</sup></b>	<b>121.9</b>	<b>3,859</b>	<b>119.0</b>	<b>3,678</b>	<b>10,408</b>
Further netting potential not recognized on the balance sheet <sup>5</sup>	(107.7)		(98.9)		
<i>of which: netting of recognized financial liabilities / assets</i>	<i>(85.3)</i>		<i>(85.3)</i>		
<i>of which: netting with collateral received / pledged</i>	<i>(22.4)</i>		<i>(13.5)</i>		
<b>Total derivative instruments, after consideration of further netting potential</b>	<b>14.2</b>		<b>20.2</b>		

*As of 31.12.16, CHF billion*

<b>Derivative instruments</b>					
Interest rate contracts	58.0	1,152	52.5	1,060	9,730
Credit derivative contracts	3.9	123	4.8	140	
Foreign exchange contracts	76.1	2,470	72.1	2,286	6
Equity / index contracts	18.0	269	22.1	318	55
Commodity contracts	2.3	39	2.0	36	9
Unsettled purchases of non-derivative financial instruments <sup>3</sup>	0.1	18	0.1	10	
Unsettled sales of non-derivative financial instruments <sup>3</sup>	0.1	13	0.2	11	
<b>Total derivative instruments, based on IFRS netting<sup>4</sup></b>	<b>158.4</b>	<b>4,084</b>	<b>153.8</b>	<b>3,860</b>	<b>9,799</b>
Further netting potential not recognized on the balance sheet <sup>5</sup>	(139.8)		(129.6)		
<i>of which: netting of recognized financial liabilities / assets</i>	<i>(113.1)</i>		<i>(113.1)</i>		
<i>of which: netting with collateral received / pledged</i>	<i>(26.7)</i>		<i>(16.6)</i>		
<b>Total derivative instruments, after consideration of further netting potential</b>	<b>18.6</b>		<b>24.2</b>		

<sup>1</sup> 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. <sup>2</sup> Other notional values relate to derivatives that are cleared through either a central counterparty or an exchange. Many of these derivatives are either legally or economically settled on a daily basis. The residual unsettled fair value of these derivatives and the fair value of other derivatives that are presented on the balance sheet net of the corresponding cash margin, both within Cash collateral receivables on derivative instruments and Cash collateral payables on derivative instruments, were not material for all periods presented. <sup>3</sup> Changes in the fair value of purchased and sold non-derivative financial instruments between trade date and settlement date are recognized as replacement values. <sup>4</sup> 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. <sup>5</sup> 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 in the "Consolidated financial statements" section of the Annual Report 2016 for more information.

**Note 9 Derivative instruments (continued)****b) Cash collateral on derivative instruments**

<i>CHF billion</i>	<b>Receivables 30.9.17</b>	<b>Payables 30.9.17</b>	Receivables 30.6.17	Payables 30.6.17	Receivables 31.12.16	Payables 31.12.16
Cash collateral on derivative instruments, based on IFRS netting <sup>1</sup>	24.9	31.9	22.7	31.5	26.7	35.5
Further netting potential not recognized on the balance sheet <sup>2</sup>	(13.6)	(17.3)	(11.2)	(18.4)	(15.1)	(22.2)
<i>of which: netting of recognized financial liabilities / assets</i>	(12.7)	(16.0)	(10.7)	(17.8)	(14.2)	(20.8)
<i>of which: netting with collateral received / pledged</i>	(1.0)	(1.3)	(0.5)	(0.7)	(1.0)	(1.4)
<b>Cash collateral on derivative instruments, after consideration of further netting potential</b>	<b>11.3</b>	<b>14.6</b>	<b>11.5</b>	<b>13.1</b>	<b>11.5</b>	<b>13.3</b>

<sup>1</sup> 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. 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, with UBS no longer applying IAS 32 netting principles. Refer to Note 9 in the "Consolidated financial statements" section of the first quarter 2017 report for more information. <sup>2</sup> 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 in the "Consolidated financial statements" section of the Annual Report 2016 for more information.

**Note 10 Other assets and liabilities**

<i>CHF million</i>	<b>30.9.17</b>	30.6.17	31.12.16
--------------------	----------------	---------	----------

**Other assets**

Prime brokerage receivables <sup>1</sup>	14,042	12,388	9,828
Recruitment loans to financial advisors	2,597	2,643	3,087
Other loans to financial advisors	561	557	471
Bail deposit <sup>2</sup>	1,304	1,246	1,213
Accrued interest income	607	558	526
Accrued income – other	872	861	822
Prepaid expenses	899	921	1,008
Settlement and clearing accounts	805	385	516
VAT and other tax receivables	297	303	261
Properties and other non-current assets held for sale	92	95	111
Assets of disposal group held for sale	0	0	5,137
Other	2,589	2,760	2,433
<b>Total other assets</b>	<b>24,665</b>	<b>22,717</b>	<b>25,412</b>

**Other liabilities**

Prime brokerage payables <sup>1</sup>	31,180	30,068	31,973
Amounts due under unit-linked investment contracts	9,893	10,099	9,286
Compensation-related liabilities	4,551	3,983	5,256
<i>of which: accrued expenses</i>	2,069	1,501	2,367
<i>of which: other deferred compensation plans</i>	1,563	1,412	1,623
<i>of which: net defined benefit pension and post-employment liabilities</i>	919	1,070	1,266
Third-party interest in consolidated investment funds	317	342	751
Settlement and clearing accounts	1,168	699	1,011
Current and deferred tax liabilities	767	656	911
VAT and other tax payables	408	469	487
Deferred income	181	192	168
Accrued interest expenses	1,203	1,076	1,571
Other accrued expenses	2,230	2,114	2,427
Liabilities of disposal group held for sale	0	0	5,213
Other	1,942	1,897	1,390
<b>Total other liabilities</b>	<b>53,839</b>	<b>51,596</b>	<b>60,443</b>

<sup>1</sup> 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. Prime brokerage payables are mainly comprised of client securities financing and deposits. <sup>2</sup> Refer to item 1 in Note 13b for more information.

## Note 11 Financial liabilities designated at fair value

<i>CHF million</i>	30.9.17	30.6.17	31.12.16
<b>Issued debt instruments</b>			
Equity-linked <sup>1</sup>	34,317	31,869	29,831
Rates-linked	6,536	6,801	10,150
Credit-linked	3,228	3,748	4,101
Fixed-rate	3,271	3,123	2,972
Other	2,189	2,389	2,875
<b>Total issued debt instruments</b>	<b>49,543</b>	<b>47,930</b>	<b>49,930</b>
<b>Over-the-counter debt instruments</b>	<b>6,455</b>	<b>5,846</b>	<b>4,663</b>
<b>Other</b>	<b>587</b>	<b>439</b>	<b>425</b>
<b>Total</b>	<b>56,585</b>	<b>54,215</b>	<b>55,017</b>
<i>of which: life-to-date own credit (gain) / loss</i>	<i>164</i>	<i>128</i>	<i>(141)</i>

<sup>1</sup> Includes investment fund unit-linked instruments issued.

## Note 12 Debt issued held at amortized cost

<i>CHF million</i>	30.9.17	30.6.17	31.12.16
Certificates of deposit	26,594	33,162	20,207
Commercial paper	17,561	6,530	1,653
Other short-term debt	3,907	4,199	4,318
<b>Short-term debt<sup>1</sup></b>	<b>48,062</b>	<b>43,891</b>	<b>26,178</b>
Senior fixed-rate bonds	29,107	25,527	27,008
Covered bonds	4,052	3,896	5,836
Subordinated debt	9,141	8,983	11,554
<i>of which: low-trigger loss-absorbing tier 2 capital instruments</i>	<i>8,256</i>	<i>8,110</i>	<i>10,429</i>
<i>of which: non-Basel III-compliant tier 2 capital instruments</i>	<i>886</i>	<i>873</i>	<i>1,125</i>
Debt issued through the central bond institutions of the Swiss regional or cantonal banks	8,368	8,369	8,302
Other long-term debt	131	91	121
<b>Long-term debt<sup>2</sup></b>	<b>50,799</b>	<b>46,866</b>	<b>52,820</b>
<b>Total debt issued held at amortized cost<sup>3</sup></b>	<b>98,861</b>	<b>90,757</b>	<b>78,998</b>

<sup>1</sup> Debt with an original maturity of less than one year. <sup>2</sup> Debt with an original maturity greater than or equal to one year. The classification of debt issued into short-term and long-term does not consider any early redemption features. <sup>3</sup> Net of bifurcated embedded derivatives with a net positive fair value of CHF 14 million as of 30 September 2017 (30 June 2017: net positive fair value of CHF 20 million; 31 December 2016: net positive fair value of CHF 38 million).

## Note 13 Provisions and contingent liabilities

### a) Provisions

<i>CHF million</i>	Operational risks <sup>1</sup>	Litigation, regulatory and similar matters <sup>2</sup>	Restructuring	Loan commitments and guarantees	Real estate	Employee benefits <sup>5</sup>	Other	Total provisions
<b>Balance as of 31 December 2016</b>	50	3,261	498	54	138	77	91	4,169
<b>Balance as of 30 June 2017</b>	47	2,446	364	53	125	57	74	3,167
Additions from acquired companies	0	0	0	0	0	0	7	7
Increase in provisions recognized in the income statement	4	310	40	1	0	1	13	369
Release of provisions recognized in the income statement	(1)	(63)	(24)	(6)	0	(2)	0	(97)
Provisions used in conformity with designated purpose	(6)	(313)	(65)	0	(2)	0	(1)	(387)
Capitalized reinstatement costs	0	0	0	0	0	0	0	1
Foreign currency translation / unwind of discount	(1)	30	8	0	1	1	1	39
<b>Balance as of 30 September 2017</b>	<b>44</b>	<b>2,410</b>	<b>323<sup>3</sup></b>	<b>48</b>	<b>124<sup>4</sup></b>	<b>57</b>	<b>93</b>	<b>3,098</b>

<sup>1</sup> Comprises provisions for losses resulting from security risks and transaction processing risks. <sup>2</sup> Comprises provisions for losses resulting from legal, liability and compliance risks. <sup>3</sup> Consists of personnel-related restructuring provisions of CHF 62 million as of 30 September 2017 (30 June 2017: CHF 74 million; 31 December 2016: CHF 150 million) and provisions for onerous lease contracts of CHF 261 million as of 30 September 2017 (30 June 2017: CHF 290 million; 31 December 2016: CHF 348 million). <sup>4</sup> Consists of reinstatement costs for leasehold improvements of CHF 84 million as of 30 September 2017 (30 June 2017: CHF 83 million; 31 December 2016: CHF 85 million) and provisions for onerous lease contracts of CHF 41 million as of 30 September 2017 (30 June 2017: CHF 42 million; 31 December 2016: CHF 53 million). <sup>5</sup> 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 13b. 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 13 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 Note 13a 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 USD 203 million fine and is subject to a three-year term of probation. A guilty plea to, or conviction of, a crime (including as a result of termination of the NPA) 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 the UBS Group third quarter 2017 report.

### Provisions for litigation, regulatory and similar matters by business division and Corporate Center unit<sup>1</sup>

<i>CHF million</i>	Wealth Management	Wealth Management Americas	Personal & Corporate Banking	Asset Management	Investment Bank	CC – Services	CC – Group ALM	CC – Non-core and Legacy Portfolio	UBS
<b>Balance as of 31 December 2016</b>	292	425	78	5	616	259	0	1,585	3,261
<b>Balance as of 30 June 2017</b>	249	361	77	5	391	253	0	1,110	2,446
Increase in provisions recognized in the income statement	20	10	0	0	2	248	0	31	310
Release of provisions recognized in the income statement	0	(3)	0	(5) <sup>2</sup>	(47)	(1)	0	(7)	(63)
Provisions used in conformity with designated purpose	(1)	(46)	0	0	(5)	(259)	0	(1)	(313)
Foreign currency translation / unwind of discount	11	3	1	0	3	1	0	11	30
<b>Balance as of 30 September 2017</b>	<b>279</b>	<b>325</b>	<b>78</b>	<b>0</b>	<b>344</b>	<b>241</b>	<b>0</b>	<b>1,144</b>	<b>2,410</b>

<sup>1</sup> 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 8), Corporate Center – Services (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.  
<sup>2</sup> In the third quarter of 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 13 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 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 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.

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 30 September 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.

## Note 13 Provisions and contingent liabilities (continued)

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. The security holders who are parties to the settlement agreement have requested that the trustee conduct a vote of security holders to approve or reject the settlement, and each of these security holders has agreed to vote its securities in favor of the settlement. Giving effect to this settlement, 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 has subsequently provided a revised list of transactions. UBS has provided and continues to provide information. UBS continues to respond to the FIRREA subpoena and to subpoenas from the New York State Attorney General and other state attorneys general relating to its RMBS business. In addition, UBS has also been responding 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 30 September 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 now face severe losses, and the Luxembourg funds are in liquidation. The last reported net asset value of the two Luxembourg funds before revelation of the Madoff scheme was approximately USD 1.7 billion in the aggregate although that figure likely includes fictitious profit reported by BMIS. 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. UBS Europe SE, Luxembourg branch, and certain other UBS subsidiaries are responding to inquiries by Luxembourg investigating authorities, without, however, being named as parties in those investigations.

**Note 13 Provisions and contingent liabilities (continued)**

In 2009 and 2010, the liquidators of the two Luxembourg funds filed claims on behalf of the funds against UBS entities, non-UBS entities and certain individuals, including current and former UBS employees. The amounts claimed are approximately EUR 890 million and EUR 305 million, respectively. The liquidators have filed supplementary claims for amounts that the funds may possibly be held liable to pay the trustee for the liquidation of BMIS (BMIS Trustee). These amounts claimed by the liquidator are approximately EUR 564 million and EUR 370 million, respectively.

In addition, a large number of alleged beneficiaries have filed claims against UBS entities (and non-UBS entities) for purported losses relating to the Madoff scheme. The majority of these cases are pending in Luxembourg, where appeals were filed by the claimants against the 2010 decisions of the court in which the claims in a number of test cases were held to be inadmissible. The Luxembourg Court of Appeal has found in favor of UBS and dismissed all of these test case appeals, confirming that the claims are inadmissible. The Luxembourg Supreme Court has also dismissed a further appeal brought by the claimant in one of the test cases.

In the US, the BMIS Trustee filed claims in 2010 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. The SDNY dismissed all of the BMIS Trustee's claims other than claims for recovery of fraudulent conveyances and preference payments that were allegedly transferred to UBS on the ground that the BMIS Trustee lacks standing to bring such claims. The SDNY decision was affirmed on appeal and is now final. In 2016, the bankruptcy court issued an opinion dismissing the remaining claims for recovery of transfers of fraudulent conveyances and preference payments on the ground that the US Bankruptcy Code does not apply to transfers that occurred outside the US. The BMIS Trustee has appealed that ruling. In 2014, several claims, including a purported class action, were filed in the US by BMIS customers against UBS entities, asserting claims similar to the ones made by the BMIS Trustee, seeking unspecified damages. One claim was voluntarily withdrawn by the plaintiff. In 2015, the SDNY dismissed the two remaining claims on the basis that the New York courts did not have jurisdiction to hear the claims against the UBS entities. The plaintiff in one of those claims has appealed the dismissal.

In Germany, certain clients of UBS are exposed to Madoff-managed positions through third-party funds and funds administered by UBS entities in Germany. A small number of claims have been filed with respect to such funds. In 2015, a court of appeal ordered UBS to pay EUR 49 million, plus interest of approximately EUR 15.3 million.

**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 2.2 billion, of which claims with aggregate claimed damages of USD 1.2 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 to dismiss the action 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.

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.

## Note 13 Provisions and contingent liabilities (continued)

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 December 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 March 2017, the court denied defendants' motion to dismiss the amended complaint.

Also, in 2013, an SEC Administrative Law Judge dismissed a case brought by the SEC against two UBS executives, finding no violations. The charges had stemmed from the SEC's investigation of UBS's sale of closed-end funds in 2008 and 2009, which UBS settled in 2012. Beginning in 2012, two federal class action complaints, which were subsequently consolidated, were filed against various UBS entities, certain of the 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 based on allegations similar to those in the SEC action. 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 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 30 September 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 to UBS AG. In addition, the DOJ's Criminal Division (Criminal Division) terminated the December 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. 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 numerous authorities, including the CFTC, remain ongoing notwithstanding these resolutions.

### Note 13 Provisions and contingent liabilities (continued)

*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 January 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.

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 has been 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 FX 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 October 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 their 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.

## Note 13 Provisions and contingent liabilities (continued)

*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. 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. UBS and other defendants in other lawsuits including those related to GBP LIBOR and Australian BBSW have filed motions to dismiss. 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 complaints, which have since been consolidated into an amended complaint, allege that the defendants conspired to manipulate ISDAFIX rates from January 2006 through June 2013, in violation of US antitrust laws and

certain state laws, and seek unspecified compensatory damages, including treble damages. On 12 July 2017, the court overseeing the ISDAFIX class action preliminarily approved a settlement agreement between UBS AG and the plaintiffs, whereby UBS AG agreed to 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. 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 order referred to above, our balance sheet at 30 September 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.

**Note 13 Provisions and contingent liabilities (continued)**

Our balance sheet at 30 September 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. 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. Of the remaining BRL

732 million in indemnification claims, administrative courts have ruled in favor of BTG in respect of BRL 455 million of assessments related to profit-sharing plans, with the remainder of the assessments pending at various levels of the administrative or judicial court system.

**8. 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. In 2016, the SFC informed UBS that it intends to commence action against UBS and certain UBS employees with respect to sponsorship work in those offerings, which could result in financial ramifications for UBS, including fines and obligations to pay investor compensation, and suspension of UBS's ability to provide corporate finance advisory services in Hong Kong for a period of time.

In January 2017, a writ was filed by the SFC with Hong Kong's High Court in which UBS was named as one of six defendants from whom the SFC was seeking investor compensation in an unspecified amount for losses incurred by certain shareholders of China Forestry Holdings Company Limited, for whom UBS acted as a sponsor in connection with their 2009 listing application. In August 2017, the SFC filed an amended writ that did not name UBS and some of the other defendants, thereby discontinuing this action against UBS.

**Note 14 Guarantees, commitments and forward starting transactions**

The table below shows the maximum irrevocable amount of guarantees, commitments and forward starting transactions.

CHF million	30.9.17			30.6.17			31.12.16		
	Gross	Sub-participations	Net	Gross	Sub-participations	Net	Gross	Sub-participations	Net
<b>Guarantees</b>									
Credit guarantees and similar instruments	6,812	(442)	6,371	6,411	(390)	6,021	6,447	(424)	6,023
Performance guarantees and similar instruments	3,309	(815)	2,494	3,229	(654)	2,575	3,190	(696)	2,494
Documentary credits	6,578	(1,652)	4,926	6,198	(1,611)	4,587	7,074	(1,761)	5,313
<b>Total guarantees</b>	<b>16,699</b>	<b>(2,908)</b>	<b>13,791</b>	<b>15,838</b>	<b>(2,656)</b>	<b>13,182</b>	<b>16,711</b>	<b>(2,881)</b>	<b>13,830</b>
<b>Loan commitments</b>	<b>39,658</b>	<b>(1,103)</b>	<b>38,555</b>	<b>42,222</b>	<b>(1,349)</b>	<b>40,874</b>	<b>54,430</b>	<b>(1,513)</b>	<b>52,917</b>
<b>Forward starting transactions<sup>1</sup></b>									
Reverse repurchase agreements	21,814			25,218			10,178		
Securities borrowing agreements	88			183			36		
Repurchase agreements	16,596			20,890			5,984		

<sup>1</sup> Cash to be paid in the future by either UBS or the counterparty.

## Note 15 Changes in organization

### 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.

#### Net restructuring expenses by business division and Corporate Center unit

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
Wealth Management	114	109	139	311	304
Wealth Management Americas	24	25	38	71	109
Personal & Corporate Banking	25	23	41	67	95
Asset Management	26	23	34	70	88
Investment Bank	83	75	181	236	461
Corporate Center	18	8	4	38	16
of which: Services	15	4	(2)	30	3
of which: Group ALM	1	1	0	3	0
of which: Non-core and Legacy Portfolio	1	2	7	6	13
<b>Total net restructuring expenses</b>	<b>290</b>	<b>263</b>	<b>436</b>	<b>793</b>	<b>1,072</b>
of which: personnel expenses	104	57	249	273	562
of which: general and administrative expenses	185	206	187	514	510
of which: depreciation and impairment of property, equipment and software	2	0	1	6	1
of which: amortization and impairment of intangible assets	0	0	0	0	0

#### Net restructuring expenses by personnel expense category

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
Salaries and variable compensation	84	49	247	233	557
Contractors	14	9	13	37	41
Social security	1	2	3	5	6
Pension and other post-employment benefit plans	0	(4)	(18)	(8)	(52)
Other personnel expenses	4	1	4	6	10
<b>Total net restructuring expenses: personnel expenses</b>	<b>104</b>	<b>57</b>	<b>249</b>	<b>273</b>	<b>562</b>

#### Net restructuring expenses by general and administrative expense category

CHF million	For the quarter ended			Year-to-date	
	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
Occupancy	17	22	27	57	97
Rent and maintenance of IT and other equipment	8	(6)	28	30	72
Administration	98	106	7	209	17
Travel and entertainment	3	2	3	6	9
Professional fees	40	34	39	101	109
Outsourcing of IT and other services	28	49	80	120	228
Other <sup>1</sup>	(9)	(1)	3	(10)	(22)
<b>Total net restructuring expenses: general and administrative expenses</b>	<b>185</b>	<b>206</b>	<b>187</b>	<b>514</b>	<b>510</b>

<sup>1</sup> Mainly comprised of onerous real estate lease contracts.



**Note 15 Changes in organization (continued)****Transfer of shared services functions to UBS Business Solutions AG**

In the second quarter of 2017, UBS transferred shared services functions in Switzerland from UBS AG to UBS Business Solutions AG, UBS's Group service company and a wholly owned subsidiary of UBS Group AG. The transfer was recorded retrospectively as of 1 April 2017 and resulted in the derecognition of CHF 706 million of assets and CHF 259 million of liabilities, the granting of a loan of CHF 140 million and a reduction in share premium within equity attributable to shareholders of CHF 307 million for UBS AG consolidated.

Following the transfer, UBS Business Solutions AG charges other legal entities within the Group for services provided, including a markup on costs incurred. For UBS AG, this has resulted in a decrease in direct costs recognized as personnel and depreciation expenses, which was more than offset by an increase in general and administrative expenses related to the service charge from UBS Business Solutions AG. In addition, entities within the UBS AG consolidated scope now charge UBS Business Solutions AG for certain services provided to Swiss shared services functions, resulting in an increase in other income for UBS AG.

**Note 16 Currency translation rates**

The following table shows the rates of the main currencies used to translate the financial information of UBS AG's foreign operations into Swiss francs.

	Spot rate				Average rate <sup>1</sup>				
	As of				For the quarter ended			Year-to-date	
	30.9.17	30.6.17	31.12.16	30.9.16	30.9.17	30.6.17	30.9.16	30.9.17	30.9.16
1 USD	0.97	0.96	1.02	0.97	0.97	0.97	0.97	0.98	0.98
1 EUR	1.14	1.10	1.07	1.09	1.14	1.09	1.09	1.10	1.09
1 GBP	1.30	1.25	1.26	1.26	1.27	1.26	1.27	1.26	1.35
100 JPY	0.86	0.85	0.87	0.96	0.87	0.87	0.95	0.88	0.91

<sup>1</sup> Monthly income statement items of foreign operations with a functional currency other than 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 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 17 Events after the reporting period****Sale of subsidiaries and businesses**

On 1 October 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 approximately CHF 140 million. This gain will be recognized in the income statement within Asset Management in the fourth quarter of 2017.

**REGISTERED OFFICE OF THE ISSUER**

**UBS AG, London Branch**  
5 Broadgate  
London  
EC2M 2QS  
United Kingdom

**ISSUER'S AUDITORS**

**Ernst & Young Ltd**  
Aeschengraben 9  
P.O. Box 2149 CH-4002 Basel  
Switzerland

**LEGAL ADVISERS**

*(as to Singapore law)*

**Allen & Gledhill LLP**  
One Marina Boulevard #28-00  
Singapore 018989

**WARRANT AGENT**

**The Central Depository (Pte) Limited**  
11 North Buona Vista Drive  
#06-07 The Metropolis Tower 2  
Singapore 138589