

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 Certificates (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 SG Issuer, Société Générale, the Certificates, or the Company (as defined below).

**A further 17,509,000 European Style Cash Settled Long Certificates
relating to the ordinary shares of par value US\$0.50 each of HSBC Holdings plc
with a Daily Leverage of 5x**

issued by

SG Issuer

(Incorporated in Luxembourg with limited liability)

unconditionally and irrevocably guaranteed by

Société Générale

Issue Price: S\$2.20 per Certificate

This document is published for the purpose of obtaining a listing of all the above certificates (the “**Certificates**”) to be issued by SG Issuer (the “**Issuer**”) unconditionally and irrevocably guaranteed by Société Générale (the “**Guarantor**”), and is supplemental to and should be read in conjunction with a base listing document dated 21 June 2019 including such further base listing documents as may be issued from time to time (the “**Base Listing Document**”) for the purpose of giving information with regard to the Issuer, the Guarantor and the Certificates. Information relating to the Company (as defined below) is contained in this document.

The Certificates shall be consolidated and form a single series with an existing issue of 1,091,000 European Style Cash Settled Long Certificates relating to the ordinary shares of par value US\$0.50 each of HSBC Holdings plc (DLC SOCGEN5XLONG HSBC (DZLW)) issued by the Issuer and listed on the SGX-ST, in which dealings commenced on 26 February 2019 and details of which are contained in the Supplemental Listing Document dated 25 February 2019.

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, Certificates 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 Certificates or other securities of the Issuer.

Restrictions have been imposed on offers and sales of the Certificates and on distributions of documents relating thereto in Singapore, Hong Kong, the European Economic Area, the United Kingdom and the United States (see “Placing and Sale” contained herein).

The Certificates are complex products. You should exercise caution in relation to them. Investors are warned that the price of the Certificates may fall in value as rapidly as it may rise and holders may sustain a total loss of their investment. The price of the Certificates also depends on the supply and demand for the Certificates in the market and the price at which the Certificates is trading at any time may differ from the underlying valuation of the Certificates because of market inefficiencies. It is not possible to predict the secondary market for the Certificates. Although the Issuer, the Guarantor and/or any of their affiliates may from time to time purchase the Certificates or sell additional Certificates on the market, the Issuer, the Guarantor and/or any of their affiliates are not obliged to do so. Investors should also note that there are leveraged risks because the Certificates integrate a leverage mechanism and the Certificates will amplify the movements in the increase, and in the decrease, of the value of the Underlying Stock (as defined below) and if the investment results in a loss, any such loss will be increased by the leverage factor of the Certificates. As such, investors could lose more than they would if they had invested directly in the Underlying Stock.

The Certificates are classified as capital markets products other than prescribed capital markets products¹ and Specified Investment Products (SIPs)², and may only be sold to retail investors with enhanced safeguards, including an assessment of such investors’ investment knowledge or experience.

The Certificates constitute general unsecured obligations of the Issuer and of no other person, and the guarantee dated 21 June 2019 (the “**Guarantee**”) and entered into by the Guarantor constitutes general unsecured obligations of the Guarantor and of no other person, and if you purchase the Certificates, you are relying upon the creditworthiness of the Issuer and the Guarantor and have no rights under the Certificates against any other person.

Application has been made to the SGX-ST for permission to deal in and for quotation of the Certificates and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Certificates. It is expected that dealings in the Certificates will commence on or about 13 April 2020.

As of the date hereof, the Guarantor’s long term credit rating by S&P Global Ratings is A, and by Moody’s Investors Service, Inc. is A1.

The Issuer is regulated by the Luxembourg Commission de Surveillance du Secteur Financier on a consolidated basis and the Guarantor is regulated by, *inter alia*, the Autorité des Marchés Financiers, the Autorité de Contrôle Prudentiel et de Résolution and the European Central Bank.

9 April 2020

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

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

Subject as set out below, the Issuer and the Guarantor accept full responsibility for the accuracy of the information contained in this document and the Base Listing Document in relation to themselves and the Certificates. To the best of the knowledge and belief of the Issuer and the Guarantor (each of which has taken all reasonable care to ensure that such is the case), the information contained in this document and the Base Listing Document for which they accept responsibility (subject as set out below in respect of the information contained herein with regard to the Company) 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 Company as set out herein is extracted from publicly available information. The Issuer and the Guarantor accept 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 and the Guarantor.

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 Certificates, and, if given or made, such information or representations must not be relied upon as having been authorised by the Issuer or the Guarantor. 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, the Guarantor or their respective subsidiaries and associates since the date hereof.

This document does not constitute an offer or invitation by or on behalf of the Issuer or the Guarantor to purchase or subscribe for any of the Certificates. The distribution of this document and the offering of the Certificates may, in certain jurisdictions, be restricted by law. The Issuer and the Guarantor require persons into whose possession this document comes to inform themselves of and observe all such restrictions. In particular, the Certificates and the Guarantee have not been and will not be registered under the United States Securities Act of 1933, as amended or any state securities law, and trading in the Certificates has not been approved by the United States Commodity Futures Trading Commission (the “CFTC”) under the United States Commodity Exchange Act of 1936, as amended and the Issuer will not be registered as an investment company under the United States Investment Company Act of 1940, as amended, and the rules and regulations thereunder. None of the Securities and Exchange Commission, any state securities commission or regulatory authority or any other United States, French or other regulatory authority has approved or disapproved of the Certificates or the Guarantee or passed upon the accuracy or adequacy of this document. Accordingly, Certificates, or interests therein, may not at any time be offered, sold, resold, traded, pledged, exercised, redeemed, transferred or delivered, directly or indirectly, in the United States or to, or for the account or benefit of, U.S. persons, nor may any U.S. person at any time trade, own, hold or maintain a position in the Certificates or any interests therein. In addition, in the absence of relief from the CFTC, offers, sales, re-sales, trades, pledges, exercises, redemptions, transfers or deliveries of Certificates, or interests therein, directly or indirectly, in the United States or to, or for the account or benefit of, U.S. persons, may constitute a violation of United States law governing commodities trading and commodity pools. Consequently, any offer, sale, resale, trade, pledge, exercise, redemption, transfer or delivery made, directly or indirectly, within the United States or to, or for the account or benefit of, a U.S. person will not be recognised. A further description of certain restrictions on offering and sale of the Certificates 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 Guarantor or the merits of investing in the Certificates, nor have they verified the accuracy or the truthfulness of statements made or opinions expressed in this document.

The Issuer, the Guarantor and/or any of their affiliates may repurchase Certificates at any time on or after the date of issue and any Certificates 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, the Guarantor and/or any of their affiliates. Investors should not therefore make any assumption as to the number of Certificates in issue at any time.

References in this document to the “**Conditions**” shall mean references to the Terms and Conditions of the European Style Cash Settled Long/Short Certificates on Single Equities contained in the Base Listing Document. Terms not defined herein shall have the meanings ascribed thereto in the Conditions.

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RISK FACTORS

The following are risk factors relating to the Certificates:

- (a) investment in Certificates involves substantial risks including market risk, liquidity risk, and the risk that the Issuer and/or the Guarantor will be unable to satisfy its/their obligations under the Certificates. Investors should ensure that they understand the nature of all these risks before making a decision to invest in the Certificates. You should consider carefully whether Certificates are suitable for you in light of your experience, objectives, financial position and other relevant circumstances. Certificates are not suitable for inexperienced investors;
- (b) the Certificates constitute general unsecured obligations of the Issuer and of no other person, and the Guarantee constitutes general unsecured obligations of the Guarantor and of no other person. In particular, it should be noted that the Issuer issues a large number of financial instruments, including Certificates, on a global basis and, at any given time, the financial instruments outstanding may be substantial. If you purchase the Certificates, you are relying upon the creditworthiness of the Issuer and the Guarantor and have no rights under the Certificates against any other person;
- (c) since the Certificates relate to the price of the Underlying Stock, certain events relating to the Underlying Stock may cause adverse movements in the value and the price of the Underlying Stock, as a result of which, the Certificate Holders (as defined in the Conditions of the Certificates) may, in extreme circumstances, sustain a significant loss of their investment if the price of the Underlying Stock has fallen sharply on the Expiry Date;
- (d) due to their nature, the Certificates can be volatile instruments and may be subject to considerable fluctuations in value. The price of the Certificates 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 price of the Underlying Stock, the time remaining to expiry, the currency exchange rates and the creditworthiness of the Issuer and the Guarantor;
- (e) if, whilst any of the Certificates remain unexercised, trading in the Underlying Stock is suspended or halted on the relevant stock exchange, trading in the Certificates may be suspended for a similar period;
- (f) as indicated in the Conditions of the Certificates and herein, a Certificate Holder must tender a specified number of Certificates at any one time in order to exercise. Thus, Certificate Holders with fewer than the specified minimum number of Certificates in a particular series will either have to sell their Certificates or purchase additional Certificates, incurring transactions costs in each case, in order to realise their investment;
- (g) investors should note that in the event of there being a Market Disruption Event (as defined in the Conditions) determination or payment of the Cash Settlement Amount (as defined in the Conditions) may be delayed, all as more fully described in the Conditions;
- (h) certain events relating to the Underlying Stock require or, as the case may be, permit the Issuer to make certain adjustments or amendments to the Conditions. Investors may refer to the Conditions 4 and 6 on pages 27 to 31 and the examples and illustrations of adjustments set out in the “Information relating to the European Style Cash Settled Long Certificates on Single Equities” section of this document for more information;

- (i) the Certificates are only exercisable on the Expiry Date and may not be exercised by Certificate Holders prior to such Expiry Date. Accordingly, if on the Expiry Date the Cash Settlement Amount is zero, a Certificate Holder will lose the value of his investment;
- (j) the total return on an investment in any Certificate may be affected by the Hedging Fee Factor (as defined below), Management Fee (as defined below) and Gap Premium (as defined below);
- (k) investors holding their position overnight should note that they would be required to bear the annualised cost which consists of the Management Fee and Gap Premium, which are calculated daily and applied to the value of the Certificates, as well as certain costs embedded within the Leverage Strategy (as described below) including the Funding Cost (as defined below) and Rebalancing Cost (as defined below);
- (l) investors should note that there may be an exchange rate risk relating to the Certificates where the Cash Settlement Amount is 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 Certificates. 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 there are leveraged risks because the Certificates integrate a leverage mechanism and the Certificates will amplify the movements in the increase, and in the decrease, of the value of the Underlying Stock and if the investment results in a loss, any such loss will be increased by the leverage factor of the Certificates. As such, investors could lose more than they would if they had invested directly in the Underlying Stock;
- (n) when held for longer than a day, the performance of the Certificates could be more or less than the leverage factor that is embedded within the Certificates. The performance of the Certificates each day is locked in, and any subsequent returns are based on what was achieved the previous day. This process, referred to as compounding, may lead to a performance difference from 5 times the performance of the Underlying Stock over a period longer than one day. This difference may be amplified in a volatile market with a sideways trend, where market movements are not clear in direction, whereby investors may sustain substantial losses;
- (o) investors should note that the Air Bag Mechanism (as defined below) reduces the impact on the Leverage Strategy if the Underlying Stock falls further, but will also maintain a reduced exposure to the Underlying Stock in the event the Underlying Stock starts to rise after the Air Bag Mechanism is triggered, thereby reducing its ability to recoup losses;
- (p) there is no assurance that the Air Bag Mechanism will prevent investors from losing the entire value of their investment, in the event of (i) an overnight fall in the Underlying Stock, where there is a 20% or greater gap between the previous day closing price and the opening price of the Underlying Stock the following day, as the Air Bag Mechanism will only be triggered when market opens the following day or (ii) a sharp intraday fall in the price of the Underlying Stock of 20% or greater within the 15 minutes Observation Period compared to the reference price,

being: (a) if air bag event has not been previously triggered on the same day, the previous closing price of the Underlying Stock, or (b) if one or more air bag events have been previously triggered on the same day, the latest New Observed Price. Investors may refer to pages 46 to 47 of this document for more information;

- (q) certain events may, pursuant to the terms and conditions of the Certificates, trigger (i) the implementation of methods of adjustment or (ii) the early termination of the Certificates. The Issuer will give the investors reasonable notice of any early termination. If the Issuer terminates the Certificates early, then the Issuer will, if and to the extent permitted by applicable law, pay an amount to each Certificate Holder in respect of each Certificate held by such holder equal to the fair market value of the Certificate less the cost to the Issuer of unwinding any underlying related hedging arrangements, all as determined by the Issuer in its sole and absolute discretion. The performance of this commitment shall depend on (i) general market conditions and (ii) the liquidity conditions of the underlying instrument(s) and, as the case may be, of any other hedging transactions. Investors should note that the amount repaid by the Issuer may be less than the amount initially invested. Investors may refer to the Condition 13 on pages 33 to 35 of this document for more information;
- (r) there is no assurance that an active trading market for the Certificates will sustain throughout the life of the Certificates, or if it does sustain, it may be due to market making on the part of the Designated Market Maker. The Issuer acting through its Designated Market Maker may be the only market participant buying and selling the Certificates. Therefore, the secondary market for the Certificates may be limited and you may not be able to realise the value of the Certificates. Do note that the bid-ask spread increases with illiquidity;
- (s) 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, the Guarantor and any of their 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 Underlying Stock. In addition, in connection with the offering of any Certificates, the Issuer, the Guarantor and any of their respective subsidiaries and affiliates may enter into one or more hedging transactions with respect to the Underlying Stock. In connection with such hedging or market-making activities or with respect to proprietary or other trading activities by the Issuer, the Guarantor and any of their respective subsidiaries and affiliates, the Issuer, the Guarantor and any of their respective subsidiaries and affiliates may enter into transactions in the Underlying Stock which may affect the market price, liquidity or value of the Certificates and which may affect the interests of Certificate Holders;
- (t) various potential and actual conflicts of interest may arise from the overall activities of the Issuer, the Guarantor and/or any of their subsidiaries and affiliates.

The Issuer, the Guarantor and any of their 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, the Guarantor and any of their subsidiaries and affiliates, in connection with their other business activities, may possess or acquire material information about the Underlying Stock. Such activities and information may involve or otherwise affect issuers of the Underlying Stock in a manner that may cause consequences adverse to the Certificate Holders or otherwise create conflicts of interests in connection with the issue of Certificates 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, the Guarantor and any of their subsidiaries and affiliates have no obligation to disclose such information about the Underlying Stock or such activities. The Issuer, the Guarantor and any of their subsidiaries and affiliates and their officers and directors may engage in any such activities without regard to the issue of Certificates by the Issuer or the effect that such activities may directly or indirectly have on any Certificate;

- (u) legal considerations which may restrict the possibility of certain investments:

Some investors' investment activities are subject to specific laws and regulations or laws and regulations currently being considered by various authorities. All potential investors must consult their own legal advisers to check whether and to what extent (i) they can legally purchase the Certificates (ii) the Certificates can be used as collateral security for various forms of borrowing (iii) if other restrictions apply to the purchase of Certificates or their use as collateral security. Financial institutions must consult their legal advisers or regulators to determine the appropriate treatment of the Certificates under any applicable risk-based capital or similar rules;

- (v) the credit rating of the Guarantor is an assessment of its ability to pay obligations, including those on the Certificates. Consequently, actual or anticipated declines in the credit rating of the Guarantor may affect the market value of the Certificates;

- (w) the Certificates are linked to the Underlying Stock and subject to the risk that the price of the Underlying Stock may decline. The following is a list of some of the significant risks associated with the Underlying Stock:

- Historical performance of the Underlying Stock does not give an indication of future performance of the Underlying Stock. It is impossible to predict whether the price of the Underlying Stock will fall or rise over the term of the Certificates; and
- The price of the Underlying Stock may be affected by the economic, financial and political events in one or more jurisdictions, including the stock exchange(s) or quotation system(s) on which the Underlying Stock may be traded;

- (x) the value of the Certificates depends on the Leverage Strategy performance built in the Certificate. The Calculation Agent will make the Leverage Strategy last closing level and a calculation tool available to the investors on a website;

- (y) two or more risk factors may simultaneously have an effect on the value of a Certificate 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 Certificate;

- (z) as the Certificates 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 Certificates;
- (ii) there will be no register of Certificate Holders and each person who is for the time being shown in the records maintained by CDP as entitled to a particular number of Certificates by way of interest (to the extent of such number) in the global warrant certificate in respect of those Certificates represented thereby shall be treated as the holder of such number of Certificates;
- (iii) investors will need to rely on any statements received from their brokers/custodians as evidence of their interest in the Certificates; and

- (iv) notices to such Certificate Holders will be published on the web-site of the SGX-ST. Investors will need to check the web-site of the SGX-ST regularly and/or rely on their brokers/custodians to obtain such notices;
- (aa) the US Foreign Account Tax Compliance Act ("**FATCA**") withholding risk:

FATCA generally imposes a 30 per cent. withholding tax on certain U.S.-source payments to certain non-US persons that do provide certification of their compliance with IRS rules to disclose the identity of their US owners and account holders (if any) or establish a basis for exemption for such disclosure. The Issuer is subject to FATCA and, as a result, is required to obtain certification from investors that they have complied with FATCA disclosure requirements or have established a basis for exemption from FATCA. If an investor does not provide us with such certification, the Issuer and the Guarantor could be required to withhold U.S. tax on U.S.-source income (if any) paid pursuant to the Certificates. In certain cases, the Issuer could be required to close an account of an investor who does not comply with the FATCA certification procedures.

FATCA IS PARTICULARLY COMPLEX. EACH INVESTOR SHOULD CONSULT ITS OWN TAX ADVISER TO OBTAIN A MORE DETAILED EXPLANATION OF FATCA AND TO DETERMINE HOW THIS LEGISLATION MIGHT AFFECT EACH INVESTOR IN ITS PARTICULAR CIRCUMSTANCES;

- (bb) U.S. withholding tax

The Issuer has determined that this Certificate is not linked to U.S. Underlying Equities within the meaning of applicable regulations under Section 871(m) of the United States Internal Revenue Code, as discussed in the accompanying Base Listing Document under "TAXATION—TAXATION IN THE UNITED STATES OF AMERICA—Section 871(m) of the U.S. Internal Revenue Code of 1986." Accordingly, the Issuer expects that Section 871(m) will not apply to the Certificates. Such determination is not binding on the IRS, and the IRS may disagree with this determination. Section 871(m) is complex and its application may depend on a Certificate Holder's particular circumstances. Certificate Holders should consult with their own tax advisers regarding the potential application of Section 871(m) to the Certificates; and

- (cc) risk factors relating to the BRRD

French law and European legislation regarding the resolution of financial institutions may require the write-down or conversion to equity of the Certificates or other resolution measures if the Issuer or the Guarantor is deemed to meet the conditions for resolution

Directive 2014/59/EU of the European Parliament and of the Council of the European Union dated 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (the "**BRRD**") entered into force on 2 July 2014. As a directive, the BRRD is not directly applicable in France and had to be transposed into national legislation. The French ordonnance no. 2015-1024 of 20 August 2015 transposed the BRRD into French law and amended the French Code monétaire et financier for this purpose. The French ordonnance has been ratified by law no. 2016-1691 dated 9 December 2016 (Loi n°2016-1691 du 9 décembre 2016 relative à la transparence, à la lutte contre la corruption et à la modernisation de la vie économique) which also incorporates provisions which clarify the implementation of the BRRD. In Luxembourg, the BRRD was implemented by the Luxembourg act dated 18 December 2015 (the "**BRR Act 2015**"). Under the BRR Act 2015, the competent authority is the CSSF and the resolution authority is the CSSF acting as Resolution Council (*le Conseil de résolution*).

The stated aim of the BRRD and Regulation (EU) no. 806/2014 of the European Parliament and of the Council of the European Union of 15 July 2014 (the “**SRM Regulation**”) is to provide for the establishment of an EU-wide framework for the recovery and resolution of credit institutions and investment firms. The regime provided for by the BRRD is, among other things, stated to be needed to provide the authority designated by each EU Member State (the “**Resolution Authority**”) with a credible set of tools to intervene sufficiently early and quickly in an unsound or failing institution so as to ensure the continuity of the institution’s critical financial and economic functions while minimizing the impact of an institution’s failure on the economy and financial system (including taxpayers’ exposure to losses).

Under the SRM Regulation, a centralized power of resolution is established and entrusted to the Single Resolution Board (the “**SRB**”) and to the national resolution authorities.

The powers provided to the Resolution Authority in the BRRD and the SRM Regulation include write-down/conversion powers to ensure that capital instruments (including subordinated debt instruments) and eligible liabilities (including senior debt instruments if junior instruments prove insufficient to absorb all losses) absorb losses of the issuing institution that is subject to resolution in accordance with a set order of priority (the “**Bail-in Power**”).

The conditions for resolution under the French Code monétaire et financier implementing the BRRD are deemed to be met when: (i) the Resolution Authority or the relevant supervisory authority determines that the institution is failing or is likely to fail, (ii) there is no reasonable prospect that any measure other than a resolution measure would prevent the failure within a reasonable timeframe, and (iii) a resolution measure is necessary for the achievement of the resolution objectives (in particular, ensuring the continuity of critical functions, avoiding a significant adverse effect on the financial system, protecting public funds by minimizing reliance on extraordinary public financial support, and protecting client funds and assets) and winding up of the institution under normal insolvency proceedings would not meet those resolution objectives to the same extent.

The Resolution Authority could also, independently of a resolution measure or in combination with a resolution measure, fully or partially write-down or convert capital instruments (including subordinated debt instruments) into equity when it determines that the institution or its group will no longer be viable unless such write down or conversion power is exercised or when the institution requires extraordinary public financial support (except when extraordinary public financial support is provided in the form defined in Article L. 613-48 III, 3° of the French Code monétaire et financier).

The Bail-in Power could result in the full (i.e., to zero) or partial write-down or conversion into ordinary shares or other instruments of ownership of the Certificates, or the variation of the terms of the Certificates (for example, the maturity and/or interest payable may be altered and/or a temporary suspension of payments may be ordered). Extraordinary public financial support should only be used as a last resort after having assessed and applied, to the maximum extent practicable, the resolution measures. No support will be available until a minimum amount of contribution to loss absorption and recapitalization of 8% of total liabilities including own funds has been made by shareholders, holders of capital instruments and other eligible liabilities through write down, conversion or otherwise. In addition, if the Issuer’s or the Guarantor’s financial condition deteriorates, the existence of the Bail-in Power could cause the market price or value of the Certificates to decline more rapidly than would be the case in the absence of such power.

In addition to the Bail-in Power, the BRRD provides the Resolution Authority with broader powers to implement other resolution measures with respect to institutions that meet the conditions for resolution, which may include (without limitation) the sale of the institution's business, the creation of a bridge institution, the separation of assets, the replacement or substitution of the institution as obligor in respect of debt instruments, modifications to the terms of debt instruments (including altering the maturity and/or the amount of interest payable and/or imposing a temporary suspension on payments), removing management, appointing an interim administrator, and discontinuing the listing and admission to trading of financial instruments.

Before taking a resolution measure, including implementing the Bail-in Power, or exercising the power to write down or convert relevant capital instruments, the Resolution Authority must ensure that a fair, prudent and realistic valuation of the assets and liabilities of the institution is carried out by a person independent from any public authority.

Since January 1, 2016, French credit institutions (such as the Issuer and the Guarantor) have to meet, at all times, a minimum requirement for own funds and eligible liabilities ("**MREL**") pursuant to Article L. 613-44 of the French Code monétaire et financier. The MREL, which is expressed as a percentage of the total liabilities and own funds of the institution, aims at preventing institutions from structuring their liabilities in a manner that impedes the effectiveness of the Bail-in Power in order to facilitate resolution.

In addition, on November 9, 2015, the Financial Stability Board (the "**FSB**") published a standard on total loss absorbing capacity ("**TLAC**") which is set forth in a term sheet (the "**FSB TLAC Term Sheet**"). That standard –which has been adopted after the BRRD –shares similar objectives to MREL but covers a different scope. Moreover, the Council of the European Union published on February 14, 2019 a final compromise text for the modification of CRR and BRRD intending to give effect to the FSB TLAC Term Sheet and to modify the requirements for MREL eligibility.

The TLAC requirements are expected to be complied with since January 1, 2019 in accordance with the FSB principles. The TLAC requirements impose a level of "Minimum TLAC" that will be determined individually for each global systemically important bank ("**G-SIB**"), such as the Issuer and the Guarantor, in an amount at least equal to (i) 16%, plus applicable buffers, of risk weight assets through January 1, 2022 and 18%, plus applicable buffers, thereafter and (ii) 6% of the Basel III leverage ratio denominator through January 1, 2022 and 6.75% thereafter (each of which could be extended by additional firm-specific requirements). However, according to the final compromise text for the modification of CRR published by the Council of the European Union in February 2019, European Union G-SIBs will have to comply with TLAC requirements, on top of the MREL requirements, as from the entry into force of the amending regulation. As such, G-SIBs will have to comply at the same time with TLAC and MREL described above.

In accordance with the provisions of the SRM Regulation, when applicable, the SRB, has replaced the national resolution authorities designated under the BRRD with respect to all aspects relating to the decision-making process and the national resolution authorities designated under the BRRD continue to carry out activities relating to the implementation of resolution schemes adopted by the SRB. The provisions relating to the cooperation between the SRB and the national resolution authorities for the preparation of the banks' resolution plans have applied since January 1, 2015 and the SRM has been fully operational since January 1, 2016.

The application of any measure under the French BRRD implementing provisions or any suggestion of such application with respect to the Issuer, the Guarantor or the Group could materially adversely affect the rights of Certificate Holders, the price or value of an investment in the Certificates and/or the ability of the Issuer or the Guarantor to satisfy its obligations under any Certificates, and as a result investors may lose their entire investment.

Moreover, if the Issuer's or the Guarantor's financial condition deteriorates, the existence of the Bail-in Power, the exercise of write-down/conversion powers or any other resolution tools by the Resolution Authority independently of a resolution measure or in combination with a resolution measure when it determines that the institution or its group will no longer be viable could cause the market price or value of the Certificates to decline more rapidly than would be the case in the absence of such powers.

Following the publication on 7 June 2019 in the Official Journal of the EU 14 May 2019 by the Council of the Directive (EU) 2019/879 of the European Parliament and of the Council of 20 May 2019 amending the BRRD as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms and Directive 98/26/EC and of the Regulation (EU) 2019/877 of the European Parliament and of the Council of 20 May 2019 amending the Single Resolution Mechanism Regulation (Regulation 806/2014) as regards the loss-absorbing and recapitalisation capacity of credit institutions and investment firms, a comprehensive legislative package reducing risks in the banking sector and further reinforcing banks' ability to withstand potential shocks will strengthen the banking union and reduce risks in the financial system from 28 December 2020.

TERMS AND CONDITIONS OF THE CERTIFICATES

The following are the terms and conditions of the Certificates 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 Cash Settled Long/Short Certificates on Single Equities” in the Base Listing Document. For the purposes of the Conditions, the following terms shall have the following meanings:

Certificates:	A further 17,509,000 European Style Cash Settled Long Certificates relating to the ordinary shares of par value US\$0.50 each of HSBC Holdings plc (the “ Underlying Stock ”) The Certificates shall be consolidated and form a single series with an existing issue of 1,091,000 European Style Cash Settled Long Certificates relating to the ordinary shares of par value US\$0.50 each of HSBC Holdings plc issued by the Issuer and listed on the SGX-ST, in which dealings commenced on 26 February 2019.
Company:	HSBC Holdings plc (RIC: 0005.HK)
Underlying Price ³ and Source:	HK\$64.2 (Reuters)
Calculation Agent:	Société Générale
Strike Level:	Zero
Daily Leverage:	5x (within the Leverage Strategy as described below)
Notional Amount per Certificate:	SGD 2.20
Management Fee (p.a.) ⁴ :	0.40%
Gap Premium (p.a.) ⁵ :	6.90%, is a hedging cost against extreme market movements overnight.
Funding Cost ⁶ :	The annualised costs of funding, referencing a publically published interbank offered rate plus spread.
Rebalancing Cost ⁶ :	The transaction costs (if applicable), computed as a function of leverage and daily performance of the Underlying Stock.
Launch Date:	7 April 2020

³ These figures are calculated as at, and based on information available to the Issuer on 25 February 2019. 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 25 February 2019.

⁴ Please note that the Management Fee is calculated on a 360-day basis and may be increased up to a maximum of 3% p.a. on giving one month's notice to investors. Any increase in the Management Fee will be announced on the SGXNET. Please refer to “Fees and Charges” below for further details of the fees and charges payable and the maximum of such fees as well as other ongoing expenses that may be borne by the Certificates.

⁵ Please note that the Gap Premium is calculated on a 360-day basis.

⁶ These costs are embedded within the Leverage Strategy.

Closing Date:	9 April 2020
Expected Listing Date:	13 April 2020
Last Trading Date:	The date falling 5 Business Days immediately preceding the Expiry Date, currently being 18 February 2022
Expiry Date:	25 February 2022 (if the Expiry Date is not a Business Day, then the Expiry Date shall fall on the preceding Business Day and subject to adjustment of the Valuation Date upon the occurrence of Market Disruption Events as set out in the Conditions of the Certificates)
Board Lot:	100 Certificates
Valuation Date:	24 February 2022 or if such day is not an Exchange Business Day, the immediately preceding Exchange Business Day.
Exercise:	The Certificates may only be exercised on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, in a Board Lot or integral multiples thereof. Certificate Holders shall not be required to deliver an exercise notice. Exercise of Certificates shall be determined by whether the Cash Settlement Amount (less any Exercise Expenses) is positive. If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Certificates shall be deemed to have been automatically exercised at 10:00 a.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 Certificates shall be paid in the manner set out in Condition 4(c) of the Conditions. In the event the Cash Settlement Amount (less any Exercise Expenses) is zero, all Certificates shall be deemed to have expired at 10:00 a.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, and Certificate Holders shall not be entitled to receive any payment from the Issuer in respect of the Certificates.
Cash Settlement Amount:	In respect of each Certificate, shall be an amount payable in the Settlement Currency equal to: Closing Level multiplied by the Notional Amount per Certificate Please refer to the “Information relating to the European Style Cash Settled Long Certificates on Single Equities” section on pages 38 to 52 of this document for examples and illustrations of the calculation of the Cash Settlement Amount.
Hedging Fee Factor:	In respect of each Certificate, shall be an amount calculated as: Product (for t from 1 to Valuation Date) of $(1 - \text{Management Fee} \times (\text{ACT}(t-1;t) \div 360)) \times (1 - \text{Gap Premium}(t-1) \times (\text{ACT}(t-1;t) \div 360))$, where:

“t” refers to “**Observation Date**” which means each Underlying Stock Business Day (subject to Market Disruption Event) from (and including) the Underlying Stock Business Day immediately preceding 26 February 2019 to the Valuation Date; and
 ACT (t-1;t) means the number of calendar days between the Underlying Stock Business Day immediately preceding the Observation Date (which is “t-1”) (included) and the Observation Date (which is “t”) (excluded).

If the Issuer determines, in its sole discretion, that on any Observation Date a Market Disruption Event has occurred, then that Observation Date shall be postponed until the first succeeding Underlying Stock Business Day on which there is no Market Disruption Event, unless there is a Market Disruption Event on each of the five Underlying Stock Business Days immediately following the original date that, but for the Market Disruption Event, would have been an Observation Date. In that case, that fifth Underlying Stock Business Day shall be deemed to be the Observation Date notwithstanding the Market Disruption Event and the Issuer shall determine, its good faith estimate of the level of the Leverage Strategy and the value of the Certificate on that fifth Underlying Stock Business Day in accordance with the formula for and method of calculation last in effect prior to the occurrence of the first Market Disruption Event taking into account, inter alia, the exchange traded or quoted price of the Underlying Stock and the potential increased cost of hedging by the Issuer as a result of the occurrence of the Market Disruption Event.

An “**Underlying Stock Business Day**” is a day on which The Stock Exchange of Hong Kong Limited (the “**HKEX**”) is open for dealings in Hong Kong during its normal trading hours and banks are open for business in Hong Kong.

Please refer to the “Information relating to the European Style Cash Settled Long Certificates on Single Equities” section on pages 38 to 52 of this document for examples and illustrations of the calculation of the Hedging Fee Factor.

Closing Level: In respect of each Certificate, shall be an amount payable in the Settlement Currency equal to:

$$\left(\frac{\text{Final Reference Level} \times \text{Final Exchange Rate}}{\text{Initial Reference Level} \times \text{Initial Exchange Rate}} - \text{Strike Level} \right) \times \text{Hedging Fee Factor}$$

Initial Reference Level: 1,000

Final Reference Level: The closing level of the Leverage Strategy (as described below) on the Valuation Date

The calculation of the closing level of the Leverage Strategy is set out in the “Specific Definitions relating to the Leverage Strategy” section on pages 18 to 22 below.

Initial Exchange Rate ³ :	0.1721
Final Exchange Rate:	The rate for the conversion of HKD to SGD as at 5:00pm (Singapore Time) on the Valuation Date as shown on Reuters, provided that if the Reuters service ceases to display such information, as determined by the Issuer by reference to such source(s) as the Issuer may reasonably determine to be appropriate at such a time.
Air Bag Mechanism:	The “Air Bag Mechanism” refers to the mechanism built in the Leverage Strategy and which is designed to reduce the Leverage Strategy exposure to the Underlying Stock during extreme market conditions. If the Underlying Stock falls by 15% or more (“Air Bag Trigger Price”) during the trading day (which represents approximately 75% loss after a 5 times leverage), the Air Bag Mechanism is triggered and the Leverage Strategy is adjusted intra-day. The Air Bag Mechanism reduces the impact on the Leverage Strategy if the Underlying Stock falls further, but will also maintain a reduced exposure to the Underlying Stock in the event the Underlying Stock starts to rise after the Air Bag Mechanism is triggered, thereby reducing its ability to recoup losses. Trading of Certificates is suspended for at least 30 minutes after the Air Bag is triggered. The Leverage Strategy is floored at 0 and the Certificates cannot be valued below zero. Please refer to the “Extraordinary Strategy Adjustment for Performance Reasons (“Air Bag Mechanism”)” section on pages 20 to 22 below and the “Description of Air Bag Mechanism” section on pages 44 to 45 of this document for further information of the Air Bag Mechanism.
Underlying Stock Currency:	Hong Kong Dollar (“ HKD ”)
Settlement Currency:	Singapore Dollar (“ SGD ”)
Exercise Expenses:	Certificate Holders will be required to pay all charges which are incurred in respect of the exercise of the Certificates.
Relevant Stock Exchange for the Certificates:	The Singapore Exchange Securities Trading Limited (“ SGX-ST ”)
Relevant Stock Exchange for the Underlying Stock:	HKEX
Business Day and Exchange Business Day:	A “Business Day” is a day on which the SGX-ST is open for dealings in Singapore during its normal trading hours and banks are open for business in Singapore. An “Exchange Business Day” is a day on which the SGX-ST and the HKEX are open for dealings in Singapore and Hong Kong respectively during its normal trading hours and banks are open for business in Singapore and Hong Kong.

Warrant Agent:	The Central Depository (Pte) Limited (“CDP”)
Clearing System:	CDP
Fees and Charges:	Normal transaction and brokerage fees shall apply to the trading of the Certificates 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 Certificates 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 holding position overnight would also be required to bear the Management Fee and Gap Premium, which are calculated daily and applied to the value of the Certificates, as well as certain costs embedded within the Leverage Strategy including the Funding Cost and Rebalancing Cost. The Management Fee may be increased up to a maximum of 3% p.a. on giving one month’s notice to investors in accordance with the terms and conditions of the Certificates. Any increase in the Management Fee will be announced on the SGXNET.
Further Information:	Please refer to the website at dlc.socgen.com for more information on the theoretical closing price of the Certificates on the previous trading day, the closing price of the Underlying Stock on the previous trading day, the Air Bag Trigger Price for each trading day and the Management Fee and Gap Premium.

Specific Definitions relating to the Leverage Strategy

Description of the Leverage Strategy

The Leverage Strategy is designed to track a 5 times daily leveraged exposure to the Underlying Stock.

At the end of each trading day of the Underlying Stock, the exposure of the Leverage Strategy to the Underlying Stock is reset within the Leverage Strategy in order to retain a daily leverage of 5 times the performance of the Underlying Stock (excluding costs) regardless of the performance of the Underlying Stock on the preceding day. This mechanism is referred to as the Daily Reset.

The Leverage Strategy incorporates an air bag mechanism which is designed to reduce exposure to the Underlying Stock during extreme market conditions, as further described below.

Leverage Strategy Formula

LSL_t means, for any Observation Date(t), the Leverage Strategy Closing Level as

of such day (t).

Subject to the occurrence of an Intraday Restrike Event, the Leverage Strategy Closing Level as of such Observation Date(t) is calculated in accordance with the following formulae:

On Observation Date(1):

$$LSL_1 = 1000$$

On each subsequent Observation Date(t):

$$LSL_t = \text{Max}[LSL_{t-1} \times (1 + LR_{t-1,t} - FC_{t-1,t} - RC_{t-1,t}), 0]$$

LR_{t-1,t}

means the Leveraged Return of the Underlying Stock between Observation Date(t-1) and Observation Date(t) closing prices, calculated as follows:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right)$$

FC_{t-1,t}

means, the Funding Cost between Observation Date(t-1) (included) and Observation Date(t) (excluded) calculated as follows :

$$FC_{t-1,t} = (\text{Leverage} - 1) \times \frac{\text{Rate}_{t-1} \times \text{ACT}(t - 1, t)}{\text{DayCountBasisRate}}$$

RC_{t-1,t}

means the Rebalancing Cost of the Leverage Strategy on Observation Date (t), calculated as follows :

$$RC_{t-1,t} = \text{Leverage} \times (\text{Leverage} - 1) \times \left(\left| \frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right| \right) \times \text{TC}$$

TC

means the Transaction Costs applicable (including Stamp Duty) that are equal to :

0.10%

Leverage

5

S_t

means, in respect of each Observation Date(t), the Closing Price of the Underlying Stock as of such Observation Date(t), subject to the adjustments and provisions of the Conditions.

Rate_t

means, in respect of each Observation Date(t), a rate calculated as of such day in accordance with the following formula:

$$\text{Rate}_t = \text{CashRate}_t + \% \text{SpreadLevel}_t$$

Rfactor_t

means, in the event Observation Date (t) is an ex-dividend date of the Underlying Stock, an amount determined by the Calculation Agent, subject to the adjustments and provisions of the Conditions, according to the following formula :

$$Rfactor_t = 1 - \frac{Div_t}{S_{t-1}}$$

where

Div_t is the dividend to be paid out in respect of the Underlying Stock and the relevant ex-dividend date which shall be considered net of any applicable

withholding taxes.

CashRate_t means, in respect of each Observation Date(t), the Overnight HKD Hong Kong Interbank Offered Rate (HIBOR) Fixing, as published on Reuters RIC H1HKDOND= or any successor page, being the rate as of day (t), provided that if any of such rate is not available, then that rate shall be determined by reference to the latest available rate that was published on the relevant Reuters page.

%SpreadLevel_t means, in respect of each Observation Date(t), a rate which shall be determined with respect to such Valuation Date(t) by the Calculation Agent as the difference between (1) the 12-month HKD Hong Kong Interbank Offered Rate (HIBOR) Fixing, as published on Reuters RIC H1HKD1YD= and (2) Overnight HKD Hong Kong Interbank Offered Rate (HIBOR) Fixing, as published on Reuters RIC H1HKDOND= or any successor page, each being the rate as of day (t), provided that if any of such rates is not available, then that rate shall be determined by reference to the latest available rate that was published on the relevant Reuters page.

Provided that if such difference is negative, %SpreadLevel_t should be 0%.

ACT(t-1,t) ACT (t-1;t) means the number of calendar days between the Underlying Stock Business Day immediately preceding the Observation Date (which is "t-1") (included) and the Observation Date (which is "t") (excluded).

DayCountBasisRate 365

Extraordinary Strategy Adjustment for Performance Reasons ("Air Bag Mechanism")

Extraordinary Strategy Adjustment for Performance Reasons If the Calculation Agent determines that an Intraday Restrike Event has occurred during an Observation Date(t) (the **Intraday Restrike Date**, noted hereafter **IRD**), an adjustment (an **Extraordinary Strategy Adjustment for Performance Reasons**) shall take place during such Observation Date(t) in accordance with the following provisions.

(1) Provided the last Intraday Restrike Observation Period as of such Intraday Restrike Date does not end on the TimeReferenceClosing, the Leverage Strategy Closing Level on the Intraday Restrike Date (LSL_{IRD}) should be computed as follows :

$$LSL_{IRD} = \text{Max}[ILSL_{IR(n)} \times (1 + ILR_{IR(n),IR(C)} - IRC_{IR(n),IR(C)}), 0]$$

(2) If the last Intraday Restrike Event Observation Period on the relevant Intraday Restrike Date ends on the TimeReferenceClosing:

$$LSL_{IRD} = \text{Max}[ILSL_{IR(n)}, 0]$$

$ILSL_{IR(k)}$ means, in respect of IR(k), the Intraday Leverage Strategy Level in accordance with the following provisions :

(1) for $k = 1$:

$$ILSL_{IR(1)} = \text{Max}[LSL_{IRD-1} \times (1 + ILR_{IR(0),IR(1)} - FC_{IRD-1,IRD} - IRC_{IR(0),IR(1)}), 0]$$

(2) for $k > 1$:

$$ILSL_{IR(k)} = \text{Max}[ILSL_{IR(k-1)} \times (1 + ILR_{IR(k-1),IR(k)} - IRC_{IR(k-1),IR(k)}), 0]$$

$ILR_{IR(k-1),IR(k)}$

means the Intraday Leveraged Return between $IR(k-1)$ and $IR(k)$, calculated as follows :

$$ILR_{IR(k-1),IR(k)} = \text{Leverage} \times \left(\frac{IS_{IR(k)}}{IS_{IR(k-1)}} - 1 \right)$$

$IRC_{IR(k-1),IR(k)}$

means the Intraday Rebalancing Cost of the Leverage Strategy in respect of $IR(k)$ on a given Intraday Restrike Date, calculated as follows :

$$IRC_{IR(k-1),IR(k)} = \text{Leverage} \times (\text{Leverage} - 1) \times \left(\left| \frac{IS_{IR(k)}}{IS_{IR(k-1)} \times Rfactor_t} - 1 \right| \right) \times TC$$

$IS_{IR(k)}$

means the Underlying Stock Price in respect of $IR(k)$ computed as follows :

(1) for $k=0$

$$IS_{IR(0)} = S_{IRD-1} \times Rfactor_{IRD}$$

(2) for $k=1$ to n

means in respect of $IR(k)$, the lowest price of the Underlying Stock during the respective Intraday Restrike Observation Period

(3) with respect to $IR(C)$

$$IS_{IR(C)} = S_{IRD}$$

In each case, subject to the adjustments and provisions of the Conditions.

$IR(k)$

For $k=0$, means the scheduled close for the Relevant Stock Exchange for the Underlying Stock (or any successor thereto) on the Observation Date immediately preceding the relevant Intraday Restrike Date;

For $k=1$ to n , means the k^{th} Intraday Restrike Event on the relevant Intraday Restrike Date.

$IR(C)$

means the scheduled close for the Relevant Stock Exchange for the Underlying Stock (or any successor thereto) on the relevant Intraday Restrike Date.

n

means the number of Intraday Restrike Events that occurred on the relevant Intraday Restrike Date.

Intraday Restrike Event

means in respect of an Observation Date(t):

(1) provided no Intraday Restrike Event has previously occurred on such Observation Date (t), the decrease at any Calculation Time of the Underlying Stock price by 15% or more compared with the relevant Underlying Stock

Price $IS_{IR(0)}$ as of such Calculation Time.

(2) if k Intraday Restrike Events have occurred on the relevant Intraday Restrike Date, the decrease at any Calculation Time of the Underlying Stock price by 15% or more compared with the relevant Underlying Stock Price $IS_{IR(k)}$ as of such Calculation Time.

Calculation Time means any time between the TimeReferenceOpening and the TimeReferenceClosing, provided that the relevant data is available to enable the Calculation Agent to determine the Leverage Strategy Level.

TimeReferenceOpening means the scheduled opening time for the Relevant Stock Exchange for the Underlying Stock (or any successor thereto).

TimeReferenceClosing means the scheduled closing time for the Relevant Stock Exchange for the Underlying Stock (or any successor thereto).

Intraday Restrike Event Observation Period means in respect of an Intraday Restrike Event, the period starting on and excluding the Intraday Restrike Event Time and finishing on and including the sooner between (1) the time falling 15 minutes after the Intraday Restrike Event Time and (2) the TimeReferenceClosing.

Where, during such period, the Calculation Agent determines that (1) the trading in the Underlying Stock is disrupted or subject to suspension or limitation or (2) the Relevant Stock Exchange for the Underlying Stock is not open for continuous trading, the Intraday Restrike Event Observation Period will be extended to the extent necessary until (1) the trading in the Underlying Stock is no longer disrupted, suspended or limited and (2) the Relevant Stock Exchange for the Underlying Stock is open for continuous trading.

Intraday Restrike Event Time means in respect of an Intraday Restrike Event, the Calculation Time on which such event occurs.

The Conditions set out in the section headed “Terms and Conditions of the European Style Cash Settled Long/Short Certificates on Single Equities” 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 Certificates.

TERMS AND CONDITIONS OF

THE EUROPEAN STYLE CASH SETTLED LONG/SHORT CERTIFICATES ON SINGLE EQUITIES

1. Form, Status and Guarantee, Transfer and Title

- (a) *Form.* The Certificates (which expression shall, unless the context otherwise requires, include any further certificates issued pursuant to Condition 11) are issued subject to and with the benefit of:-
- (i) a master instrument by way of deed poll (the “**Master Instrument**”) dated 21 June 2019, made by SG Issuer (the “**Issuer**”) and Société Générale (the “**Guarantor**”); and
 - (ii) a warrant agent agreement (the “**Master Warrant Agent Agreement**” or “**Warrant Agent Agreement**”) dated any time before or on the Closing Date, made between the Issuer and the Warrant Agent for the Certificates.

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

The holders of the Certificates (the “**Certificate Holders**”) are entitled to the benefit of, are bound by and are deemed to have notice of all the provisions of the Master Instrument and the Master Warrant Agent Agreement or Warrant Agent Agreement.

- (b) *Status and Guarantee.* The Certificates constitute direct, general and unsecured 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 Certificates provide for cash settlement on exercise. The Certificates do not entitle Certificate Holders to the delivery of any Underlying Stock, are not secured by the Underlying Stock and do not entitle Certificate Holders to any interest in any Underlying Stock.

The due and punctual payment of any amounts due by the Issuer in respect of the Certificates issued by the Issuer is unconditionally and irrevocably guaranteed by the Guarantor as provided in the Guarantee (each such amount payable under the Guarantee, a “**Guarantee Obligation**”).

The Guarantee Obligations will constitute direct, unconditional, unsecured and unsubordinated obligations of the Guarantor ranking as senior preferred obligations as provided for in Article L. 613-30-3 I 3° of the French Code *Monétaire et Financier* (the “**Code**”).

Such Guarantee Obligations rank and will rank equally and rateably without any preference or priority among themselves and:

- (i) *pari passu* with all other direct, unconditional, unsecured and unsubordinated obligations of the Guarantor outstanding as of the date of the entry into force of the

law no. 2016-1691 (the “**Law**”) on 11 December 2016;

- (ii) *pari passu* with all other present or future direct, unconditional, unsecured and senior preferred obligations (as provided for in Article L. 613-30-3 I 3° of the Code) of the Guarantor issued after the date of the entry into force of the Law on 11 December 2016;
- (iii) junior to all present or future claims of the Guarantor benefiting from the statutorily preferred exceptions; and
- (iv) senior to all present and future senior non-preferred obligations (as provided for in Article L.613-30-3 I 4° of the Code) of the Guarantor.

In the event of the failure of the Issuer to promptly perform its obligations to any Certificate Holder under the terms of the Certificates, such Certificate Holder may, but is not obliged to, give written notice to the Guarantor at Société Générale, Tour Société Générale, 75886 Paris Cedex 18, France marked for the attention of SEGL/JUR/OMF - Market Transactions & Financing.

- (c) **Transfer.** The Certificates are represented by a global warrant certificate (“**Global Warrant**”) which will be deposited with The Central Depository (Pte) Limited (“**CDP**”). Certificates in definitive form will not be issued. Transfers of Certificates may be effected only in Board Lots or integral multiples thereof. All transactions in (including transfers of) Certificates, 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 Certificates shall be treated by the Issuer, the Guarantor and the Warrant Agent as the holder and absolute owner of such number of Certificates, notwithstanding any notice to the contrary. The expression “**Certificate Holder**” shall be construed accordingly.
- (e) **Bail-In.** By the acquisition of Certificates, each Certificate Holder (which, for the purposes of this Condition, includes any current or future holder of a beneficial interest in the Certificates) acknowledges, accepts, consents and agrees:
 - (i) to be bound by the effect of the exercise of the Bail-In Power (as defined below) by the Relevant Resolution Authority (as defined below) or the Regulator (as defined below), which may include and result in any of the following, or some combination thereof:
 - (A) the reduction of all, or a portion, of the Amounts Due (as defined below), on a permanent basis;
 - (B) the conversion of all, or a portion, of the Amounts Due into shares, other securities or other obligations of the Issuer or another person (and the issue to the Certificate Holder of such shares, securities or obligations), including by means of an amendment, modification or variation of the Conditions of the Certificates, in which case the Certificate Holder agrees to accept in lieu of its rights under the Certificates any such shares, other securities or other obligations of the Issuer or another person;
 - (C) the cancellation of the Certificates; and/or
 - (D) the amendment or alteration of the expiration of the Certificates or

amendment of the amounts payable on the Certificates, or the date on which the amounts become payable, including by suspending payment for a temporary period; and

- (ii) that the terms of the Certificates are subject to, and may be varied, if necessary, to give effect to, the exercise of the Bail-In Power by the Relevant Resolution Authority or the Regulator.

“Amounts Due” means any amounts due by the Issuer under the Certificates.

“Bail-In Power” means any power existing from time to time under any laws, regulations, rules or requirements in effect in France, relating to the transposition of Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (as amended from time to time, the **“BRRD”**), including without limitation pursuant to French decree-law No. 2015-1024 dated 20 August 2015 (*Ordonnance portant diverses dispositions d'adaptation de la législation au droit de l'Union européenne en matière financière*) (as amended from time to time, the **“20 August 2015 Decree Law”**), Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 (as amended from time to time, the **“Single Resolution Mechanism Regulation”**), or otherwise arising under French law, and in each case the instructions, rules and standards created thereunder, pursuant to which the obligations of a Regulated Entity (or an affiliate of such Regulated Entity) can be reduced (in part or in whole), cancelled, suspended, transferred, varied or otherwise modified in any way, or securities of a Regulated Entity (or an affiliate of such Regulated Entity) can be converted into shares, other securities, or other obligations of such Regulated Entity or any other person, whether in connection with the implementation of a bail-in tool following placement in resolution or otherwise.

“Regulated Entity” means any entity referred to in Section I of Article L.613-34 of the French *Code monétaire et financier* as modified by the 20 August 2015 Decree Law, which includes certain credit institutions, investment firms, and certain of their parent or holding companies established in France.

“Relevant Resolution Authority” means the *Autorité de contrôle prudentiel et de résolution* (the ACPR), the Single Resolution Board established pursuant to the Single Resolution Mechanism Regulation, and/or any other authority entitled to exercise or participate in the exercise of any Bail-in Power from time to time (including the Council of the European Union and the European Commission when acting pursuant to Article 18 of the Single Resolution Mechanism Regulation).

“Regulator” means the European Central Bank and any successor or replacement thereto, or other authority having primary responsibility for the prudential oversight and supervision of the Issuer.

No repayment or payment of the Amounts Due will become due and payable or be paid after the exercise of the Bail-in Power by the Relevant Resolution Authority or the Regulator with respect to the Issuer unless, at the time such repayment or payment, respectively, is scheduled to become due, such repayment or payment would be

permitted to be made by the Issuer under the laws and regulations in effect in France and the European Union applicable to the Issuer or other members of its group.

Upon the exercise of any Bail-in Power by the Relevant Resolution Authority or the Regulator with respect to the Certificates, the Issuer will provide a written notice to the Certificate Holders in accordance with Condition 9 as soon as practicable regarding such exercise of the Bail-in Power. Any delay or failure by the Issuer to give notice shall not affect the validity and enforceability of the Bail-in Power nor the effects on the Certificates described above.

Neither a cancellation of the Certificates, a reduction, in part or in full, of the Amounts Due, the conversion thereof into another security or obligation of the Issuer or another person, as a result of the exercise of the Bail-in Power by the Relevant Resolution Authority or the Regulator with respect to the Issuer, nor the exercise of any Bail-in Power by the Relevant Resolution Authority or the Regulator with respect to the Certificates will be an event of default or otherwise constitute non-performance of a contractual obligation, or entitle the Certificate Holder to any remedies (including equitable remedies) which are hereby expressly waived.

If the Relevant Resolution Authority or the Regulator exercises the Bail-in Power with respect to less than the total Amounts Due, unless otherwise instructed by the Issuer or the Relevant Resolution Authority or the Regulator, any cancellation, write-off or conversion made in respect of the Certificates pursuant to the Bail-in Power will be made on a pro-rata basis.

The matters set forth in this Condition shall be exhaustive on the foregoing matters to the exclusion of any other agreements, arrangements or understandings between the Issuer and each Certificate Holder. No expenses necessary for the procedures under this Condition, including, but not limited to, those incurred by the Issuer, shall be borne by any Certificate Holder.

2. Certificate Rights and Exercise Expenses

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

The “**Cash Settlement Amount**”, in respect of each Certificate, shall be an amount payable in the Settlement Currency equal to the Closing Level multiplied by the Notional Amount per Certificate.

The “**Closing Level**”, in respect of each Certificate, shall be an amount payable in the Settlement Currency equal to:

$$\left(\frac{\text{Final Reference Level} \times \text{Final Exchange Rate}}{\text{Initial Reference Level} \times \text{Initial Exchange Rate}} - \text{Strike Level} \right) \times \text{Hedging Fee Factor}$$

If the Issuer determines, in its sole discretion, that on the Valuation Date a Market Disruption Event has occurred, then that Valuation Date shall be postponed until the first succeeding Exchange Business Day on which there is no Market Disruption Event, unless there is a Market Disruption Event on each of the five Exchange Business Days immediately following the original date that, but for the Market Disruption Event, would have been a Valuation Date. In that case:-

- (i) that fifth Exchange Business Day shall be deemed to be the Valuation Date

notwithstanding the Market Disruption Event; and

- (ii) the Issuer shall determine the Final Reference Level on the basis of its good faith estimate of the Final Reference Level that would have prevailed on that fifth Exchange Business Day but for the Market Disruption Event.

"Market Disruption Event" means the occurrence or existence on the Valuation Date of (i) any suspension of trading on the Relevant Stock Exchange of the Underlying Stock requested by the Company if that suspension is, in the determination of the Issuer, material, (ii) any suspension of or limitation imposed on trading (including but not limited to unforeseen circumstances such as by reason of movements in price exceeding limits permitted by the Relevant Stock Exchange or any act of God, war, riot, public disorder, explosion, terrorism or otherwise) on the Relevant Stock Exchange in the Underlying Stock if that suspension or limitation is, in the determination of the Issuer, material, or (iii) the closing of the Relevant Stock Exchange or a disruption to trading on the Relevant Stock Exchange if that disruption is, in the determination of the Issuer, material as a result of the occurrence of any act of God, war, riot, public disorder, explosion or terrorism.

- (b) *Exercise Expenses.* Certificate Holders will be required to pay all charges which are incurred in respect of the exercise of the Certificates (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 Certificate Holders 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 Certificate Holders in accordance with Condition 4.
- (c) *No Rights.* The purchase of Certificates does not confer on the Certificate Holders any right (whether in respect of voting, dividend or other distributions in respect of the Underlying Stock or otherwise) which the holder of an Underlying Stock may have.

3. **Expiry Date**

Unless automatically exercised in accordance with Condition 4(b), the Certificates shall be deemed to expire at 10:00 a.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 Certificates**

- (a) *Exercise.* Certificates 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.* Certificate Holders shall not be required to deliver an exercise notice. Exercise of Certificates shall be determined by whether the Cash Settlement Amount (less any Exercise Expenses) is positive. If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Certificates shall be deemed to have been automatically exercised at 10:00 a.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 Certificates shall be paid in the manner set out in Condition 4(c) below. In the event the Cash Settlement Amount (less any Exercise Expenses) is zero, all Certificates shall be deemed to have expired at 10:00 a.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a

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

- (c) *Settlement.* In respect of Certificates which are automatically exercised in accordance with Condition 4(b), the Issuer will pay to the relevant Certificate Holder the Cash Settlement Amount (if any) in the Settlement Currency. The aggregate Cash Settlement Amount (less any Exercise Expenses) shall be despatched as soon as practicable and no later than five Business Days following the Expiry Date by way of crossed cheque or other payment in immediately available funds drawn in favour of the Certificate Holder only (or, in the case of joint Certificate Holders, the first-named Certificate Holder) 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 Certificate Holder and posted to the Certificate Holder's address appearing in the records maintained by CDP (or, in the case of joint Certificate Holders, to the address of the first-named Certificate Holder 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.
- (d) *CDP not liable.* CDP shall not be liable to any Certificate Holder 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 Certificates or otherwise pursuant to or in connection with these Conditions.
- (e) *Business Day.* In these Conditions, a "**Business Day**" shall be a day on which the SGX-ST is open for dealings in Singapore during its normal trading hours and banks are open for business in Singapore.

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 Certificates 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 Certificate Holders 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 Certificate Holders. 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 Certificate Holders.

6. Adjustments

- (a) *Potential Adjustment Event.* Following the declaration by a Company of the terms of any Potential Adjustment Event (as defined below), the Issuer will determine whether such Potential Adjustment Event has a dilutive or concentrative or other effect on the theoretical value of the Underlying Stock and, if so, will (i) make the corresponding adjustment, if any, to any one or more of the Conditions as the Issuer determines appropriate to account for that dilutive or concentrative or other effect, and (ii) determine the effective date of that adjustment. The Issuer may, but need not, determine the appropriate adjustment by reference to the adjustment in respect of such Potential Adjustment Event made by an exchange on which options or futures contracts on the Underlying Stock are traded.

- (b) *Definitions.* **“Potential Adjustment Event”** means any of the following:
- (i) a subdivision, consolidation, reclassification or other restructuring of the Underlying Stock (excluding a Merger Event) or a free distribution or dividend of any such Underlying Stock to existing holders by way of bonus, capitalisation or similar issue;
 - (ii) a distribution or dividend to existing holders of the Underlying Stock of (1) such Underlying Stock, or (2) other share capital or securities granting the right to payment of dividends and/or the proceeds of liquidation of the Company equally or proportionately with such payments to holders of such Underlying Stock, or (3) share capital or other securities of another issuer acquired by the Company as a result of a “spin-off” or other similar transaction, or (4) any other type of securities, rights or warrants or other assets, in any case for payment (in cash or otherwise) at less than the prevailing market price as determined by the Issuer;
 - (iii) an extraordinary dividend;
 - (iv) a call by the Company in respect of the Underlying Stock that is not fully paid;
 - (v) a repurchase by the Company of the Underlying Stock whether out of profits or capital and whether the consideration for such repurchase is cash, securities or otherwise;
 - (vi) with respect to a Company an event that results in any shareholder rights pursuant to a shareholder rights agreement or other plan or arrangement of the type commonly referred to as a “poison pill” being distributed, or becoming separated from shares of common stock or other shares of the capital stock of such Company (provided that any adjustment effected as a result of such an event shall be readjusted upon any redemption of such rights); or
 - (vii) any other event that may have, in the opinion of the Issuer, a dilutive or concentrative or other effect on the theoretical value of the Underlying Stock.
- (c) *Merger Event, Tender Offer, Nationalisation and Insolvency.* If a Merger Event, Tender Offer, Nationalisation or Insolvency occurs in relation to the Underlying Stock, the Issuer may take any action described below:
- (i) determine the appropriate adjustment, if any, to be made to any one or more of the Conditions to account for the Merger Event, Tender Offer, Nationalisation or Insolvency, as the case may be, and determine the effective date of that adjustment. The Issuer may, but need not, determine the appropriate adjustment by reference to the adjustment in respect of the Merger Event, Tender Offer, Nationalisation or Insolvency made by an options exchange to options on the Underlying Stock traded on that options exchange;
 - (ii) cancel the Certificates by giving notice to the Certificate Holders in accordance with Condition 9. If the Certificates are so cancelled, the Issuer will pay an amount to each Certificate Holder in respect of each Certificate held by such Certificate Holder which amount shall be the fair market value of a Certificate taking into account the Merger Event, Tender Offer, Nationalisation or Insolvency, as the case may be, less the cost to the Issuer

and/or any of its affiliates of unwinding any underlying related hedging arrangements, all as determined by the Issuer in its reasonable discretion. Payment will be made in such manner as shall be notified to the Certificate Holders in accordance with Condition 9; or

- (iii) following any adjustment to the settlement terms of options on the Underlying Stock on such exchange(s) or trading system(s) or quotation system(s) as the Issuer in its reasonable discretion shall select (the “**Option Reference Source**”) make a corresponding adjustment to any one or more of the Conditions, which adjustment will be effective as of the date determined by the Issuer to be the effective date of the corresponding adjustment made by the Option Reference Source. If options on the Underlying Stock are not traded on the Option Reference Source, the Issuer will make such adjustment, if any, to any one or more of the Conditions as the Issuer determines appropriate, with reference to the rules and precedents (if any) set by the Option Reference Source, to account for the Merger Event, Tender Offer, Nationalisation or Insolvency, as the case may be, that in the determination of the Issuer would have given rise to an adjustment by the Option Reference Source if such options were so traded.

Once the Issuer determines that its proposed course of action in connection with a Merger Event, Tender Offer, Nationalisation or Insolvency, it shall give notice to the Certificate Holders in accordance with Condition 9 stating the occurrence of the Merger Event, Tender Offer, Nationalisation or Insolvency, as the case may be, giving details thereof and the action proposed to be taken in relation thereto. Certificate Holders should be aware that due to the nature of such events, the Issuer will not make an immediate determination of its proposed course of action or adjustment upon the announcement or occurrence of a Merger Event, Tender Offer, Nationalisation or Insolvency.

- (d) *Definitions.* “**Insolvency**” means that by reason of the voluntary or involuntary liquidation, bankruptcy, insolvency, dissolution or winding-up of or any analogous proceeding affecting a Company (i) all the Underlying Stock of that Company is required to be transferred to a trustee, liquidator or other similar official or (ii) holders of the Underlying Stock of that Company become legally prohibited from transferring them. “**Merger Date**” means the closing date of a Merger Event or, where a closing date cannot be determined under the local law applicable to such Merger Event, such other date as determined by the Issuer. “**Merger Event**” means, in respect of the Underlying Stock, any (i) reclassification or change of such Underlying Stock that results in a transfer of or an irrevocable commitment to transfer all of such Underlying Stock outstanding to another entity or person, (ii) consolidation, amalgamation, merger or binding share exchange of a Company with or into another entity or person (other than a consolidation, amalgamation, merger or binding share exchange in which such Company is the continuing entity and which does not result in reclassification or change of all of such Underlying Stock outstanding), (iii) takeover offer, exchange offer, solicitation, proposal or other event by any entity or person to purchase or otherwise obtain 100 per cent. of the outstanding Underlying Stock of the Company that results in a transfer of or an irrevocable commitment to transfer all such Underlying Stock (other than such Underlying Stock owned or controlled by such other entity or person), or (iv) consolidation, amalgamation, merger or binding share exchange of the Company or its subsidiaries with or into another entity in which the Company is the continuing entity and which does not result in a reclassification or change of all such Underlying Stock outstanding but results in the outstanding Underlying Stock (other than Underlying Stock owned or controlled by such other entity) immediately prior to such event collectively representing less than 50 per cent.

of the outstanding Underlying Stock immediately following such event, in each case if the Merger Date is on or before the Valuation Date. “**Nationalisation**” means that all the Underlying Stock or all or substantially all of the assets of a Company are nationalised, expropriated or are otherwise required to be transferred to any governmental agency, authority, entity or instrumentality thereof. “**Tender Offer**” means a takeover offer, tender offer, exchange offer, solicitation, proposal or other event by any entity or person that results in such entity or person purchasing, or otherwise obtaining or having the right to obtain, by conversion or other means, greater than 10 per cent. and less than 100 per cent. of the outstanding voting shares of the Company, as determined by the Issuer, based upon the making of filings with governmental or self-regulatory agencies or such other information as the Issuer deems relevant.

- (e) *Other Adjustments.* Except as provided in this Condition 6 and Conditions 10 and 12, 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 discretion and without any obligation whatsoever) to make such adjustments and amendments as it believes appropriate in circumstances where an event or events occur which it believes in its sole discretion (and notwithstanding any prior adjustment made pursuant to the above) should, in the context of the issue of the Certificates and the obligations of the Issuer, give rise to such adjustment or, as the case may be, amendment provided that such adjustment or, as the case may be, amendment is considered by the Issuer not to be materially prejudicial to the Certificate Holders generally (without considering the circumstances of any individual Certificate Holder or the tax or other consequences of such adjustment or amendment in any particular jurisdiction).
- (f) *Notice of Adjustments.* All determinations made by the Issuer pursuant hereto will be conclusive and binding on the Certificate Holders. The Issuer will give, or procure that there is given, notice as soon as practicable of any adjustment and of the date from which such adjustment is effective by publication in accordance with Condition 9.

7. Purchases

The Issuer, the Guarantor or any of their respective subsidiaries may at any time purchase Certificates at any price in the open market or by tender or by private treaty. Any Certificates so purchased may be held or resold or surrendered for cancellation.

8. Meetings of Certificate Holders; Modification

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

Such a meeting may be convened by the Issuer or by Certificate Holders holding not less than ten per cent. of the Certificates 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 Certificates for the time being remaining unexercised, or at any adjourned meeting, two or more persons being or representing Certificate Holders whatever the number of Certificates 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 Certificate Holders who, being entitled to do so, vote in person or by proxy.

An Extraordinary Resolution passed at any meeting of the Certificate Holders shall be binding on all the Certificate Holders 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 Certificate Holders, effect (i) any modification of the provisions of the Certificates or the Master Instrument which is not materially prejudicial to the interests of the Certificate Holders or (ii) any modification of the provisions of the Certificates or the Master Instrument which is of a formal, minor or technical nature, which is made to correct an obvious error or which is necessary in order to comply with mandatory provisions of Singapore law. Any such modification shall be binding on the Certificate Holders 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 Certificate Holder or to which a Certificate Holder is entitled or which the Issuer shall have agreed to deliver to a Certificate Holder may be delivered by hand or sent by post addressed to the Certificate Holder at his address appearing in the records maintained by CDP or, in the case of joint Certificate Holders, 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 Certificate Holder.
- (b) *Notices.* All notices to Certificate Holders will be validly given if published in English on the web-site 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 web-site 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 Certificate, give notice of the date of expiry of such Certificate in the manner prescribed above.

10. Liquidation

In the event of a liquidation or dissolution of the Company or the appointment of a liquidator (including a provisional liquidator) or receiver or judicial manager or trustee or administrator or analogous person under Singapore or other applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, all unexercised Certificates will lapse and shall cease to be valid for any purpose, in the case of voluntary liquidation, on the effective date of the relevant resolution and, in the case of an involuntary liquidation or dissolution, on the date of the relevant court order or, in the case of the appointment of a liquidator (including a provisional liquidator) or receiver or judicial manager or trustee or administrator or analogous person under Singapore or other applicable law in respect of the whole or substantially the whole of its undertaking, property or assets, on the date when such appointment is effective but subject (in any such case) to any contrary mandatory

requirement of law. In the event of the voluntary liquidation of the Company, the Issuer shall make such adjustments or amendments as it reasonably believes are appropriate in the circumstances.

11. Further Issues

The Issuer shall be at liberty from time to time, without the consent of the Certificate Holders, to create and issue further certificates so as to form a single series with the Certificates, subject to the approval of the SGX-ST.

12. Delisting

- (a) **Delisting.** If at any time, the Underlying Stock ceases to be listed on the Relevant Stock Exchange, the Issuer shall give effect to these Conditions in such manner and make such adjustments and amendments to the rights attaching to the Certificates as it shall, in its absolute discretion, consider appropriate to ensure, so far as it is reasonably able to do so, that the interests of the Certificate Holders generally are not materially prejudiced as a consequence of such delisting (without considering the individual circumstances of any Certificate Holder or the tax or other consequences that may result in any particular jurisdiction).
- (b) **Issuer's Determination.** The Issuer shall determine, in its absolute discretion, any adjustment or amendment and its determination shall be conclusive and binding on the Certificate Holders save in the case of manifest error. Notice of any adjustments or amendments shall be given to the Certificate Holders in accordance with Condition 9 as soon as practicable after they are determined.

13. Early Termination

- (a) *Early Termination for Illegality and Force Majeure, etc.* If the Issuer determines that a Regulatory Event (as defined below) has occurred and, for reasons beyond its control, the performance of its obligations under the Certificates has become illegal or impractical in whole or in part for any reason, or the Issuer determines that, for reasons beyond its control, it is no longer legal or practical for it to maintain its hedging arrangements with respect to the Certificates for any reason, the Issuer may in its discretion and without obligation terminate the Certificates early in accordance with Condition 13(c).

Should any one or more of the provisions contained in the Conditions be or become invalid, the validity of the remaining provisions shall not in any way be affected thereby.

For the purposes of this Condition:

"Regulatory Event" means, following the occurrence of a Change in Law (as defined below) with respect to the Issuer and/or Société Générale as Guarantor or in any other capacity (including without limitation as hedging counterparty of the Issuer, market maker of the Certificates or direct or indirect shareholder or sponsor of the Issuer) or any of its affiliates involved in the issuer of the Certificates (hereafter the **"Relevant Affiliates"** and each of the Issuer, Société Générale and the Relevant Affiliates, a **"Relevant Entity"**) that, after the Certificates have been issued, (i) any Relevant Entity would incur a materially increased (as compared with circumstances existing prior to such event) amount of tax, duty, liability, penalty, expense, fee, cost or regulatory capital charge however defined or collateral requirements for performing its obligations under the Certificates or hedging the Issuer's obligations under the Certificates, including, without limitation, due to clearing requirements of, or the absence of, clearing of the transactions entered into in connection with the issue of, or hedging the Issuer's

obligation under, the Certificates, (ii) it is or will become for any Relevant Entity impracticable, impossible (in each case, after using commercially reasonable efforts), unlawful, illegal or otherwise prohibited or contrary, in whole or in part, under any law, regulation, rule, judgement, order or directive of any governmental, administrative or judicial authority, or power, applicable to such Relevant Entity (a) to hold, acquire, issue, reissue, substitute, maintain, settle, or as the case may be, guarantee, the Certificates, (b) to acquire, hold, sponsor or dispose of any asset(s) (or any interest thereof) of any other transaction(s) such Relevant Entity may use in connection with the issue of the Certificates or to hedge the Issuer's obligations under the Certificates, (c) to perform obligations in connection with, the Certificates or any contractual arrangement entered into between the Issuer and Société Générale or any Relevant Affiliate (including without limitation to hedge the Issuer's obligations under the Certificates) or (d) to hold, acquire, maintain, increase, substitute or redeem all or a substantial part of its direct or indirect shareholding in the Issuer's capital or the capital of any Relevant Affiliate or to directly or indirectly sponsor the Issuer or any Relevant Affiliate, or (iii) there is or may be a material adverse effect on a Relevant Entity in connection with the issue of the Certificates.

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

- (b) *Early Termination for other reasons.* The Issuer reserves the right (such right to be exercised in the Issuer's sole and unfettered discretion and without any obligation whatsoever) to terminate the Certificates in accordance with Condition 13(c) where an event or events occur which it believes in its sole discretion should, in the context of the issue of the Certificates and the obligations of the Issuer, give rise to such termination provided that such termination (i) is considered by the Issuer not to be materially prejudicial to the interests of Certificate Holders generally (without considering the circumstances of any individual Certificate Holder or the tax or other consequences of such termination in any particular jurisdiction); or (ii) is otherwise considered by the Issuer to be appropriate and such termination is approved by the SGX-ST.
- (c) *Termination.* If the Issuer terminates the Certificates early, then the Issuer will give notice to the Certificate Holders in accordance with Condition 9. The Issuer will, if and to the extent permitted by applicable law, pay an amount to each Certificate Holder in respect of each Certificate held by such holder equal to the fair market value of a Certificate notwithstanding such illegality or impracticality less the cost to the Issuer of unwinding any underlying related hedging arrangements, all as determined by the

Issuer in its sole and absolute discretion. Payment will be made in such manner as shall be notified to the Certificate Holders in accordance with Condition 9.

14. Governing Law

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

15. Prescription

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

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

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

SUMMARY OF THE ISSUE

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

Issuer: SG Issuer

Company: HSBC Holdings plc

The Certificates: European Style Cash Settled Long Certificates relating to the Underlying Stock

Number: A further 17,509,000 Certificates

The Certificates shall be consolidated and form a single series with an existing issue of 1,091,000 European Style Cash Settled Long Certificates relating to the ordinary shares of par value US\$0.50 each of HSBC Holdings plc issued by the Issuer and listed on the SGX-ST, in which dealings commenced on 26 February 2019.

Form: The Certificates will be issued subject to, and with the benefit of, a master instrument by way of deed poll dated 21 June 2019 (the “**Master Instrument**”) and executed by the Issuer and the Guarantor and a master warrant agent agreement dated 29 May 2017 (the “**Master Warrant Agent Agreement**”) and made between the Issuer, the Guarantor and the Warrant Agent.

Cash Settlement Amount: In respect of each Certificate, is the amount (if positive) equal to:

Notional Amount per Certificate x Closing Level

Denominations: Certificates are represented by a global warrant in respect of all the Certificates.

Exercise: The Certificates may only be exercised on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, in a Board Lot or integral multiples thereof. Certificate Holders will not be required to deliver an exercise notice. If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Certificates will be deemed to have been automatically exercised at 10:00 a.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 Certificates shall be paid in the manner set out in Condition 4(c) of the Conditions. In the event the Cash Settlement Amount (less any Exercise Expenses) is zero, all Certificates shall be deemed to have expired at 10:00 a.m. (Singapore time) on the Expiry Date or if the Expiry Date is not a Business Day, the immediately preceding Business Day, and Certificate Holders shall not be entitled to receive any payment from the Issuer in respect of the Certificates.

Exercise and Trading Currency:	SGD
Board Lot:	100 Certificates
Transfers of Certificates:	Certificates may only be transferred in Board Lots (or integral multiples thereof). All transfers in Certificates, 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 Certificates and the SGX-ST has agreed in principle to grant permission to deal in and for quotation of the Certificates. Issue of the Certificates is conditional on such listing being granted. It is expected that dealings in the Certificates on the SGX-ST will commence on or about 13 April 2020.
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 Certificates will be permitted, subject to the approval of the SGX-ST.

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

INFORMATION RELATING TO THE EUROPEAN STYLE CASH SETTLED LONG CERTIFICATES ON SINGLE EQUITIES

What are European Style Cash Settled Long Certificates on Single Equities?

European style cash settled long certificates on single equities (the “**Certificates**”) are structured products relating to the Underlying Stock and the return on a Certificate is linked to the performance of the Leverage Strategy.

A) Cash Settlement Amount Payable upon the Exercise of the Certificates at Expiry

Upon the exercise of the Certificates at expiry, the Certificate Holders would be paid a Cash Settlement Amount in respect of each Certificate.

The Cash Settlement Amount, in respect of each Certificate, shall be an amount payable in the Settlement Currency equal to the Closing Level multiplied by the Notional Amount per Certificate.

The Closing Level, in respect of each Certificate, shall be an amount payable in the Settlement Currency equal to (1) divided by (2) less (3) subject to any adjustments such as (4), where:

(1) is the Final Reference Level multiplied by the Final Exchange Rate;

(2) is the Initial Reference Level multiplied by the Initial Exchange Rate;

(3) is the Strike Level; and

(4) is the Hedging Fee Factor.

If the Cash Settlement Amount (less any Exercise Expenses) is positive, all Certificates shall be deemed to have been automatically exercised and investors will receive a Cash Settlement Amount. If the Cash Settlement Amount (less any Exercise Expenses) is zero, all Certificates shall be deemed to have expired. Please refer to the section headed “Terms and Conditions of the European Style Cash Settled Long/Short Certificates on Single Equities” for further details on the calculation of the Cash Settlement Amount.

The Certificates are only suitable for investors who believe that the price of the Underlying Stock will increase and are seeking short-term leveraged exposure to the Underlying Stock.

B) Trading the Certificates before Expiry

If the Certificate Holders want to cash out their investments in the Certificates before the expiry of the Certificates, they may sell the Certificates in the secondary market during the life of the Certificates, and would be subject to the following fees and charges:

- (i) For Certificate Holders who trade the Certificates intraday: shall pay normal transaction and brokerage fees for the trading of the Certificates on the SGX-ST, and may be required to pay stamp taxes or other documentary charges in accordance with the laws and practices of the country where the Certificates are transferred; and
- (ii) For Certificate Holders who hold the Certificates overnight: in addition to the normal transaction and brokerage fees and applicable stamp taxes, would also be required to bear the Management Fee and Gap Premium as well as certain costs embedded within the Leverage Strategy including the Funding Cost and Rebalancing Cost.

Illustration of the Calculation of Hedging Fee Factor

Hedging Fee Factor	=	Product of the Daily Fees

Daily Fees	=	Daily Management Fee Adjustment	
		1 – Management Fee x ACT (t-1;t) / 360	
		x	
		Daily Gap Premium Adjustment	
		1 – Gap Premium (t-1) x ACT (t-1;t) / 360	

Illustration of the Calculation of Cash Settlement Amount

Cash Settlement Amount = Final Value of Certificates – Strike Level (zero)

Value of Certificates	=	<table border="1"> <tr><td>t'=0</td></tr> <tr><td>Notional Amount</td></tr> </table>	t'=0	Notional Amount	x	<table border="1"> <tr><td>t=1</td></tr> <tr> <td>Leverage Strategy daily performance⁸</td> <td>x</td> <td>Daily Fees</td> </tr> </table>	t=1	Leverage Strategy daily performance ⁸	x	Daily Fees	x	<table border="1"> <tr><td>t=2</td></tr> <tr> <td>Leverage Strategy daily performance</td> <td>x</td> <td>Daily Fees</td> </tr> </table>	t=2	Leverage Strategy daily performance	x	Daily Fees	x ...	<table border="1"> <tr><td>t=i</td></tr> <tr> <td>Leverage Strategy Daily performance</td> <td>x</td> <td>Daily Fees</td> </tr> </table>	t=i	Leverage Strategy Daily performance	x	Daily Fees
			t'=0																			
Notional Amount																						
t=1																						
Leverage Strategy daily performance ⁸	x	Daily Fees																				
t=2																						
Leverage Strategy daily performance	x	Daily Fees																				
t=i																						
Leverage Strategy Daily performance	x	Daily Fees																				

Value of Certificates	=	<table border="1"> <tr><td>t=0</td></tr> <tr><td>Notional Amount</td></tr> </table>	t=0	Notional Amount	x	<table border="1"> <tr><td colspan="2">Product of the daily Leverage Strategy Performance</td></tr> <tr> <td>Leverage Strategy daily performance</td> <td>x</td> <td>Leverage Strategy daily performance</td> </tr> </table>	Product of the daily Leverage Strategy Performance		Leverage Strategy daily performance	x	Leverage Strategy daily performance	x	<table border="1"> <tr><td colspan="2">Product of the Daily Fees (Hedging Fee Factor)</td></tr> <tr> <td>Daily Fees</td> <td>x</td> <td>Daily Fees</td> </tr> </table>	Product of the Daily Fees (Hedging Fee Factor)		Daily Fees	x	Daily Fees
			t=0															
Notional Amount																		
Product of the daily Leverage Strategy Performance																		
Leverage Strategy daily performance	x	Leverage Strategy daily performance																
Product of the Daily Fees (Hedging Fee Factor)																		
Daily Fees	x	Daily Fees																

Final Value of Certificates	=	<table border="1"> <tr><td>t=0</td></tr> <tr><td>Notional Amount</td></tr> </table>	t=0	Notional Amount	x	<table border="1"> <tr> <td>Final Reference Level x Final Exchange Rate</td> <td>÷</td> <td>Initial Reference Level x Initial Exchange Rate</td> </tr> </table>	Final Reference Level x Final Exchange Rate	÷	Initial Reference Level x Initial Exchange Rate	x	<table border="1"> <tr><td>Hedging Fee Factor</td></tr> </table>	Hedging Fee Factor
			t=0									
Notional Amount												
Final Reference Level x Final Exchange Rate	÷	Initial Reference Level x Initial Exchange Rate										
Hedging Fee Factor												

Illustration of the applicable fees and charges for an intraday trading scenario

Hedging Fee is implemented overnight in the price of the Certificate. As a consequence, when trading intraday, investors will not bear any Hedging Fee.

Investors will only support bid/ask costs, which are the difference between the price at which the Designated Market Maker purchases (bid) and sells (ask) the Certificate at any point of time.

⁷ "t" refers to "Observation Date" which means each Underlying Stock Business Day (subject to Market Disruption Event) from (and including) the Underlying Stock Business Day immediately preceding the Expected Listing Date to the Valuation Date.

⁸ Leverage Strategy daily performance is computed as the Leverage Strategy Closing Level on Business Day (t) divided by the Leverage Strategy Closing Level on Business Day (t-1).

Example of Calculation of Hedging Fee Factor and Cash Settlement Amount

The example is purely hypothetical. We include the example to illustrate how the Certificates work, and you MUST NOT rely on them as any indication of the actual return or what the payout on the Certificates might actually be. The example also assumes a product which expires 16 days after listing date, to illustrate the daily calculation of price, costs and fees from listing date to expiry date.

Assuming an investor purchases the following Certificates at the Issue Price:

Underlying Stock:	Ordinary shares of par value US\$0.50 each of HSBC Holdings plc
Expected Listing Date:	03/07/2018
Expiry Date:	18/07/2018
Initial Reference Level:	1,000
Initial Exchange Rate:	1
Final Reference Level:	1,200
Final Exchange Rate:	1
Issue Price:	2.20 SGD
Notional Amount per Certificate:	2.20 SGD
Management Fee (p.a.):	0.40%
Gap Premium (p.a.):	6.90%
Strike Level:	Zero

Hedging Fee Factor

Hedging Fee Factor on the n^{th} Underlying Stock Business Day after issuance of Certificate ("HFF (n)") is calculated as follows:

$$\text{HFF}(0) = 100\%$$

On Next Calendar Day (assuming it is an Underlying Stock Business Day):

$$\text{HFF}(1) = \text{HFF}(0) \times \left(1 - \text{Management Fee} \times \frac{\text{ACT}(t-1; t)}{360}\right) \times \left(1 - \text{Gap Premium} \times \frac{\text{ACT}(t-1; t)}{360}\right)$$

$$\text{HFF}(1) = 100\% \times \left(1 - 0.40\% \times \frac{1}{360}\right) \times \left(1 - 6.90\% \times \frac{1}{360}\right)$$

$$\text{HFF}(1) = 100\% \times 99.9989\% \times 99.9808\% \approx 99.9797\%$$

Assuming 2nd Underlying Stock Business Day falls 3 Calendar Days after 1st Underlying Stock Business Day:

$$\text{HFF (2)} = \text{HFF (1)} \times \left(1 - \text{Management Fee} \times \frac{\text{ACT (t-1; t)}}{360}\right) \times \left(1 - \text{Gap Premium} \times \frac{\text{ACT (t-1; t)}}{360}\right)$$

$$\text{HFF (2)} = 99.9797\% \times \left(1 - 0.40\% \times \frac{3}{360}\right) \times \left(1 - 6.90\% \times \frac{3}{360}\right)$$

$$\text{HFF (2)} = 99.9797\% \times 99.9967\% \times 99.9425\% \approx 99.9189\%$$

The same principle applies to the following Underlying Stock Business Days:

$$\text{HFF (n)} = \text{HFF (n-1)} \times \left(1 - \text{Management Fee} \times \frac{\text{ACT (t-1; t)}}{360}\right) \times \left(1 - \text{Gap Premium} \times \frac{\text{ACT (t-1; t)}}{360}\right)$$

In this example, the Hedging Fee Factor as of the Valuation Date would be equal to 99.6963% as illustrated below:

Date	HFF
3/7/2018	100.0000%
4/7/2018	99.9797%
5/7/2018	99.9594%
6/7/2018	99.9392%
9/7/2018	99.8784%
10/7/2018	99.8581%
11/7/2018	99.8379%
12/7/2018	99.8176%
13/7/2018	99.7974%
16/7/2018	99.7367%
17/7/2018	99.7165%
18/7/2018	99.6963%

Cash Settlement Amount

In this example, the Closing Level and the Cash Settlement Amount would be computed as follows:

Closing Level = [(Final Reference Level x Final Exchange Rate) / (Initial Reference Level x Initial Exchange Rate) – Strike Level] x Hedging Fee Factor

$$= [(1200 \times 1) / (1000 \times 1) - 0] \times 99.6963\%$$

$$= 119.64\%$$

Cash Settlement Amount = Closing Level x Notional Amount per Certificate

$$= 119.64\% \times 2.20 \text{ SGD}$$

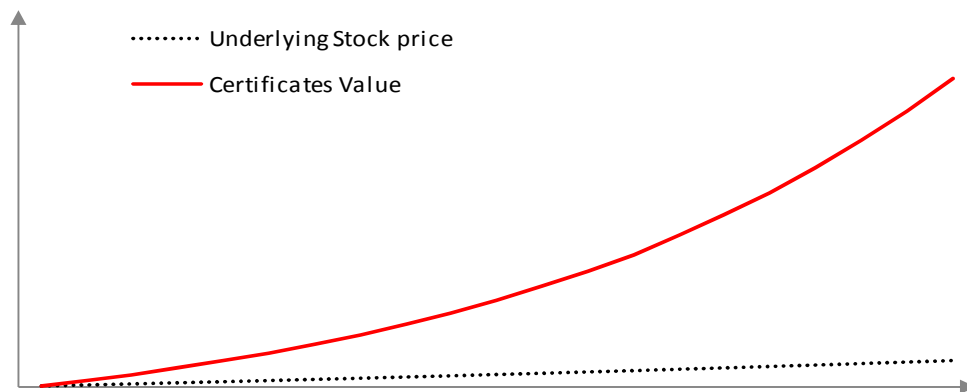
$$= \mathbf{2.632 \text{ SGD}}$$

Illustration on how returns and losses can occur under different scenarios

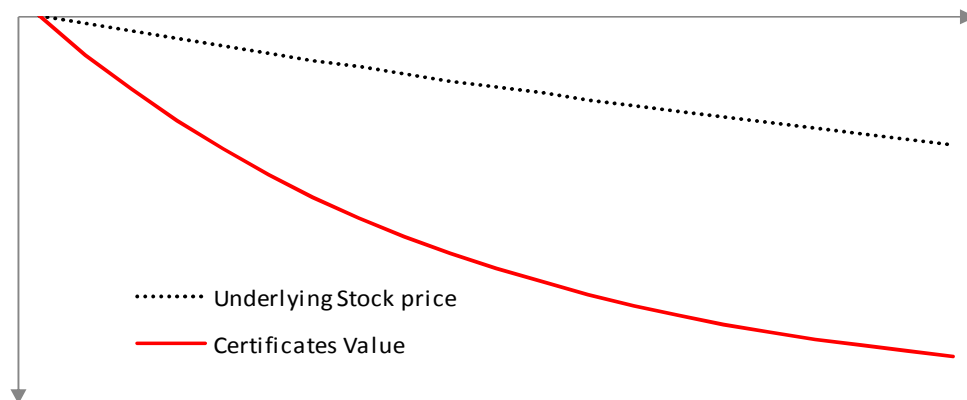
The examples are purely hypothetical and do not take fees and charges payable by investors into consideration. The examples highlight the effect of the Underlying Stock performance on the value of the Certificates and do not take into account the possible influence of fees, exchange rates, dividends, or any other market parameters.

1. Illustrative examples

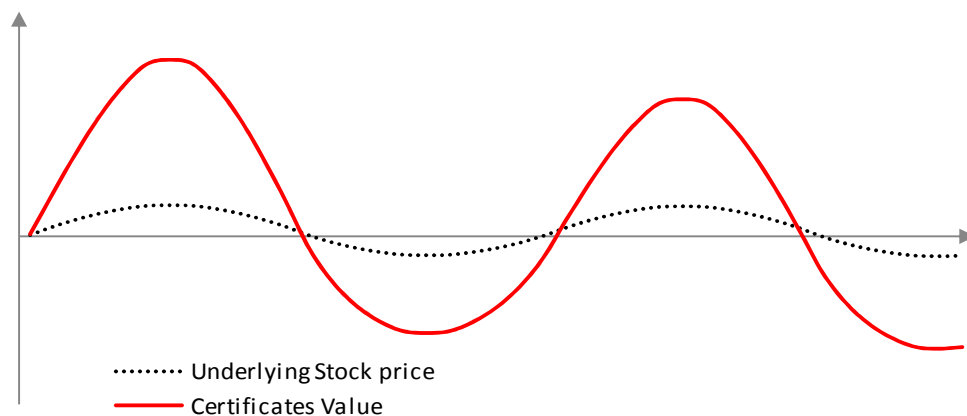
Scenario 1 – Upward Trend



Scenario 2 – Downward Trend



Scenario 3 – Volatile Market



2. Numerical Examples

Scenario 1 – Upward Trend

Underlying Stock						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		2.0%	2.0%	2.0%	2.0%	2.0%
Value at end of day	10,000.0	10,200.0	10,404.0	10,612.1	10,824.3	11,040.8
Accumulated Return		2.00%	4.04%	6.12%	8.24%	10.41%

Value of the Certificates						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		10.0%	10.0%	10.0%	10.0%	10.0%
Price at end of day	2.20	2.42	2.66	2.93	3.22	3.54
Accumulated Return		10.00%	21.00%	33.10%	46.41%	61.05%

Scenario 2 – Downward Trend

Underlying Stock						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Value at end of day	10,000.0	9,800.0	9,604.0	9,411.9	9,223.7	9,039.2
Accumulated Return		-2.00%	-3.96%	-5.88%	-7.76%	-9.61%

Value of the Certificates						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		-10.0%	-10.0%	-10.0%	-10.0%	-10.0%
Price at end of day	2.20	1.98	1.78	1.60	1.44	1.30
Accumulated Return		-10.00%	-19.00%	-27.10%	-34.39%	-40.95%

Scenario 3 – Volatile Market

Underlying Stock						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		2.0%	-2.0%	2.0%	-2.0%	2.0%
Value at end of day	10,000.0	10,200.0	9,996.0	10,195.9	9,992.0	10,191.8
Accumulated Return		2.00%	-0.04%	1.96%	-0.08%	1.92%

Value of the Certificates						
	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5
Daily return		10.0%	-10.0%	10.0%	-10.0%	10.0%
Price at end of day	2.20	2.42	2.18	2.40	2.16	2.37
Accumulated Return		10.00%	-1.00%	8.90%	-1.99%	7.81%

Description of Air Bag Mechanism

The Certificates integrate an “Air Bag Mechanism” which is designed to reduce exposure to the Underlying Stock during extreme market conditions.

When the Air Bag triggers, a 30-minute period starts. This period is divided into two sub-periods:

- Observation Period : during 15 minutes after the Air Bag trigger, the price of the Underlying Stock is observed and its minimum price is recorded; and
- Reset Period: after 15 minutes, the Leverage Strategy is reset using the minimum price of the Underlying Stock during the Observation Period as the New Observed Price. The New Observed Price replaces the last closing price of the Underlying Stock in order to compute the performance of the Leverage Strategy, 30 minutes after the Air Bag trigger.

Trading of Certificates is suspended for at least 30 minutes after the Air Bag is triggered. Investors cannot sell or purchase any Certificates during this period.

Air Bag Mechanism timeline

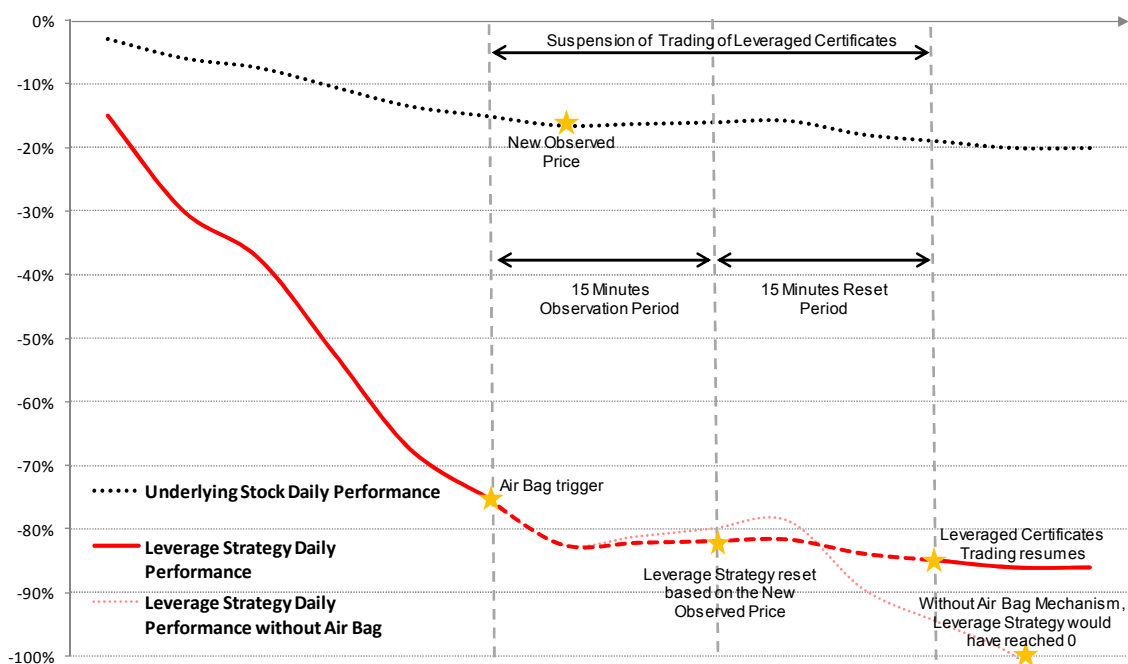
Air Bag Trigger	Observation Period	Resumption of Trading
More than 45 minutes before Market Close	First 15 minutes after Air Bag Trigger	Trading resumes the same day between 30 and 45 minutes after Air Bag Trigger
45 minutes before Market Close		Next trading day at Market Open
30 to 45 minutes before Market Close		
30 minutes before Market Close		
15 to 30 minutes before Market Close		
15 minutes before Market Close	From Air Bag Trigger to Market Close	
Less than 15 minutes before Market Close		

With **Market Close** defined as:

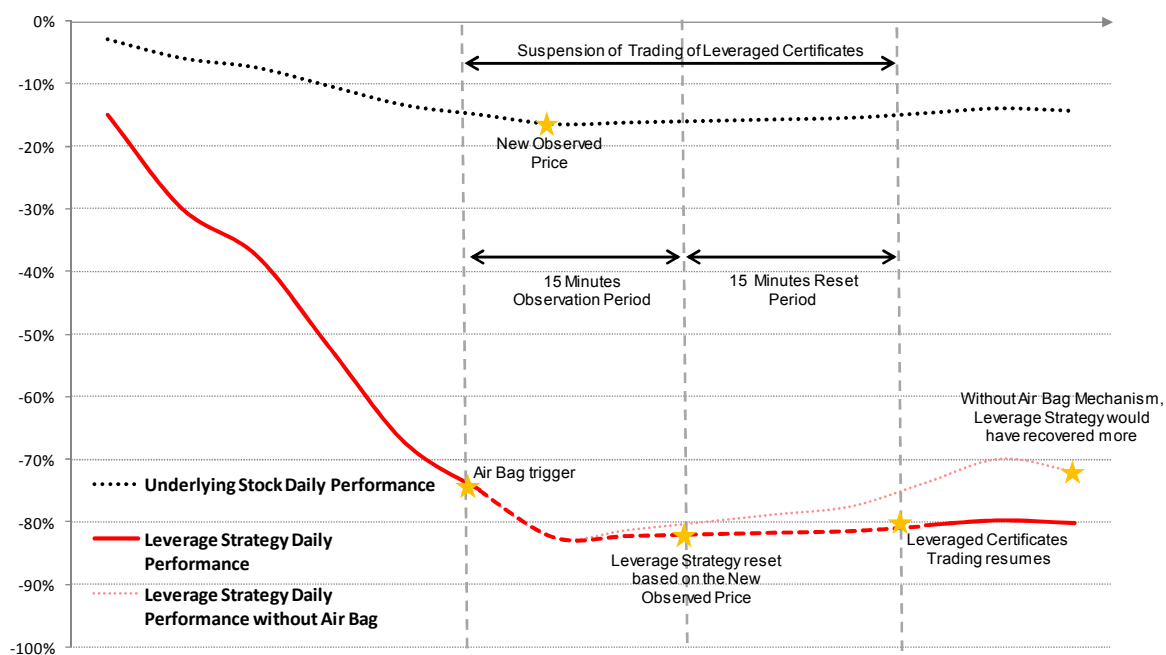
- Underlying Stock closing time with respect to the Observation Period
- The sooner between Underlying Stock closing time and SGX closing time with respect to the Resumption of Trading

Illustrative examples of the Air Bag Mechanism⁹

Scenario 1 – Downward Trend after Air Bag trigger



Scenario 2 – Upward Trend after Air Bag trigger



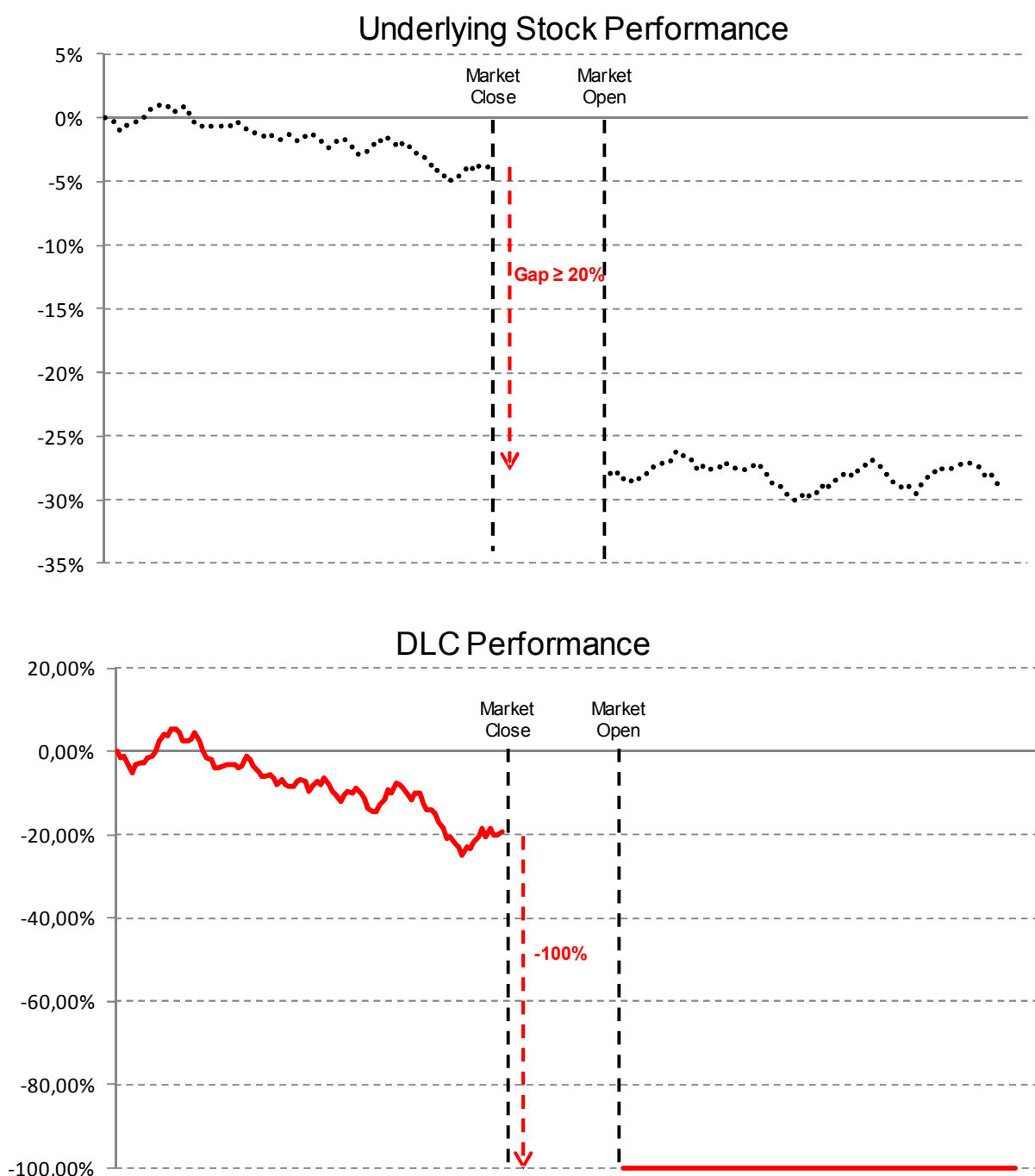
⁹ The illustrative examples are not exhaustive.

Scenarios where the investor may lose the entire value of the investment

The scenarios below are purely hypothetical and do not take fees and charges payable by investors into consideration. The scenarios highlight cases where the Certificates may lose 100% of their value.

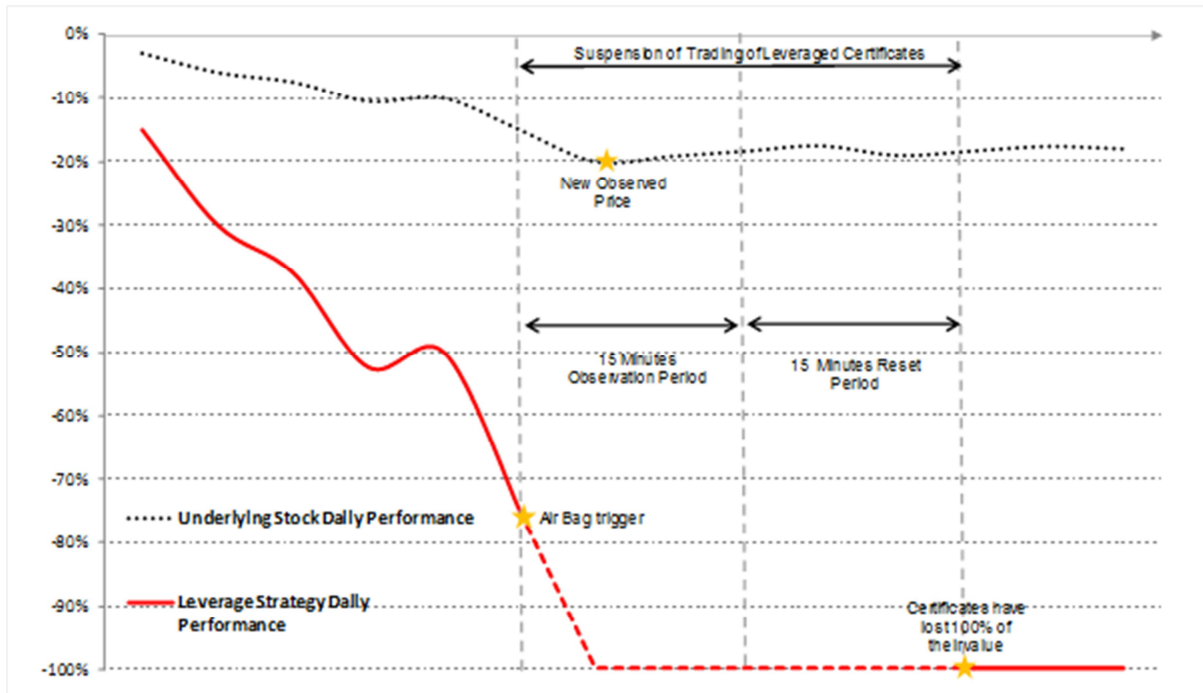
Scenario 1 – Overnight fall of the Underlying Stock

On any business day, the opening price of the Underlying Stock may be higher or lower than the closing price on the previous day. The difference between the previous closing price and the opening price of the Underlying Stock is termed a “gap”. If the opening price of the Underlying Stock is 20% or more below the previous day closing price, the Air Bag Mechanism would only be triggered when the market opens the following day, and the Certificates would lose their entire value in such event.



Scenario 2 – Sharp intraday fall of the Underlying Stock

Although the Air Bag Mechanism is designed to reduce the exposure to the Underlying Stock during extreme market conditions, the Certificate can lose 100% of its value in the event the price of the Underlying Stock falls by 20% or more within the 15 minutes Observation Period compared to the reference price, being: (i) if air bag event has not been previously triggered on the same day, the previous closing price of the Underlying Stock, or (ii) if one or more air bag events have been previously triggered on the same day, the latest New Observed Price. The Certificates would lose their entire value in such event.



Examples and illustrations of adjustments due to certain corporate actions

The examples are purely hypothetical and do not take fees and charges payable by investors into consideration. The examples highlight the effect of corporate actions on the value of the Certificates and do not take into account the possible influence of fees, exchange rates, or any other market parameters.

In the case of any corporate action on the Underlying Stock, the Calculation Agent will, as soon as reasonably practical after it becomes aware of such event, determine whether such corporate action has a dilutive or concentrative effect on the theoretical value of the Underlying Stock, and if so, will (a) calculate the corresponding adjustment, if any, to be made to the elements relating to the Underlying Stock which are used to determine any settlement or payment terms under the Certificates and/or adjust at its discretion any other terms of the Certificates as it determines appropriate to preserve the economic equivalent of the obligations of the Issuer under the Certificates and (b) determine the effective date of such adjustment.

Notwithstanding the foregoing, in the event Observation Date (t) is an ex-date with respect to a corporate action related to the Underlying Stock, the Calculation Agent may, in its sole and absolute discretion, replace the $Rfactor_t$ with respect to such Observation Date (t) by an amount computed according to the following generic formula :

$$Rfactor_t = \left[1 - \frac{Div_t + DivExc_t - M \times R}{S_{t-1}} \right] \times \frac{1}{1 + M}$$

This formula is provided for indicative purposes and the Calculation Agent may determine that this formula is not appropriate for certain corporate actions and may apply a different formula instead.

Such adjustment of $Rfactor_t$ would affect the Leveraged Return, the Rebalancing Cost, and the Underlying Reference Price used to determine the Intraday Restrike Event. The Air Bag mechanism would not be triggered if the stock price falls by 15% exclusively because of the dilutive effect of a corporate action.

Where:

$DivExc_t$ is the amount received as an Extraordinary Dividend by a holder of existing Shares for each Share held prior to the Extraordinary Dividend, net of any applicable withholding taxes.

M is the number of new Share(s) (whether a whole or a fraction) per existing Share each holder thereof is entitled to subscribe or to receive (positive amount) or the number of existing Shares redeemed or canceled per existing Share (negative amount), as the case may be, resulting from the corporate action.

R is the subscription price per Share (positive amount) or the redemption price per Share (negative amount) including any dividends or other benefits forgone to be subscribe to or to receive (as applicable), or to redeem a Share.

1. Stock split

Assuming the Underlying Stock is subject to a 1 to 2 stock split (i.e. 1 new Share for every 1 existing share):

$$S_{t-1} = \$100$$

$$S_t = \$51$$

$$Div_t = \$0$$

$$DivExc_t = \$0$$

M = 1 (i.e. 1 new Shares for 1 existing Share)

R = \$0 (no subscription price / redemption price)

$$Rfactor_t = \left[1 - \frac{0 + 0 - 2 \times 0}{100} \right] \times \frac{1}{1 + 1} = 50\%$$

As a consequence:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right) = 5 \times \left(\frac{51}{100 \times 50\%} - 1 \right) = 10\%$$

S_{t-1}	$S_{t-1} \times Rfactor_t$	S_t	Adjusted Underlying Stock Performance
100	50	51	2%

Value of the Certificate (t-1)	Value of the Certificate (t)	Certificates' performance (excluding any cost and fees)
2.20	2.42	10%

In such case an Intraday Restrike Event would occur if the Underlying Stock price falls to \$42.5, which is 15% below \$50, the Underlying Stock Reference Price.

2. Share Consolidation

Assuming the Underlying Stock is subject to a 2 to 1 share consolidation (i.e. 1 Share canceled for every 2 existing Shares):

$$S_{t-1} = \$100$$

$$S_t = \$202$$

$$\text{Div}_t = \$0$$

$$\text{DivExc}_t = \$0$$

M = -0.5 (i.e. 0.5 Shares canceled for each 1 existing Share)

R = \$0 (no subscription price / redemption price)

$$Rfactor_t = \left[1 - \frac{0 + 0 - (-0.5) \times 0}{100} \right] \times \frac{1}{1 + (-0.5)} = 200\%$$

As a consequence:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right) = 5 \times \left(\frac{202}{100 \times 200\%} - 1 \right) = 5\%$$

S_{t-1}	$S_{t-1} \times Rfactor_t$	S_t	Adjusted Underlying Stock Performance
100	200	202	1%

Value of the Certificate (t-1)	Value of the Certificate (t)	Certificates' performance (excluding any cost and fees)
2.20	2.31	5%

In such case an Intraday Restrike Event would occur if the Underlying Stock price falls to \$170, which is 15% below \$200, the Underlying Stock Reference Price.

3. Rights Issues

Assuming there is a rights issue with respect to the Underlying Stock, with a right to receive 1 new Share for every 2 existing Shares, for a subscription price of \$40.

$$S_{t-1} = \$100$$

$$S_t = \$84$$

$$Div_t = \$0$$

$$DivExc_t = \$0$$

$$R = \$40 \text{ (i.e. subscription price of \$40)}$$

$$M = 0.5 \text{ (i.e. 1 new share for every 2 existing shares)}$$

$$Rfactor_t = \left[1 - \frac{0 + 0 - 0.5 \times 40}{100} \right] \times \frac{1}{1 + 0.5} = 80\%$$

As a consequence:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right) = 5 \times \left(\frac{84}{100 \times 80\%} - 1 \right) = 25\%$$

S_{t-1}	$S_{t-1} \times Rfactor_t$	S_t	Adjusted Underlying Stock Performance
100	80	84	5%

Value of the Certificate (t-1)	Value of the Certificate (t)	Certificates' performance (excluding any cost and fees)
2.20	2.75	25%

In such case an Intraday Restrike Event would occur if the Underlying Stock price falls to \$68, which is 15% below \$80, the Underlying Stock Reference Price.

4. Bonus Issues

Assuming there is a bonus issue with respect to the Underlying Stock, where shareholders receive 1 bonus share for 5 existing shares:

$$S_{t-1} = \$100$$

$$S_t = \$85$$

$$\text{Div}_t = \$0$$

$$\text{DivExc}_t = \$0$$

$$R = \$0$$

$$M = 0.2 \text{ (i.e. 1 new share for 5 existing shares)}$$

$$Rfactor_t = \left[1 - \frac{0 + 0 - 0.2 \times 0}{100} \right] \times \frac{1}{1 + 0.2} = 83.33\%$$

As a consequence:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right) = 5 \times \left(\frac{85}{100 \times 83.33\%} - 1 \right) = 10\%$$

S_{t-1}	$S_{t-1} \times Rfactor_t$	S_t	Adjusted Underlying Stock Performance
100	83.33	85	2%

Value of the Certificate (t-1)	Value of the Certificate (t)	Certificates' performance (excluding any cost and fees)
2.20	2.42	10%

In such case an Intraday Restrike Event would occur if the Underlying Stock price falls to \$70.83, which is 15% below \$83.33, the Underlying Stock Reference Price.

5. Extraordinary Dividend

Assuming there is an extraordinary dividend of \$20 (net of taxes) paid in respect of each stock.

$$S_{t-1} = \$100$$

$$S_t = \$84$$

$$\text{Div}_t = \$0$$

$$\text{DivExc}_t = \$20$$

$$R = \$0$$

$$M = 0$$

$$Rfactor_t = \left[1 - \frac{0 + 20 - 0 \times 0}{100} \right] \times \frac{1}{1 + 0} = 80\%$$

As a consequence:

$$LR_{t-1,t} = \text{Leverage} \times \left(\frac{S_t}{S_{t-1} \times Rfactor_t} - 1 \right) = 5 \times \left(\frac{84}{100 \times 80\%} - 1 \right) = 25\%$$

S_{t-1}	$S_{t-1} \times Rfactor_t$	S_t	Adjusted Underlying Stock Performance
100	80	84	5%

Value of the Certificate (t-1)	Value of the Certificate (t)	Certificates' performance (excluding any cost and fees)
2.20	2.75	25%

In such case an Intraday Restrike Event would occur if the Underlying Stock price falls to \$68, which is 15% below \$80, the Underlying Stock Reference Price.

INFORMATION RELATING TO THE COMPANY

All information contained in this document regarding the Company, including, without limitation, its financial information, is derived from publicly available information which appears on the web-site of Hong Kong Exchanges and Clearing Limited (the “HKExCL”) at <http://www.hkex.com.hk> and/or the Company’s web-site at <http://www.hsbc.com>. The Issuer has not independently verified any of such information.

HSBC Holdings plc (the “**Company**”), the parent company of HSBC, is headquartered in London. HSBC serves customers worldwide from approximately 3,800 offices in 66 countries and territories in our geographical regions: Europe, Asia, North America, Latin America, and Middle East and North Africa. With assets of \$2.6tn at 31 December 2018, HSBC is one of the world’s largest banking and financial services organisations.

The information set out in Appendix I of this document relates to the audited consolidated financial statements of the Company and its subsidiaries for the year ended 31 December 2019 and has been extracted and reproduced from an announcement by the Company dated 18 February 2020 in relation to the same. Further information relating to the Company may be located on the web-site of the HKExCL at <http://www.hkex.com.hk>.

INFORMATION RELATING TO THE DESIGNATED MARKET MAKER

Société Générale has been appointed the designated market maker (“**DMM**”) for the Certificates. The DMM will provide competitive buy and sell quotes for the Certificates continuously during the trading hours of the SGX-ST on the following basis:

- (a) Maximum bid and offer spread : 10 ticks or S\$0.20 whichever is greater
- (b) Minimum quantity subject to bid and offer spread : 10,000 Certificates
- (c) Last Trading Day for Market Making : The date falling 5 Exchange Business Days immediately preceding the Expiry Date

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

- (i) during the pre-market opening and five minutes following the opening of the SGX-ST on any trading day;
- (ii) if the Certificates are valueless (where the Issuer’s bid price is below the minimum bid size for such securities as prescribed by the SGX-ST);
- (iii) before the Relevant Stock Exchange for the Underlying Stock has opened and after the Relevant Stock Exchange for the Underlying Stock has closed on any trading day;
- (iv) when trading in the Underlying Stock 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 Certificates at any time when the Underlying Stock is not negotiated/traded for any reason;
- (v) where the Certificates are suspended from trading for any reason;
- (vi) market disruption events, including, without limitation, any suspension of or limitation imposed on trading (including but not limited to unforeseen circumstances such as by reason of movements in price exceeding limits permitted by the SGX-ST or any act of God, war, riot, public disorder, explosion, terrorism or otherwise) in the Underlying Stock;
- (vii) where the Issuer or the DMM faces technical problems affecting the ability of the DMM to provide bids and offer quotations;
- (viii) where 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, and the Issuer informs the SGX-ST of its inability to do so as soon as practicable;
- (ix) in cases where the Issuer has no Certificates to sell, then the DMM will only provide the bid price;
- (x) if the stock market experiences exceptional price movement and volatility;
- (xi) when it is a public holiday in Singapore and/or Hong Kong and/or the SGX-ST and/or the HKEX are not open for dealings; and
- (xii) during the suspension of trading of Certificates after an Air Bag Mechanism has been triggered.

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

SUPPLEMENTAL INFORMATION RELATING TO THE ISSUER

The information set out in Appendix II of this document is a reproduction of the Issuer's condensed interim financial statements as at and for the six-month period ended 30 June 2019.

SUPPLEMENTAL INFORMATION RELATING TO THE GUARANTOR

The information set out in Appendix III of this document is a reproduction of the Guarantor's audited consolidated financial statements for the year ended 31 December 2019.

SUPPLEMENTAL GENERAL INFORMATION

The information set out herein is supplemental to, and should be read in conjunction with, the information set out on page 99 of the Base Listing Document.

1. Save as disclosed in this document and the Base Listing Document, neither the Issuer nor the Guarantor is involved in any legal or arbitration proceedings (including any proceedings which are pending or threatened of which the Issuer or the Guarantor is aware) which may have or have had in the previous 12 months a significant effect on the financial position of the Issuer or the Guarantor in the context of the issuance of the Certificates.
2. 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 Certificates will take place in Board Lots in Singapore dollars. For further details on the transfer of Certificates and their exercise, please refer to the section headed “Summary of the Issue” above.
3. It is not the current intention of the Issuer to apply for a listing of the Certificates on any stock exchange other than the SGX-ST.
4. Save as disclosed in the Base Listing Document and herein, there has been no material adverse change in the financial position or prospects of the Issuer since 30 June 2019 or the Guarantor since 31 December 2019, in the context of the issuance of Certificates hereunder.
5. The following contracts, relating to the issue of the Certificates, have been or will be entered into by the Issuer and/or the Guarantor and may be material to the issue of the Certificates:
 - (a) the Guarantee;
 - (b) the Master Instrument; and
 - (c) the Master Warrant Agent Agreement.

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

6. The Auditors of the Issuer and the Guarantor have given and have not withdrawn their written agreement to the inclusion of the report, included herein, in the form and context in which it is included. Their report was not prepared exclusively for incorporation into this document.

The Auditors of the Issuer and the Guarantor have no shareholding in the Issuer or the Guarantor or any of its subsidiaries, nor do they have the right (whether legally enforceable or not) to subscribe for or to nominate persons to subscribe for securities of the Issuer or the Guarantor or any of its subsidiaries.

7. The Certificates are not fully covered by the Underlying Stock held by Issuer or a trustee for and on behalf of the Issuer. The Issuer has appropriate risk management capabilities to manage the issue of the Certificates.
8. Société Générale, Singapore Branch, currently of 8 Marina Boulevard, #12-01 Marina Bay Financial Centre Tower 1, Singapore 018981, has been authorised to accept, on behalf of the Issuer and the Guarantor, service of process and any other notices required to be served on the Issuer or the Guarantor. Any notices required to be served on the Issuer or the Guarantor should be sent to Société Générale at the above address for the attention of Société Générale Legal Department.

9. Copies of the following documents may be inspected during usual business hours on any weekday (Saturdays, Sundays and holidays excepted) at the offices of Société Générale, Singapore Branch at 8 Marina Boulevard, #12-01 Marina Bay Financial Centre Tower 1, Singapore 018981, during the period of 14 days from the date of this document:
- (a) the Memorandum and Articles of Association of the Issuer and the Constitutional Documents of the Guarantor;
 - (b) the latest financial reports (including the notes thereto) of the Issuer;
 - (c) the latest financial reports (including the notes thereto) of the Guarantor;
 - (d) the consent letters from the Auditors to the Issuer and the Guarantor referred to in paragraph 6 above;
 - (e) the Base Listing Document;
 - (f) this document; and
 - (g) the Guarantee.

PLACING AND SALE

General

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

Each Certificate Holder undertakes that it will inform any subsequent purchaser of the terms and conditions of the Certificates and all such subsequent purchasers as may purchase such securities from time to time shall be deemed to be a Certificate Holder for the purposes of the Certificates and shall be bound by the terms and conditions of the Certificates.

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 Certificates may not be circulated or distributed, nor may Certificates 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

Each dealer has represented and agreed, and each further dealer appointed in respect of the Certificates and each other purchaser will be required to represent and agree, that it has not issued or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Certificates, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Certificates which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance (Cap.571) of Hong Kong and any rules made under that Ordinance.

European Economic Area

Each dealer represents and agrees, and each further dealer appointed in respect of the Certificates will be required to represent and agree that, it has not offered, sold or otherwise made available and will not offer, sell, or otherwise make available any Certificates which are the subject of the offering as contemplated by this document to any retail investor in the European Economic Area. For the purposes of this provision:

- (a) the expression "**retail investor**" means a person who is one (or more) of the following:
 - (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

- (ii) a customer within the meaning of Directive 2016/97/EU (as amended, the Insurance Distribution Directive), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or
 - (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended, including by Directive 2010/73/EU, the Prospectus Directive); and
- (b) the expression “**offer**” includes the communication in any form and by any means of sufficient information on the terms of the offer and the Certificates to be offered so as to enable an investor to decide to purchase or subscribe the Certificates.

United Kingdom

Each dealer has represented and agreed, and each further dealer appointed in respect of the Certificates will be required to represent and agree, that:

- (a) in respect to Certificates having a maturity of less than one year: (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business; and (ii) it has not offered or sold and will not offer or sell any Certificates other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Certificates would otherwise constitute a contravention of Section 19 of Financial Services and Markets Act, as amended (the “**FSMA**”) by the Issuer;
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) received by it in connection with the issue or sale of any Certificates in circumstances in which section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Certificates in, from or otherwise involving the United Kingdom.

United States

The Certificates and the Guarantee have not been and will not be registered under the United States Securities Act of 1933, as amended (the “**Securities Act**”) or any state securities law, and trading in the Certificates has not been approved by the United States Commodity Futures Trading Commission (the “**CFTC**”) under the United States Commodity Exchange Act of 1936, as amended (the “**Commodity Exchange Act**”) and the Issuer will not be registered as an investment company under the United States Investment Company Act of 1940, as amended, and the rules and regulations thereunder. None of the Securities and Exchange Commission, any state securities commission or regulatory authority or any other United States, French or other regulatory authority has approved or disapproved of the Certificates or the Guarantee or passed upon the accuracy or adequacy of this document. Accordingly, Certificates, or interests therein, may not at any time be offered, sold, resold, traded, pledged, exercised, redeemed, transferred or delivered, directly or indirectly, in the United States or to, or for the account or benefit of, U.S. persons, nor may any U.S. person at any time trade, own, hold or maintain a position in the Certificates or any interests therein. In addition, in the absence of relief from the CFTC, offers, sales, re-sales, trades, pledges, exercises, redemptions, transfers or deliveries of Certificates, or interests therein, directly or indirectly, in the United States or to, or for the account or benefit of, U.S. persons, may constitute a violation of United States law governing

commodities trading and commodity pools. Consequently, any offer, sale, resale, trade, pledge, exercise, redemption, transfer or delivery made, directly or indirectly, within the United States or to, or for the account or benefit of, a U.S. person will not be recognised.

Each dealer has represented and agreed, and each further dealer will be required to represent and agree, that it has not and will not at any time offer, sell, resell, trade, pledge, exercise, redeem, transfer or deliver, directly or indirectly, Certificates in the United States or to, or for the account or benefit of, any U.S. person or to others for offer, sale, resale, trade, pledge, exercise, redeem, transfer or delivery, directly or indirectly, in the United States or to, or for the account or benefit of, any such U.S. person. Any person purchasing Certificates of any tranches must agree with the relevant dealer or the seller of such Certificates that (i) it will not at any time offer, sell, resell, trade, pledge, exercise, redeem, transfer or deliver, directly or indirectly, any Certificates in the United States or to, or for the account or benefit of, any U.S. person or to others for offer, sale, resale, trade, pledge, exercise, redemption, transfer or delivery, directly or indirectly, in the United States or to, or for the account or benefit of, any U.S. person, and (ii) it is not purchasing any Certificates for the account or benefit of any U.S. person.

Exercise or otherwise redemption of Certificates will be conditional upon certification that each person exercising or otherwise redeeming a Certificate is not a U.S. person or in the United States and that the Certificate is not being exercised or otherwise redeemed on behalf of a U.S. person. No payment will be made to accounts of holders of the Certificates located in the United States.

As used in the preceding paragraphs, the term “**United States**” includes the territories, the possessions and all other areas subject to the jurisdiction of the United States of America, and the term “**U.S. person**” means any person who is (i) a U.S. person as defined under Regulation S under the Securities Act, (ii) a U.S. person as defined in paragraph 7701(a)(30) of the Internal Revenue Code of 1986, or (iii) a person who comes within any definition of U.S. person for the purposes of the United States Commodity Exchange Act of 1936, as amended (the “**CEA**”) or any rules thereunder of the CFTC, guidance or order proposed or issued under the CEA (for the avoidance of doubt, any person who is not a “Non-United States person” defined under CFTC Rule 4.7(a)(1)(iv), but excluding, for purposes of subsection (D) thereof, the exception for qualified eligible persons who are not “Non-United States persons”, shall be considered a U.S. person).

APPENDIX I

REPRODUCTION OF THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019 OF HSBC HOLDINGS PLC AND ITS SUBSIDIARIES

The information set out below is a reproduction of the audited consolidated financial statements of the Company and its subsidiaries for the year ended 31 December 2019 and has been extracted and reproduced from an announcement by the Company dated 18 February 2020 in relation to the same.

Report of the independent auditors to the members of HSBC Holdings plc

Opinion

In our opinion, HSBC Holdings plc's ('HSBC') Group financial statements¹ and parent company financial statements:

- give a true and fair view of the state of the Group's and parent company's affairs at 31 December 2019 and of the Group's and parent company's profit and cash flows for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006, and as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

In expressing this opinion, we believe that the audit evidence we have obtained is sufficient and appropriate. Our work has been undertaken, and our opinion expressed, in accordance with applicable law and the International Standards on Auditing (UK) as issued by the Financial Reporting Council ('FRC') of the United Kingdom. Our responsibilities and those of the directors are explained later in this report.

Independence

We can confirm that PwC remained independent of the Group in accordance with the ethical requirements that are relevant to the audit of listed public interest entities in the UK, which includes the FRC's Ethical Standard. PwC has also fulfilled its other ethical responsibilities in accordance with these requirements. To the best of our knowledge and belief, non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company. Other than those disclosed in note 6 to the financial statements, we have provided no non-audit services to the Group or the parent company in the period from 1 January 2019 to 31 December 2019.

Our audit approach

Overview

This was the first year that it has been my responsibility to form this opinion on behalf of PricewaterhouseCoopers LLP ('PwC'), who you first appointed on 31 March 2015 in relation to that year's audit. In addition to forming this opinion, in this report we have also provided information on how we approached the audit, how it changed from the previous year and details of the significant discussions that we had with the Group Audit Committee ('GAC').

We approached our audit by considering what would be considered to be material to the users of the financial statements. The scope of our audit and the nature, timing and extent of audit procedures performed were then determined based on our risk assessment taking into account changes from the prior year, the financial significance of subsidiaries and other qualitative factors. Finally we executed the planned approach and concluded based on the results of our testing ensuring that sufficient audit evidence had been obtained to support our opinion. We discussed our approach and the results of our audit with the GAC.

Materiality

In order to perform our work, we had regard to the concept of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures.

The table provides you with details of how we determined materiality for both the Group and the parent company.

	Group financial statements	Parent company financial statements
Overall materiality	\$1bn (2018: \$1bn).	\$900m (2018: \$900m).
How we determined it	5% of adjusted profit before tax	0.75% of total assets. This would result in an overall materiality of \$1.9bn and is therefore reduced below the materiality for the Group.
Rationale for benchmark applied	We believe a standard benchmark of 5% of adjusted profit before tax is an appropriate quantitative indicator of materiality, although certain items could also be material for qualitative reasons. This benchmark is standard for listed entities and consistent with the wider industry. We selected adjusted profit because, as discussed on page 47, management believes it best reflects the performance of HSBC and how the Group is run. We excluded the adjustments made by management on page 263 for certain customer redress programmes and fair value movements of financial instruments, as in our opinion they are recurring items that form part of ongoing business performance.	A benchmark of total assets has been used as the parent company's primary purpose is to act as a holding company with investments in the Group's subsidiaries, not to generate operating profits and therefore a profit based measure is not relevant.

¹ We have audited HSBC Holdings plc's financial statements which comprise the consolidated and parent company balance sheets as at 31 December 2019, the consolidated and parent company income statements and the consolidated and parent company statements of comprehensive income for the year then ended, the consolidated and parent company statements of cash flows for the year then ended, the consolidated and parent company statements of changes in equity for the year then ended, and the notes to the financial statements, which include a summary of significant accounting policies and other explanatory information. Certain required disclosures have been presented elsewhere in the Annual Report and Accounts 2019, rather than in the notes to the financial statements. These are cross-referenced from the financial statements and are identified as '(Audited)'. The relevant disclosures are included in the Risk sections on pages 73 to 151; the Capital sections on pages 152 to 153; and the Directors' remuneration report disclosures on pages 184 to 217.

Our objective is to obtain reasonable assurance about whether the financial statements are free from material misstatement, whether due to fraud or error. Reasonable assurance is not a guarantee that an audit will always detect a material misstatement when it exists. It is important to recognise that identifying a material misstatement arising from fraud is more difficult than identifying one arising solely from error because fraud generally involves deliberate concealment, collusion or misrepresentation.

Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements as a whole. The misstatements identified during the audit were carefully considered to assess if they were individually or in aggregate material. We agreed with the GAC that we would report to them misstatements identified during our audit above \$50m (2018: \$50m), as well as misstatements below that amounts that, in our view, warranted reporting for qualitative reasons. We reported items for the Group and parent company to the GAC, impacting either the absolute level of profit and equity or misclassifications within the financial statements and notes. The Directors concluded that all items which remained unadjusted were not material to the financial statements. We agreed with their conclusion. All other significant adjustments that we identified in our audit were adjusted by the Group prior to the issuance of the financial statements.

Risk assessment, scoping and audit approach

When planning the Group audit, we considered if multiple errors might exist which, when aggregated, could exceed our overall materiality of \$1bn. In order to reduce the risk of multiple errors that could aggregate to this amount, we used a lower level of materiality of \$750m, known as performance materiality, to identify the individual balances, classes of transactions and disclosures that were subject to audit. The scope of our audit and the nature, timing and extent of testing also considered other qualitative factors, such as balances that have a level of uncertainty or judgement associated with them. Our audit approach remained broadly unchanged, and reflects how HSBC is organised. It incorporated four important aspects.

(1) Audit approach to HSBC's global businesses

We designed audit approaches for the products and services that substantially make up HSBC's global businesses, such as lending, deposits and derivatives. These global business approaches were designed by partners and team members who are specialists in the relevant businesses. These approaches were provided to the audit partners and teams around the world that contributed to the Group audit.

(2) Audit work for Significant Subsidiaries

Through our risk assessment and scoping we identified certain entities (collectively the Significant Subsidiaries) for which we obtained audit opinions. We obtained full scope audit opinions for Hongkong and Shanghai Banking Corporation Limited, HSBC Bank plc, HSBC Bank UK plc, HSBC North America Holdings Inc, HSBC Bank Canada and HSBC Mexico S.A. We obtained audit opinions over specific balances for HSBC Global Services (UK) Limited, HSBC Global Services (HK) Limited and HSBC Group Management Services Limited and HSBC Bank Middle East Limited - UAE Operations. The audits for HSBC Bank plc, HSBC Bank UK plc, HSBC Global Services (UK) Limited and HSBC Group Management Services Limited were performed by other PwC teams in the UK. All other audits were performed by other PwC network firms.

We asked the partners and teams reporting to us on the Significant Subsidiaries to work to assigned materiality levels reflecting the size of the operations they audited. The performance materiality levels ranged from \$50m to \$675m. Certain Significant Subsidiaries were audited to a local statutory audit materiality that was less than our overall Group materiality.

We were in active dialogue throughout the year with the partners and teams responsible for the audits of the Significant Subsidiaries. This included consideration of how they planned and performed their work, including their use of the global business approaches. We visited these Significant Subsidiaries and attended Audit Committee meetings for some of them. We also attended meetings with management in each of these Significant Subsidiaries at the year-end.

The audit of The Hongkong and Shanghai Banking Corporation in Hong Kong relied upon work performed by PwC network firms in Malaysia, China and India. Similarly, the audit of HSBC Bank plc in the UK relied upon work performed by PwC network firms in France and Germany. We considered how the audit partners and teams for the Significant Subsidiaries instructed and provided oversight to the work performed in these locations. Collectively, PwC network firms completed audit procedures covering 85% of assets and 82% of total operating income.

(3) Audit work performed at Operations Centres

A significant amount of the operational processes and controls which are critical to financial reporting are undertaken in operations centres run by HSBC Operations Services and Technology ('HOST') across 11 different locations. Financial reporting processes are performed in HSBC's four Finance Operations Centres. We coordinated and provided oversight on the audit work performed by PwC teams in the UK, Poland, China, Sri Lanka, Malaysia, India and the Philippines. This work was relied upon by us, as well as the PwC teams auditing the Significant Subsidiaries.

(4) Audit procedures undertaken at a Group level and on the parent company

We ensured that appropriate further work was undertaken for the HSBC Group and parent company. This work included auditing, for example, the impairment assessment of goodwill, the consolidation of the Group's results, the preparation of the financial statements, certain disclosures within the Directors' remuneration report, litigation provisions and exposures, taxation, and management's entity level and oversight controls relevant to financial reporting.

Subsidiaries' balances that were not identified as part of a Significant Subsidiary were subject to procedures which mitigated the risk of material misstatement, including testing of entity level controls, information technology general controls, testing at the Operations Centre, analytical review procedures and understanding and assessing the outcome of local external audits.

Our audit in 2019

In April 2019, we held a meeting in Shanghai of the partners and senior staff from the Group audit team and the PwC teams who undertake audits of the Significant Subsidiaries and the Operations Centres. The meeting focused primarily on: reassessing our approach to auditing HSBC's businesses; changes at HSBC and changes in our PwC teams; and how we continued to innovate and improve the quality of our audit. We also discussed and agreed our significant audit risks.

Report of the independent auditors to the members of HSBC Holdings plc

Other matters relevant to our audit in 2019 included:

(1) Rotational approach to scoping

We worked with the Significant Subsidiaries in 2019 to develop an approach for rotating certain smaller locations in and out of scope over a number of reporting periods. These locations, which are subject to local external audits, are individually relatively small compared to the Group. Notwithstanding their size, the rotational approach is designed to ensure that over time these locations are subject to audit work as part of the Group audit. Australia was removed from the scope for 2019 and Malaysia was included. HSBC Global Services (HK) Limited was also included in the scope of work for 2019, due to the increase in its contribution to the Group's financial performance.

(2) The impact of geopolitical events on the macro environment

Current geopolitical events were considered to determine if changes in our approach were required, for example; the impacts of the UK's departure from the EU, China-US trade arrangements and the social unrest in Hong Kong. We specifically considered how these matters were reflected in expected credit losses and more broadly on the valuation of assets and liabilities. IFRS requires financial statements to carry certain assets at fair value, as discussed in Note 1. Where this is the case, it is the value on 31 December 2019, and therefore the financial statements cannot reflect changes which will occur in the future as a result of these or other events.

(3) Adding unpredictability to our audit procedures

As required by auditing standards, we undertook procedures which were deliberately unexpected and could not have reasonably been predicted by HSBC management. As an example, we performed incremental testing to assess the appropriateness of costs incurred that were charged against the restructuring provisions recognised by the Group in 2019.

(4) Using the work of others

We continued to make use of evidence provided by others. This included testing of controls performed by Group Internal Audit and management themselves in some low risk areas. We used the work of PwC experts, for example, valuation experts for our work around the assumptions used in the impairment assessment over goodwill and actuaries on the estimates used in determining pension liabilities. An increasing number of controls are operated on behalf of HSBC by third parties. We rely on audit evidence that is scoped and provided by other auditors that are engaged by those third parties. For example, we obtain a report evidencing the testing of external systems and controls supporting HSBC's payroll and HR processes.

(5) Innovation in the audit

We are committed to driving innovation and the use of technology in the audit. In 2019 we have focused on innovation led by members of the audit team. We have trained a number of team members on the use of tools available and allowed them to develop technology solutions for use in the audit.

Responsibilities of the Directors and auditors

The Directors have, on page 219 acknowledged their responsibility to prepare the financial statements to give a true and fair view; to have controls enabling them to be satisfied that the financial statements are free from material misstatement, whether due to fraud or error; and, as described below to assess whether the Group and parent company can continue as a going concern.

The audit opinion does not provide assurance over any particular number or disclosure, but over the financial statements taken as a whole. The scope of an audit is sometimes not fully understood. It is important that you understand the scope in order to understand the assurance that our opinion provides. A further description of the scope of an audit is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities. It is also critical that you understand the inherent limitations of the audit which are disclosed in this description, including the possibility that an approach based upon sampling and other audit techniques may not identify all issues.

While our audit procedures include obtaining representations that the Group is in compliance with all applicable laws and regulations, an audit does not involve testing HSBC's compliance with each of the very large number of laws and regulations with which the Group, as a financial services business, must comply. We apply judgement in selecting the specific laws and regulations as the focus of our audit procedures. These procedures included regularly meeting with some of the Group's regulators, reviewing correspondence with both regulators and legal advisors and meeting with the Group General Counsel.

Annually the Prudential Regulation Authority provides questions covering aspects of our audit where they would like further information to assist them in their regulatory responsibilities. These questions did not highlight any areas that we had not already considered in our audit.

Matters reported to the GAC

We escalated those matters which we believe are important to the GAC for their consideration. We attended each of the 10 GAC meetings held during the year. We also met with members of the GAC on a number of other occasions outside of GAC meetings. During these various interactions we reported and discussed our observations on a variety of accounting matters, particularly those involving management judgement, and our views on controls over financial reporting. We can confirm that this report is consistent with the reporting made to the GAC.

During the April GAC meeting, the audit plan was presented. This was supplemented by subsequent update where we refreshed our risk assessment. As a result of changes within HSBC and more broadly in the macroeconomic and geopolitical environment, we increased our assessment of the risk in relation to impairment of goodwill, pension liabilities and impairment of investment in subsidiaries. All statutory audits require auditors to address the risk of management override of internal controls, including testing journals and evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud. Whilst management override of controls remains a significant audit risk, our assessment is that the risk has reduced for 2019 due to HSBC publicly stating they will not achieve a number of the financial targets established in their strategy update from June 2018.

We reported to the GAC all of the matters that presented significant risks of material misstatement in the financial statements. They include those that had the greatest effect on the overall audit strategy, and the allocation of resources and effort. These matters are discussed below together with an explanation of how the audit was tailored to address these specific areas. This is not a list of all audit risks and we do not form an opinion on any one area, but on the financial statements overall. The list reflects the same key audit matters from the prior year, with the addition of impairment of goodwill, pension liabilities and impairment of investment in subsidiaries, and the removal of management override of controls.

IT Access Management

Consideration of key audit matter

Our audit approach relies extensively on automated controls and therefore on the effectiveness of controls over IT systems.

In previous years, we identified and reported that controls over access to applications, operating systems and data in the financial reporting process required improvements. Access management controls are critical to ensure that changes to applications and underlying data are made in an appropriate manner. Appropriate access and change controls contribute to mitigating the risk of potential fraud or errors as a result of changes to applications and data. Management implemented remediation activities that have contributed to progress being made in reducing the risk over access management in the financial reporting process. The significance of IT controls to our audit and the status of the remediation was discussed at GAC meetings during the year.

Procedures performed to support our discussions and conclusions

Access rights were tested over applications, operating systems and databases relied upon for financial reporting. Specifically, the audit tested that:

- New access requests for joiners were properly reviewed and authorised.
- User access rights were removed on a timely basis when an individual left or moved role.
- Access rights to applications, operating systems and databases were periodically monitored for appropriateness.
- Highly privileged access was restricted to appropriate personnel.

Other areas that were independently assessed included password policies, security configurations, controls over changes to applications, operating systems and databases.

Where control deficiencies were identified, a range of other procedures were performed:

- Where access outside of policy was identified, we understood the nature of the access, and, where required, obtained additional evidence on whether that access had been exploited.
- Testing of controls to manage the monitoring of business access, in particular, automation implemented to identify and resolve cases where users are found to have access which represent a possible toxic combination of privileges.
- Substantive testing relating to automated controls, specific year-end reconciliations (i.e. custodian, bank account and suspense account reconciliations) and confirmations with external counterparties.

Relevant references in the Annual Report and Accounts 2019

Effectiveness of internal controls, page 214.

Impairment of loans and advances

Consideration of key audit matter

This is the second year that expected credit losses ('ECL') have been reported under IFRS 9. The underlying processes and controls have matured since 2018. HSBC has updated certain ECL models during the year.

The global credit environment has remained benign for an extended period of time, in part due to the globally low interest rates. However, there are a growing number of regional and country specific risks.

We continued to critically assess the more judgemental decisions made by management, in particular the severity and likelihood of alternative downside economic scenarios that form part of the forward economic guidance and their impact on ECL. We also considered; the determination of customer credit ratings and probabilities of default, and the impact they had on the determination of significant increases in credit risk; the appropriateness of post model adjustments made to reflect model and data limitations; and the estimation of specific impairments for wholesale exposures that had defaulted or were on the watch or worry list.

We discussed a number of areas with the GAC, including: changes made to models and the inputs into them; geopolitical risks, such as the social unrest in Hong Kong, the US-China trade tensions and the UK's departure from the EU; the migration of customer risk ratings; and impairments of significant wholesale exposures.

Procedures performed to support our discussions and conclusions

- Performed risk based substantive testing of models that were updated during the year, including independently rebuilding the modelling for certain assumptions.
- Independently reviewed the updates to the scripts used in the underlying tool to calculate ECL to validate that they reflected approved updates to models, parameters and inputs.
- Tested the controls over the inputs of critical data into source system and the flow and transformation of data between source systems to the impairment calculation engine. Substantive testing was performed over the critical data used in the year end ECL calculation.
- Tested the review and challenge of multiple economic scenarios by an expert panel and internal governance committee and assessed the reasonableness and likelihood of these scenarios using our economic experts. Relevant economic, political and other events were considered in assessing the reasonableness of alternative downside scenarios. The severity and magnitude of the scenarios were compared to external forecasts and data from historical economic downturns, and the sensitivities of the scenarios on the ECL were considered.
- Observed management's review and challenge forums to assess the ECL output and approval of post model adjustments.
- Tested the approval of the key inputs, assumptions and discounted cash flows that support the impairments of significant wholesale exposures, and substantively tested a sample of significant wholesale exposures.

Relevant references in the Annual Report and Accounts 2019

Credit risk disclosures, pages 84.

GAC Report, page 177.

Note 1.2d: Financial instruments measured at amortised cost, page 244.

Report of the independent auditors to the members of HSBC Holdings plc

Goodwill impairment

Consideration of key audit matter

The macroeconomic and geopolitical environment has become more challenging, impacting both 2019 and the outlook into 2020. Furthermore, a business update has been announced that will impact the future performance of certain businesses across the Group. These matters are considered a potential indicator of impairment for goodwill.

An impairment test was performed by HSBC using a value in use ('VIU') model that estimates the value of each cash generating unit ('CGU'). The VIU was less than the carrying value for certain CGUs, being Global Banking and Markets, Europe - Commercial Banking, Latin America - Commercial Banking, Middle East and North Africa - Commercial Banking and North America - Global Private Banking. This resulted in an impairment being recognised of \$7.3bn, with \$5.6bn of goodwill remaining on the balance sheet at 31 December 2019 for other CGUs.

The value of the VIU is based on the requirements of the relevant accounting standard and assumptions about future cash flows which are estimated using the Group's Annual Operating Plan ('AOP'), long term growth rates and discount rates. These assumptions, which are judgemental, are derived from a combination of management estimates, market data and other information provided by external parties.

We discussed the appropriateness of these assumptions with the GAC, particularly those for which variations had the most significant impact on the carrying value of the VIU. We focused on the assumptions related to the revenue growth rates and cost reduction targets in the AOP, and the long term growth rates and discount rates for specific businesses in certain locations. Our discussions and focus on assumptions was driven by consideration of the achievability of management's AOP and the prospects for different types of banking business in the future. For these assumptions we considered reasonably possible alternatives.

Procedures performed to support our discussions and conclusions

- We assessed the appropriateness of the methodology, including the estimation of VIUs and the CGUs to which they relate.
- A reasonable range for the discount rate used within the model was independently calculated with the assistance of our valuation experts, and compared to the rates used by management.
- The determination of assumptions within the model including the long-term growth rates, discount rates and Annual Operating Plan were challenged. Where available, external information was obtained and used to audit management's assumptions.
- We assessed whether the cash flows included in the model were in accordance with the relevant accounting standard.
- We performed sensitivity analysis on certain key assumptions used.
- The controls in place over the model, and its mathematical accuracy, were tested.
- We read and assessed the disclosures made in the *Annual Report and Accounts 2019* in relation to goodwill.

Relevant references in the *Annual Report and Accounts 2019*

GAC Report, page 177.

Note 1.2(a): Critical accounting estimates and judgements, page 242.

Note 21: Goodwill and intangible assets, page 289.

Investment in associate – Bank of Communications Company, Limited ('BoCom')

Consideration of key audit matter

At 31 December 2019, the market value of the Group's investment in BoCom was \$9bn lower than the carrying value. This is considered an indicator of potential impairment. An impairment test was performed by HSBC using a value in use ('VIU') model to estimate the investment's value assuming it continues to be held in perpetuity rather than sold. The VIU was \$2.5bn in excess of the carrying value. On this basis no impairment was recorded and the share of BoCom's profits has been recognised in the consolidated income statement.

The VIU model is based on the requirements of the relevant accounting standard and is dependent on many assumptions, both short-term and long-term in nature. These assumptions, which are judgemental, are derived from a combination of management estimates, analysts' forecasts and market data.

We discussed the appropriateness of these assumptions with the GAC, particularly those for which variations had the most significant impact on the carrying value of the VIU. We focused on the assumptions relating to forecast cash flows and the impact of meeting regulatory capital requirements. We also discussed with the GAC the effective tax rate and loan impairment rate assumptions and considered reasonably possible alternatives. Our discussions and focus on assumptions was driven by consideration of the current levels of uncertainty due to the impact of China-US trade tensions, and the overall outlook for the Chinese banking market, and the broader Chinese economy.

Procedures performed to support our discussions and conclusions

- We assessed the appropriateness of the methodology used to estimate the VIU.
- A reasonable range for the discount rate used within the model was independently calculated with the assistance of our valuation experts and compared to the discount rate used by management.
- We challenged the basis for determining assumptions and the inputs used. Where available, we obtained corroborating information for inputs into assumptions from external market information, third-party sources, including analyst reports, and historical publicly available BoCom information.
- We assessed whether the approach to estimating the VIU was in accordance with the relevant accounting standard.
- We performed sensitivity analysis on key assumptions used.
- The controls in place over the model, and its mathematical accuracy, were tested.
- We observed meetings in September and November 2019 between management and senior BoCom executive management, held specifically to identify facts and circumstances impacting assumptions relevant to the determination of the VIU.
- We read and assessed the disclosures made in the *Annual Report and Accounts 2019* in relation to BoCom.
- Representations were obtained from HSBC that assumptions used were consistent with information currently available to them, both as a shareholder and to which HSBC are entitled through their participation on BoCom's Board of Directors.

Relevant references in the *Annual Report and Accounts 2019*

GAC Report, page 177.

Note 1.2(a): Critical accounting estimates and judgements, page 243.

Note 18 Interests in associates and joint ventures, page 283.

Defined benefit pensions obligations

Consideration of key audit matter

HSBC has \$40.6bn of pension liabilities from defined benefit schemes. The valuation of these pension liabilities is dependent on a number of assumptions, including discount rate, inflation rates and mortality rates. Relatively small changes in these assumptions can have a material impact on the valuation of the pension obligations.

We focused our testing and discussions with the GAC on the largest schemes in the UK and the US, which made up 83% of the overall defined benefit pension obligations at 31 December 2019. We discussed the key assumptions, including results of the work performed by our actuarial experts and how the estimate compare to our independently expected range.

Procedures performed to support our discussions and conclusions

- We tested the controls for determining the actuarial estimates.
- We engaged our actuarial experts to understand the judgements made by management and their actuarial expert in determining the key financial and demographic estimates used in estimating the pension liabilities.
- We assessed the reasonableness of the estimates using independently developed assumptions and external market data.
- We assessed management's approach to determining discount rates and inflation estimates and compared these to market practice.
- We read and assessed the disclosures made in the Annual Report and Accounts 2019 in relation to pensions.

Relevant references in the Annual Report and Accounts 2019

GAC Report page 177.

Note 5, page 253.

Impairment of investment in subsidiaries (Parent Company only)

Consideration of key audit matter

The net asset value of HSBC Overseas Holdings (UK) Limited was below the carrying amount as at 31 December 2019, which was considered an indicator for impairment. This is considered an indicator of potential impairment.

An impairment test was performed to calculate the recoverable amount of HSBC Overseas Holdings (UK) Limited. The recoverable amount is based on the requirements of the relevant accounting standard and is dependent on many assumptions, including future cash flows, long term growth rates, discount rates and fair values. These assumptions, which are judgemental, are derived from a combination of management estimates, market data and other information provided by external parties. The recoverable amount was less than the carrying value which resulted in an impairment being recognised of \$2.5bn.

We discussed the appropriateness of the recoverable amount and the assumptions used with the GAC

Procedures performed to support our discussions and conclusions

- We assessed the appropriateness of the methodology used to calculate the recoverable amount.
- The determination of assumptions, including future cash flows, long term growth rates, discount rates and fair values were challenged. Where available, external information was obtained and used to audit management's assumptions.
- We assessed whether the estimation of the recoverable amount was in accordance with accounting standards.
- We read and assessed the disclosures made in the Annual Report and Accounts 2019 in relation to investment in subsidiaries.

Relevant references in the Annual Report and Accounts 2019

Note 19, page 286.

There were a number of other matters which were covered in the meetings with the GAC, including;

- internal controls over financial reporting. At the GAC meetings in December 2019 and February 2020, there was an update on the control environment over financial reporting. We provided information on the aggregate number of new and outstanding control deficiencies identified by PwC and management. Those deemed to be significant in their potential impact on financial reporting, but not material, were discussed individually;
- other areas where management judgement had been applied. During the year this included discussions relating to: customer redress programmes, particularly in the UK; restructuring provisions & other related costs; the present value of in-force long-term insurance business; fair value of financial instruments; and uncertain tax positions.
- a discussion on the results of quality inspections performed with respect to the audit work of different PwC Network firms on which we rely and the rotation plans of the audit partners working on the Group audit.

Going concern

On page 41, the Directors confirmed their belief it was appropriate to prepare the financial statements on a going concern basis, because they believe that the Group and the parent company will continue in business. That statement also included confirmation that they had not identified any material uncertainties to either the Group's or the parent company's ability to continue as a going concern over a period of at least twelve months from the date of their approval of these financial statements. Because not all future events or conditions can be predicted, this statement is not a guarantee. I reviewed this statement, and considered HSBC's budgets, cash flows, capital plan and stress tests.

In accordance with ISAs (UK) we report as follows:

Reporting obligation	Outcome
We are required to report if we have anything material to add or draw attention to in respect of the directors' statement in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the directors' identification of any material uncertainties to the Group's and the parent company's ability to continue as a going concern over a period of at least twelve months from the date of approval of the financial statements.	We have nothing material to add or to draw attention to. However, because not all future events or conditions can be predicted, this statement is not a guarantee as to the Group's and parent company's ability to continue as a going concern. For example, the terms of the United Kingdom's withdrawal from the European Union are not clear, and it is difficult to evaluate all of the potential implications on the group's trade, customers, suppliers and the wider economy.
We are required to report if the directors' statement relating to Going Concern in accordance with Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.	We have nothing to report.

Report of the independent auditors to the members of HSBC Holdings plc

Other required matters and reporting on other information

The *Annual Report and Accounts 2019* contains a considerable amount of other information that is required by regulators or standard setters and is outside of the audited financial statements and the auditors' report. This information, while being unaudited, may still be important to your consideration of the performance and position of HSBC, for example risk weighted assets. The Directors are responsible for this other information.

In the table below, we have set out certain areas, our related responsibilities and reporting. Except as outlined in the table, we have not provided an audit opinion or any form of assurance. It is important that you understand the limitations in the scope of our responsibility, particularly over areas important to considering the future potential of HSBC such as the Viability Statement and how the Group's key risks are managed.

Area of the <i>Annual Report and Accounts 2019</i>	Our responsibility	Our reporting
Directors' remuneration report on pages 184 to 217		
Those parts of which are marked as audited.	Consider whether the information is properly prepared.	In our opinion, this information has been properly prepared in accordance with the Companies Act 2006.
Other remuneration report disclosures.	Consider whether certain other disclosures specified by the Companies Act have been made.	The other required disclosures have been made.
Other areas		
Strategic Report and the Report of the Directors (as defined on pages 2 to 218).	Consider whether they are consistent with the audited financial statements. Consider whether they are prepared in accordance with applicable legal requirements. Report if we have identified any material misstatements in either report. This is based on our knowledge and understanding of the Group and parent company and the environment they operate in that was obtained during the audit.	In our opinion, based on the work undertaken in the course of the audit, the information in these reports is consistent with the audited financial statements and prepared in accordance with applicable legal requirements. We have no material misstatements to report.
Viability statement on page 41 which considers the longer term sustainability of the Group's business model, as to whether the Directors have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, and why the Directors consider that period to be appropriate. This includes confirmation of the Directors' robust assessment of principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity, and disclosures describing those risks and how they are managed or mitigated.	Review the confirmation and description in the light of the knowledge gathered during the audit, including making enquiries and considering the Directors' processes used to support the statements made. Consider if the statements are aligned with the relevant provisions of the UK Corporate Governance Code (the "Code").	We have nothing material to draw attention to or to add to the confirmation or description.
GAC Report on page 173.	Consider whether it deals appropriately with those matters that I reported to the GAC.	No exceptions to report.
Directors' statement on page 219 that they consider the HSBC <i>Annual Report and Accounts 2019</i> , taken as a whole, to be fair, balanced and understandable and provides the information necessary for you to assess HSBC's position and performance, business model and strategy.	Consider whether any information found during the course of the audit would cause us to disagree.	No disagreements to report.
Corporate governance report on pages 157 to 218.	Consider whether the Directors' statement relating to the parent company's compliance with the Code properly discloses any departure from a relevant provision of the Code specified, under the Listing Rules, for review by the auditors.	Nothing to report following my review.
All other information in the <i>Annual Report and Accounts 2019</i> aside from the audited financial statements and the auditors' report.	Read the other information and consider whether it is materially inconsistent with the financial statements or our knowledge gained in the audit, or otherwise appears to be materially misstated. I am required to perform additional work to validate if apparent inconsistencies or misstatements are real, and report those matters to you.	Nothing to report following my review.

Other Reporting

In addition, we are required to report to you under the Companies Act 2006 if:

- we have not received all of the information and explanations required for our audit;
- adequate accounting records have not been kept by the parent company;
- returns adequate for our audit have not been received from branches not visited by PwC; and
- the parent company financial statements and the audited part of the Directors' remuneration report do not agree with the accounting records and returns.

We have no exceptions to report as a result of any of these responsibilities.

Use of this report

This report, including the opinions, has been prepared for and only for you, the parent company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006, and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come except where expressly agreed by our prior written consent.

Scott Berryman (Senior Statutory Auditor)

for and on behalf of **PricewaterhouseCoopers LLP**

Chartered Accountants and Statutory Auditors

London, United Kingdom

18 February 2020



Financial statements

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HSBC MyDeal

We launched MyDeal to make the deal execution process in our primary capital markets business more efficient. The customer can access the secured platform on mobile or online and receive real-time information of a deal throughout its life cycle. This includes logistics, investor feedback and book-building data.

MyDeal became available to customers in early 2019. By the end of 2019, we had used the platform in a number of jurisdictions to manage more than 84 deals with a combined value of \$47.5 billion. It has received positive feedback from customers.

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Consolidated income statement for the year ended 31 December

	Notes*	2019 \$m	2018 \$m	2017 \$m
Net interest income		30,462	30,489	28,176
– interest income ^{1,2}		54,695	49,609	40,995
– interest expense ³		(24,233)	(19,120)	(12,819)
Net fee income	2	12,023	12,620	12,811
– fee income		15,439	16,044	15,853
– fee expense		(3,416)	(3,424)	(3,042)
Net income from financial instruments held for trading or managed on a fair value basis	3	10,231	9,531	8,426
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss	3	3,478	(1,488)	2,836
Changes in fair value of designated debt and related derivatives ⁴	3	90	(97)	155
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	3	812	695	N/A
Gains less losses from financial investments		335	218	1,150
Net insurance premium income	4	10,636	10,659	9,779
Other operating income		2,957	960	443
Total operating income		71,024	63,587	63,776
Net insurance claims and benefits paid and movement in liabilities to policyholders	4	(14,926)	(9,807)	(12,331)
Net operating income before change in expected credit losses and other credit impairment charges/Loan impairment charges and other credit risk provisions		56,098	53,780	51,445
Change in expected credit losses and other credit impairment charges		(2,756)	(1,767)	N/A
Loan impairment charges and other credit risk provisions		N/A	N/A	(1,769)
Net operating income		53,342	52,013	49,676
Employee compensation and benefits	5	(18,002)	(17,373)	(17,315)
General and administrative expenses		(13,828)	(15,353)	(15,707)
Depreciation and impairment of property, plant and equipment and right-of-use assets ⁵		(2,100)	(1,119)	(1,166)
Amortisation and impairment of intangible assets		(1,070)	(814)	(696)
Goodwill impairment	21	(7,349)	–	–
Total operating expenses		(42,349)	(34,659)	(34,884)
Operating profit		10,993	17,354	14,792
Share of profit in associates and joint ventures	18	2,354	2,536	2,375
Profit before tax		13,347	19,890	17,167
Tax expense	7	(4,639)	(4,865)	(5,288)
Profit for the year		8,708	15,025	11,879
Attributable to:				
– ordinary shareholders of the parent company		5,969	12,608	9,683
– preference shareholders of the parent company		90	90	90
– other equity holders		1,324	1,029	1,025
– non-controlling interests		1,325	1,298	1,081
Profit for the year		8,708	15,025	11,879
		\$	\$	\$
Basic earnings per ordinary share	9	0.30	0.63	0.48
Diluted earnings per ordinary share	9	0.30	0.63	0.48

* For Notes on the financial statements, see page 240.

1 Interest income includes \$45,708m (2018: \$42,130m) of interest recognised on financial assets measured at amortised cost and \$8,259m (2018: \$7,020m) of interest recognised on financial assets measured at fair value through other comprehensive income.

2 Interest revenue calculated using the effective interest method comprises interest recognised on financial assets measured at either amortised cost or fair value through other comprehensive income.

3 Interest expense includes \$21,922m (2018: \$16,972m) of interest on financial instruments, excluding interest on financial liabilities held for trading or designated or otherwise mandatorily measured at fair value.

4 The debt instruments, issued for funding purposes, are designated under the fair value option to reduce an accounting mismatch.

5 Includes depreciation of the right-of-use assets of \$912m (2018: nil). Right-of-use assets have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.

Consolidated statement of comprehensive income
for the year ended 31 December

	2019 \$m	2018 \$m	2017 \$m
Profit for the year	8,708	15,025	11,879
Other comprehensive income/(expense)			
Items that will be reclassified subsequently to profit or loss when specific conditions are met:			
Available-for-sale investments	N/A	N/A	146
– fair value gains	N/A	N/A	1,227
– fair value gains reclassified to the income statement	N/A	N/A	(1,033)
– amounts reclassified to the income statement in respect of impairment losses	N/A	N/A	93
– income taxes	N/A	N/A	(141)
Debt instruments at fair value through other comprehensive income	1,152	(243)	N/A
– fair value gains/(losses)	1,793	(168)	N/A
– fair value gains transferred to the income statement on disposal	(365)	(95)	N/A
– expected credit recoveries/(losses) recognised in the income statement	109	(94)	N/A
– income taxes	(385)	114	N/A
Cash flow hedges	206	19	(192)
– fair value gains/(losses)	551	(267)	(1,046)
– fair value (gains)/losses reclassified to the income statement	(286)	317	833
– income taxes	(59)	(31)	21
Share of other comprehensive income/(expense) of associates and joint ventures	21	(64)	(43)
– share for the year	21	(64)	(43)
Exchange differences	1,044	(7,156)	9,077
– other exchange differences	1,044	(7,156)	8,939
– income tax attributable to exchange differences	–	–	138
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of defined benefit asset/liability	13	(329)	2,419
– before income taxes	(17)	(388)	3,440
– income taxes	30	59	(1,021)
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	(2,002)	2,847	(2,024)
– before income taxes	(2,639)	3,606	(2,409)
– income taxes	637	(759)	385
Equity instruments designated at fair value through other comprehensive income	366	(27)	N/A
– fair value gains/(losses)	364	(71)	N/A
– income taxes	2	44	N/A
Effects of hyperinflation	217	283	N/A
Other comprehensive income/(expense) for the period, net of tax	1,017	(4,670)	9,383
Total comprehensive income for the year	9,725	10,355	21,262
Attributable to:			
– ordinary shareholders of the parent company	6,838	8,083	18,914
– preference shareholders of the parent company	90	90	90
– other equity holders	1,324	1,029	1,025
– non-controlling interests	1,473	1,153	1,233
Total comprehensive income for the year	9,725	10,355	21,262

Consolidated balance sheet

	Notes*	At	
		31 Dec 2019 \$m	31 Dec 2018 \$m
Assets			
Cash and balances at central banks		154,099	162,843
Items in the course of collection from other banks		4,956	5,787
Hong Kong Government certificates of indebtedness		38,380	35,859
Trading assets	11	254,271	238,130
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	14	43,627	41,111
Derivatives	15	242,995	207,825
Loans and advances to banks		69,203	72,167
Loans and advances to customers		1,036,743	981,696
Reverse repurchase agreements – non-trading		240,862	242,804
Financial investments	16	443,312	407,433
Prepayments, accrued income and other assets	22	136,680	110,571
Current tax assets		755	684
Interests in associates and joint ventures	18	24,474	22,407
Goodwill and intangible assets	21	20,163	24,357
Deferred tax assets	7	4,632	4,450
Total assets		2,715,152	2,558,124
Liabilities and equity			
Liabilities			
Hong Kong currency notes in circulation		38,380	35,859
Deposits by banks		59,022	56,331
Customer accounts		1,439,115	1,362,643
Repurchase agreements – non-trading		140,344	165,884
Items in the course of transmission to other banks		4,817	5,641
Trading liabilities	23	83,170	84,431
Financial liabilities designated at fair value	24	164,466	148,505
Derivatives	15	239,497	205,835
Debt securities in issue	25	104,555	85,342
Accruals, deferred income and other liabilities	26	118,156	97,380
Current tax liabilities		2,150	718
Liabilities under insurance contracts	4	97,439	87,330
Provisions	27	3,398	2,920
Deferred tax liabilities	7	3,375	2,619
Subordinated liabilities	28	24,600	22,437
Total liabilities		2,522,484	2,363,875
Equity			
Called up share capital	31	10,319	10,180
Share premium account	31	13,959	13,609
Other equity instruments		20,871	22,367
Other reserves		2,127	1,906
Retained earnings		136,679	138,191
Total shareholders' equity		183,955	186,253
Non-controlling interests		8,713	7,996
Total equity		192,668	194,249
Total liabilities and equity		2,715,152	2,558,124

* For Notes on the financial statements, see page 240.

The accompanying notes on pages 240 to 322 and the audited sections in: 'Risk' on pages 73 to 151, 'Capital' on pages 152 to 155, and 'Directors' remuneration report' on pages 184 to 210 form an integral part of these financial statements.

These financial statements were approved by the Board of Directors on 18 February 2020 and signed on its behalf by:

Mark E Tucker
Group Chairman

Ewen Stevenson
Group Chief Financial Officer

Consolidated statement of cash flows
for the year ended 31 December

	2019 \$m	2018 \$m	2017 \$m
Profit before tax	13,347	19,890	17,167
Adjustments for non-cash items:			
Depreciation, amortisation and impairment ¹	10,519	1,933	1,862
Net gain from investing activities	(399)	(126)	(1,152)
Share of profits in associates and joint ventures	(2,354)	(2,536)	(2,375)
Gain on disposal of subsidiaries, businesses, associates and joint ventures	(929)	—	(79)
Change in expected credit losses gross of recoveries and other credit impairment charges	3,012	2,280	N/A
Loan impairment losses gross of recoveries and other credit risk provisions	N/A	N/A	2,603
Provisions including pensions	2,423	1,944	917
Share-based payment expense	478	450	500
Other non-cash items included in profit before tax	(2,297)	(1,303)	(381)
Elimination of exchange differences ²	(3,742)	4,930	(20,757)
Changes in operating assets and liabilities			
Change in net trading securities and derivatives	(18,910)	20,855	(13,615)
Change in loans and advances to banks and customers	(53,760)	(44,071)	(108,984)
Change in reverse repurchase agreements – non-trading	(7,390)	(25,399)	(37,281)
Change in financial assets designated and otherwise mandatorily measured at fair value	(2,308)	(1,515)	(5,303)
Change in other assets	(21,863)	6,766	(6,570)
Change in deposits by banks and customer accounts	79,163	(5,745)	102,457
Change in repurchase agreements – non-trading	(25,540)	35,882	41,044
Change in debt securities in issue	19,268	18,806	(1,369)
Change in financial liabilities designated at fair value	20,068	4,500	8,508
Change in other liabilities	23,124	(2,187)	13,514
Dividends received from associates	633	910	740
Contributions paid to defined benefit plans	(533)	(332)	(685)
Tax paid	(2,267)	(3,417)	(3,175)
Net cash from operating activities	29,743	32,515	(12,414)
Purchase of financial investments	(445,907)	(399,458)	(357,264)
Proceeds from the sale and maturity of financial investments	413,186	386,056	418,352
Net cash flows from the purchase and sale of property, plant and equipment	(1,343)	(1,196)	(1,167)
Net cash flows from purchase/(disposal) of customer and loan portfolios	1,118	(204)	6,756
Net investment in intangible assets	(2,289)	(1,848)	(1,285)
Net cash flow on disposal of subsidiaries, businesses, associates and joint ventures	(83)	4	165
Net cash from investing activities	(35,318)	(16,646)	65,557
Issue of ordinary share capital and other equity instruments	—	6,001	5,196
Cancellation of shares	(1,000)	(1,998)	(3,000)
Net sales/(purchases) of own shares for market-making and investment purposes	141	133	(67)
Redemption of preference shares and other equity instruments	—	(6,078)	—
Subordinated loan capital repaid ³	(4,210)	(4,077)	(3,574)
Dividends paid to shareholders of the parent company and non-controlling interests	(9,773)	(10,762)	(9,005)
Net cash from financing activities	(14,842)	(16,781)	(10,450)
Net increase/(decrease) in cash and cash equivalents	(20,417)	(912)	42,693
Cash and cash equivalents at 1 Jan ⁴	312,911	323,718	263,324
Exchange differences in respect of cash and cash equivalents	1,248	(9,895)	17,701
Cash and cash equivalents at 31 Dec^{4, 5}	293,742	312,911	323,718
Cash and cash equivalents comprise:			
– cash and balances at central banks	154,099	162,843	180,624
– items in the course of collection from other banks	4,956	5,787	6,628
– loans and advances to banks of one month or less	41,626	39,460	61,973
– reverse repurchase agreements with banks of one month or less	65,370	74,702	58,850
– treasury bills, other bills and certificates of deposit less than three months	20,132	21,685	11,593
– cash collateral and net settlement accounts	12,376	14,075	10,900
– less: items in the course of transmission to other banks	(4,817)	(5,641)	(6,850)
Cash and cash equivalents at 31 Dec^{4, 5}	293,742	312,911	323,718

Interest received was \$58,627m (2018: \$45,291m; 2017: \$41,676m), interest paid was \$27,384m (2018: \$14,172m; 2017: \$10,962m) and dividends received (excluding dividends received from associates, which are presented separately above) were \$2,369m (2018: \$1,702m; 2017: \$2,225m).

1 The impact of the right-of-use assets recognised under IFRS 16 at the beginning of 2019 is not recognised in 2018 and 2017. This also includes the impact of a \$7.3bn goodwill impairment in 2019.

2 Adjustment to bring changes between opening and closing balance sheet amounts to average rates. This is not done on a line-by-line basis, as details cannot be determined without unreasonable expense.

3 Subordinated liabilities changes during the year are attributable to repayments of \$(4.2)bn (2018: \$(4.1)bn; 2017: \$(3.6)bn) of securities. Non-cash changes during the year included foreign exchange gains/(losses) of \$0.6bn (2018: \$(0.6)bn; 2017: \$(0.6)bn) and fair value gains/(losses) of \$1.4bn (2018: \$(1.4)bn; 2017: \$(1.2)bn).

4 In 2019, HSBC included settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented and also include the net impact of other cash equivalents not previously included in cash and cash equivalents. The net effect of these changes increased cash and cash equivalents by \$11.8bn in 2018 and decreased cash and cash equivalents by \$(13.7)bn in 2017.

5 At 31 December 2019, \$35,735m (2018: \$26,282m; 2017: \$39,830m) was not available for use by HSBC, of which \$19,353m (2018: \$19,755m; 2017: \$21,424m) related to mandatory deposits at central banks.

Consolidated statement of changes in equity
for the year ended 31 December

	Called up share capital and share premium	Other equity instruments	Retained earnings ^{3,4}	Other reserves				Total share-holders' equity	Non-controlling interests	Total equity
				Financial assets at FVOCI reserve	Cash flow hedging reserve	Foreign exchange reserve	Merger and other reserves ^{4,6}			
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2019	23,789	22,367	138,191	(1,532)	(206)	(26,133)	29,777	186,253	7,996	194,249
Profit for the year	—	—	7,383	—	—	—	—	7,383	1,325	8,708
Other comprehensive income (net of tax)	—	—	(1,759)	1,424	204	1,000	—	869	148	1,017
– debt instruments at fair value through other comprehensive income	—	—	—	1,146	—	—	—	1,146	6	1,152
– equity instruments designated at fair value through other comprehensive income	—	—	—	278	—	—	—	278	88	366
– cash flow hedges	—	—	—	—	204	—	—	204	2	206
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	(2,002)	—	—	—	—	(2,002)	—	(2,002)
– remeasurement of defined benefit asset/liability	—	—	5	—	—	—	—	5	8	13
– share of other comprehensive income of associates and joint ventures	—	—	21	—	—	—	—	21	—	21
– effects of hyperinflation	—	—	217	—	—	—	—	217	—	217
– exchange differences	—	—	—	—	—	1,000	—	1,000	44	1,044
Total comprehensive income for the year	—	—	5,624	1,424	204	1,000	—	8,252	1,473	9,725
Shares issued under employee remuneration and share plans	557	—	(495)	—	—	—	—	62	—	62
Shares issued in lieu of dividends and amounts arising thereon	—	—	2,687	—	—	—	—	2,687	—	2,687
Dividends to shareholders	—	—	(11,683)	—	—	—	—	(11,683)	(777)	(12,460)
Redemption of securities ²	—	(1,496)	(12)	—	—	—	—	(1,508)	—	(1,508)
Transfers ⁷	—	—	2,475	—	—	—	(2,475)	—	—	—
Cost of share-based payment arrangements	—	—	478	—	—	—	—	478	—	478
Cancellation of shares ⁹	(68)	—	(1,000)	—	—	—	68	(1,000)	—	(1,000)
Other movements	—	—	414	—	—	—	—	414	21	435
At 31 Dec 2019	24,278	20,871	136,679	(108)	(2)	(25,133)	27,370	183,955	8,713	192,668

Consolidated statement of changes in equity (continued)

	Other reserves									
	Called up share capital and share premium	Other equity instru- ments	Retained earnings ^{3,4}	Financial assets at FVOCI reserve ⁵	Cash flow hedging reserve	Foreign exchange reserve	Merger and other reserves ^{4,6}	Total share- holders' equity	Non- controlling interests	Total equity
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 31 Dec 2017	20,337	22,250	139,999	(350)	(222)	(19,072)	27,308	190,250	7,621	197,871
Impact on transition to IFRS 9 ¹⁰	—	—	(585)	(1,021)	—	—	—	(1,606)	(41)	(1,647)
At 1 Jan 2018	20,337	22,250	139,414	(1,371)	(222)	(19,072)	27,308	188,644	7,580	196,224
Profit for the year	—	—	13,727	—	—	—	—	13,727	1,298	15,025
Other comprehensive income (net of tax)	—	—	2,765	(245)	16	(7,061)	—	(4,525)	(145)	(4,670)
– debt instruments at fair value through other comprehensive income	—	—	—	(245)	—	—	—	(245)	2	(243)
– equity instruments designated at fair value through other comprehensive income	—	—	—	—	—	—	—	—	(27)	(27)
– cash flow hedges	—	—	—	—	16	—	—	16	3	19
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	2,847	—	—	—	—	2,847	—	2,847
– remeasurement of defined benefit asset/liability	—	—	(301)	—	—	—	—	(301)	(28)	(329)
– share of other comprehensive income of associates and joint ventures	—	—	(64)	—	—	—	—	(64)	—	(64)
– effects of hyperinflation	—	—	283	—	—	—	—	283	—	283
– exchange differences	—	—	—	—	—	(7,061)	—	(7,061)	(95)	(7,156)
Total comprehensive income for the year	—	—	16,492	(245)	16	(7,061)	—	9,202	1,153	10,355
Shares issued under employee remuneration and share plans	721	—	(610)	—	—	—	—	111	—	111
Shares issued in lieu of dividends and amounts arising thereon	—	—	1,494	—	—	—	—	1,494	—	1,494
Capital securities issued ¹	—	5,968	—	—	—	—	—	5,968	—	5,968
Dividends to shareholders	—	—	(11,547)	—	—	—	—	(11,547)	(710)	(12,257)
Redemption of securities ²	—	(5,851)	(237)	—	—	—	—	(6,088)	—	(6,088)
Transfers ⁷	—	—	(2,200)	—	—	—	2,200	—	—	—
Cost of share-based payment arrangements	—	—	450	—	—	—	—	450	—	450
Cancellation of shares ^{8,9}	2,731	—	(4,998)	—	—	—	269	(1,998)	—	(1,998)
Other movements	—	—	(67)	84	—	—	—	17	(27)	(10)
At 31 Dec 2018	23,789	22,367	138,191	(1,532)	(206)	(26,133)	29,777	186,253	7,996	194,249
At 1 Jan 2017	22,715	17,110	136,795	(477)	(27)	(28,038)	27,308	175,386	7,192	182,578
Profit for the year	—	—	10,798	—	—	—	—	10,798	1,081	11,879
Other comprehensive income (net of tax)	—	—	328	131	(194)	8,966	—	9,231	152	9,383
– available-for-sale investments	—	—	—	131	—	—	—	131	15	146
– cash flow hedges	—	—	—	—	(194)	—	—	(194)	2	(192)
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk	—	—	(2,024)	—	—	—	—	(2,024)	—	(2,024)
– remeasurement of defined benefit asset/liability	—	—	2,395	—	—	—	—	2,395	24	2,419
– share of other comprehensive income of associates and joint ventures	—	—	(43)	—	—	—	—	(43)	—	(43)
– exchange differences	—	—	—	—	—	8,966	—	8,966	111	9,077
Total comprehensive income for the year	—	—	11,126	131	(194)	8,966	—	20,029	1,233	21,262
Shares issued under employee remuneration and share plans	622	—	(566)	—	—	—	—	56	—	56
Shares issued in lieu of dividends and amounts arising thereon	—	—	3,206	—	—	—	—	3,206	—	3,206
Capital securities issued ¹	—	5,140	—	—	—	—	—	5,140	—	5,140
Dividends to shareholders	—	—	(11,551)	—	—	—	—	(11,551)	(660)	(12,211)
Cost of share-based payment arrangements	—	—	500	—	—	—	—	500	—	500
Cancellation of shares ⁹	(3,000)	—	—	—	—	—	—	(3,000)	—	(3,000)
Other movements	—	—	489	(4)	(1)	—	—	484	(144)	340
At 31 Dec 2017	20,337	22,250	139,999	(350)	(222)	(19,072)	27,308	190,250	7,621	197,871

- 1 In 2018, HSBC Holdings issued \$4,150m, £1,000m and SGD750m of perpetual subordinated contingent convertible capital securities on which there were \$60m of external issuance costs, \$49m of intra-Group issuance costs and \$11m of tax benefits. In 2017, HSBC Holdings issued \$3,000m, SGD1,000m and €1,250m of perpetual subordinated contingent convertible capital securities, on which there were \$14m of external issuance costs, \$37m of intra-Group issuance costs and \$10m of tax benefits. Under IFRSs these issuance costs and tax benefits are classified as equity.
- 2 During 2019, HSBC Holdings redeemed \$1,500m 5.625% perpetual subordinated capital securities on which there were \$12m of external issuance costs. In 2018, HSBC Holdings redeemed \$2,200m 8.125% perpetual subordinated capital securities and its \$3,800m 8.000% perpetual subordinated capital securities, Series 2, on which there were \$172m of external issuance costs and \$23m of intra-Group issuance costs wound down. Under IFRSs external issuance costs are classified as equity.
- 3 At 31 December 2019, retained earnings included 432,108,782 treasury shares (2018: 379,926,645; 2017: 360,590,019). In addition, treasury shares are also held within HSBC's Insurance business retirement funds for the benefit of policyholders or beneficiaries within employee trusts for the settlement of shares expected to be delivered under employee share schemes or bonus plans, and the market-making activities in Global Markets.
- 4 Cumulative goodwill amounting to \$5,138m has been charged against reserves in respect of acquisitions of subsidiaries prior to 1 January 1998, including \$3,469m charged against the merger reserve arising on the acquisition of HSBC Bank plc. The balance of \$1,669m has been charged against retained earnings.
- 5 The \$350m at 31 December 2017 represents the IAS 39 available-for-sale fair value reserve as at 31 December 2017.
- 6 Statutory share premium relief under section 131 of the Companies Act 1985 (the 'Act') was taken in respect of the acquisition of HSBC Bank plc in 1992, HSBC France in 2000 and HSBC Finance Corporation in 2003, and the shares issued were recorded at their nominal value only. In HSBC's consolidated financial statements, the fair value differences of \$8,290m in respect of HSBC France and \$12,768m in respect of HSBC Finance Corporation were recognised in the merger reserve. The merger reserve created on the acquisition of HSBC Finance Corporation subsequently became attached to HSBC Overseas Holdings (UK) Limited ('HOHU'), following a number of intra-Group reorganisations. During 2009, pursuant to section 131 of the Companies Act 1985, statutory share premium relief was taken in respect of the rights issue and \$15,796m was recognised in the merger reserve.
- 7 Permitted transfers from the merger reserve to retained earnings were made when the investment in HSBC Overseas Holdings (UK) Limited was previously impaired. In 2018, a part reversal of this impairment resulted in a transfer from retained earnings back to the merger reserve of \$2,200m. At 31 December 2019, an additional impairment of \$2,475m was recognised and a permitted transfer of this amount was made from the merger reserve to retained earnings.
- 8 This includes a re-presentation of the cancellation of shares to retained earnings and capital redemption reserve in respect of the 2017 share buy-back, under which retained earnings have been reduced by \$3,000m, called up capital and share premium increased by \$2,836m and other reserves increased by \$164m.
- 9 For further details, refer to Note 31 in the Annual Report and Accounts 2019. In August 2019, HSBC announced a share buy-back of up to \$1.0bn, which was completed in September 2019. In May 2018, HSBC announced a share buy-back of up to \$2.0bn, which was completed in August 2018. In February 2017, HSBC announced a share buy-back of up to \$1.0bn, which was completed in April 2017. In July 2017, HSBC announced a share buy-back of up to \$2.0bn, which was completed in November 2017. Shares bought back from these buy-back programmes have been cancelled.
- 10 The impact of transitioning to IFRS 9 at 1 January 2018 on the consolidated financial statements of HSBC was a decrease in net assets of \$1.6bn, arising from a decrease of \$2.2bn from additional impairment allowances, a decrease of \$0.9bn from our associates reducing their net assets, an increase of \$1.1bn from the remeasurement of financial assets and liabilities as a consequence of classification changes and an increase in net deferred tax assets of \$0.4bn.

HSBC Holdings income statement
for the year ended 31 December

	Notes*	2019 \$m	2018 \$m	2017 \$m
Net interest expense		(2,554)	(1,112)	(383)
– interest income		1,249	2,193	2,185
– interest expense		(3,803)	(3,305)	(2,568)
Fee (expense)/income		(2)	0	2
Net income from financial instruments held for trading or managed on a fair value basis	3	1,477	245	(181)
Changes in fair value of designated debt and related derivatives ¹	3	(360)	(77)	103
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	3	1,659	43	–
Gains less losses from financial investments		–	4	154
Dividend income from subsidiaries ²		15,117	55,304	10,039
Other operating income		1,293	960	769
Total operating income		16,630	55,367	10,503
Employee compensation and benefits	5	(37)	(37)	(54)
General and administrative expenses		(4,772)	(4,507)	(4,911)
Reversal of impairment/(impairment) of subsidiaries ³		(2,562)	2,064	(63)
Total operating expenses		(7,371)	(2,480)	(5,028)
Profit before tax		9,259	52,887	5,475
Tax (charge)/credit		(218)	(62)	64
Profit for the year		9,041	52,825	5,539

* For Notes on the financial statements, see page 240.

1 The debt instruments, issued for funding purposes, are designated under the fair value option to reduce an accounting mismatch.

2 The 2018 year included \$44,893m (2019: nil) return on capital from HSBC Finance (Netherlands) resulting from restructuring the Group's Asia operation to meet resolution and recovery requirements.

3 The 2019 year includes \$2,475m impairment of HSBC Overseas Holdings (UK) Limited (2018: reversal of \$2,200m).

HSBC Holdings statement of comprehensive income
for the year ended 31 December

	2019 \$m	2018 \$m	2017 \$m
Profit for the year	9,041	52,825	5,539
Other comprehensive income/(expense)			
Items that will be reclassified subsequently to profit or loss when specific conditions are met:			
Financial investments in HSBC undertakings	–	–	(53)
– fair value gains/(losses)	–	–	(70)
– income taxes	–	–	17
Items that will not be reclassified subsequently to profit or loss:			
Changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	(396)	865	(828)
– before income taxes	(573)	1,090	(1,007)
– income taxes	177	(225)	179
Other comprehensive (expense)/income for the year, net of tax	(396)	865	(881)
Total comprehensive income for the year	8,645	53,690	4,658

HSBC Holdings balance sheet

	Notes*	31 Dec 2019 \$m	31 Dec 2018 \$m
Assets			
Cash and balances with HSBC undertakings		2,382	3,509
Financial assets with HSBC undertakings designated and otherwise mandatorily measured at fair value		61,964	23,513
Derivatives	15	2,002	707
Loans and advances to HSBC undertakings		10,218	56,144
Financial investments		16,106	—
Prepayments, accrued income and other assets		559	126
Current tax assets		203	594
Investments in subsidiaries ¹		161,473	160,231
Intangible assets		333	357
Deferred tax assets		—	—
Total assets at 31 Dec		255,240	245,181
Liabilities and equity			
Liabilities			
Amounts owed to HSBC undertakings		464	949
Financial liabilities designated at fair value	24	30,303	25,049
Derivatives	15	2,021	2,159
Debt securities in issue	25	56,844	50,800
Accruals, deferred income and other liabilities		1,915	994
Subordinated liabilities	28	18,361	17,715
Deferred tax liabilities		288	162
Total liabilities		110,196	97,828
Equity			
Called up share capital	31	10,319	10,180
Share premium account		13,959	13,609
Other equity instruments		20,743	22,231
Other reserves		37,539	39,899
Retained earnings		62,484	61,434
Total equity		145,044	147,353
Total liabilities and equity at 31 Dec		255,240	245,181

* For Notes on the financial statements, see page 240.

1 The 2018 year included \$56,587m (2019: nil) capital injection to HSBC Asia Holdings Limited.

The accompanying notes on pages 240 to 322 and the audited sections in: 'Global businesses and geographical regions' on pages 56 to 71, 'Risk' on pages 73 to 151, 'Capital' on pages 152 to 155 and 'Directors' remuneration report' on pages 184 to 210 form an integral part of these financial statements.

These financial statements were approved by the Board of Directors on 18 February 2020 and signed on its behalf by:

Mark E Tucker
Group Chairman

Ewen Stevenson
Group Chief Financial Officer

HSBC Holdings statement of cash flows
for the year ended 31 December

	2019 \$m	2018 \$m	2017 \$m
Profit before tax	9,259	52,887	5,475
Adjustments for non-cash items	2,657	(46,878)	(17)
– depreciation, amortisation and impairment/expected credit losses	72	70	33
– share-based payment expense	1	–	(2)
– other non-cash items included in profit before tax ¹	2,584	(46,948)	(48)
Changes in operating assets and liabilities			
Change in loans to HSBC undertakings	41,471	7,293	(1,122)
Change in financial assets with HSBC undertakings designated and otherwise mandatorily measured at fair value	(38,451)	(7,305)	(11,944)
Change in financial investments in HSBC undertakings	–	–	(1,775)
Change in net trading securities and net derivatives	(1,433)	758	(2,183)
Change in other assets	(437)	231	134
Change in financial investments	(70)	–	–
Change in debt securities in issue	1,899	(1,094)	1,020
Change in financial liabilities designated at fair value	1,227	(740)	954
Change in other liabilities	437	(1,883)	721
Tax received	459	301	443
Net cash from operating activities	17,018	3,570	(8,294)
Purchase of financial investments	(19,293)	–	–
Proceeds from the sale and maturity of financial investments	6,755	–	1,165
Net cash outflow from acquisition of or increase in stake of subsidiaries	(3,721)	(8,992)	(89)
Repayment of capital from subsidiaries	–	3,627	4,070
Net investment in intangible assets	(44)	(121)	(150)
Net cash from investing activities	(16,303)	(5,486)	4,996
Issue of ordinary share capital and other equity instruments	500	6,652	5,647
Redemption of other equity instruments	–	(6,093)	–
Purchase of treasury shares	–	–	–
Cancellation of shares	(1,006)	(1,998)	(3,000)
Subordinated loan capital issued	–	–	–
Subordinated loan capital repaid	(4,107)	(1,972)	(1,184)
Debt securities issued	10,817	19,513	11,433
Debt securities repaid	–	(1,025)	–
Dividends paid on ordinary shares	(7,582)	(8,693)	(6,987)
Dividends paid to holders of other equity instruments	(1,414)	(1,360)	(1,359)
Net cash from financing activities	(2,792)	5,024	4,550
Net increase/(decrease) in cash and cash equivalents	(2,077)	3,108	1,252
Cash and cash equivalents at 1 January	8,057	4,949	3,697
Cash and cash equivalents at 31 Dec²	5,980	8,057	4,949
Cash and cash equivalents comprise:			
– cash at bank with HSBC undertakings	2,382	3,509	1,985
– loans and advances to banks of one month or less	102	4,548	2,964
– treasury and other eligible bills	3,496	–	–

Interest received was \$2,216m (2018: \$2,116m; 2017: \$2,103m), interest paid was \$3,819m (2018: \$3,379m; 2017: \$2,443m) and dividends received were \$15,117m (2018: \$10,411m; 2017: \$10,039m).

- ¹ The 2018 year included \$44,893m (2019: nil) return on capital from HSBC Finance (Netherlands) resulting from restructuring the Group's Asia operation to meet resolution and recovery requirements.
- ² In 2019, HSBC included settlement accounts with bank counterparties of one month or less on a net basis. Comparatives have been re-presented and also include other cash equivalents not included in 2018 cash and cash equivalents. The net effect of these changes increased cash and cash equivalents by \$1,548m in 2018 and had no impact in 2017.

HSBC Holdings statement of changes in equity

for the year ended 31 December

					Other reserves			Total shareholders' equity \$m
	Called up share capital	Share premium	Other equity instruments	Retained earnings ^{1,2}	Financial assets at FVOCI reserve	Merger and other reserves ²		
	\$m	\$m	\$m	\$m	\$m	\$m		
At 1 Jan 2019	10,180	13,609	22,231	61,434	—	39,899	147,353	
Profit for the year	—	—	—	9,041	—	—	9,041	
Other comprehensive income (net of tax)	—	—	—	(396)	—	—	(396)	
– changes in fair value of financial liabilities designated at fair value upon initial recognition arising from changes in own credit risk	—	—	—	(396)	—	—	(396)	
Total comprehensive income for the year	—	—	—	8,645	—	—	8,645	
Shares issued under employee share plans	36	521	—	(56)	—	—	501	
Shares issued in lieu of dividends and amounts arising thereon	171	(171)	—	2,687	—	—	2,687	
Cancellation of shares ³	(68)	—	—	(1,000)	—	68	(1,000)	
Capital securities issued	—	—	—	—	—	—	—	
Dividends to shareholders	—	—	—	(11,683)	—	—	(11,683)	
Redemption of capital securities	—	—	(1,488)	(20)	—	—	(1,508)	
Transfers ⁵	—	—	—	2,475	—	(2,475)	—	
Other movements	—	—	—	2	—	47	49	
At 31 Dec 2019	10,319	13,959	20,743	62,484	—	37,539	145,044	
At 31 Dec 2017	10,160	10,177	22,107	23,903	59	37,381	103,787	
Impact on transition to IFRS 9	—	—	—	949	(59)	—	890	
At 1 Jan 2018	10,160	10,177	22,107	24,852	—	37,381	104,677	
Profit for the year	—	—	—	52,825	—	—	52,825	
Other comprehensive income (net of tax)	—	—	—	865	—	—	865	
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk	—	—	—	865	—	—	865	
Total comprehensive income for the year	—	—	—	53,690	—	—	53,690	
Shares issued under employee share plans	42	679	—	—	—	—	721	
Shares issued in lieu of dividends and amounts arising thereon	83	(83)	—	1,494	—	—	1,494	
Cancellation of shares ⁴	(105)	2,836	—	(4,998)	—	269	(1,998)	
Capital securities issued	—	—	5,967	—	—	—	5,967	
Dividends to shareholders	—	—	—	(11,547)	—	—	(11,547)	
Redemption of capital securities	—	—	(5,843)	(236)	—	—	(6,079)	
Transfers ⁵	—	—	—	(2,200)	—	2,200	—	
Other movements	—	—	—	379	—	49	428	
At 31 Dec 2018	10,180	13,609	22,231	61,434	—	39,899	147,353	
At 1 Jan 2017	10,096	12,619	17,004	27,656	112	37,371	104,858	
Profit for the year	—	—	—	5,539	—	—	5,539	
Other comprehensive income (net of tax)	—	—	—	(828)	(53)	—	(881)	
– available-for-sale investments	—	—	—	—	(53)	—	(53)	
– changes in fair value of financial liabilities designated at fair value due to movement in own credit risk	—	—	—	(828)	—	—	(828)	
Total comprehensive income for the year	—	—	—	4,711	(53)	—	4,658	
Shares issued under employee share plans	38	584	—	(52)	—	—	570	
Shares issued in lieu of dividends and amounts arising thereon	190	(190)	—	3,205	—	—	3,205	
Cancellation of shares	(164)	(2,836)	—	—	—	—	(3,000)	
Capital securities issued	—	—	5,103	—	—	—	5,103	
Dividends to shareholders	—	—	—	(11,551)	—	—	(11,551)	
Cost of share-based payment arrangements	—	—	—	(2)	—	—	(2)	
Other movements	—	—	—	(64)	—	10	(54)	
At 31 Dec 2017	10,160	10,177	22,107	23,903	59	37,381	103,787	

Dividends per ordinary share at 31 December 2019 were \$0.51 (2018: \$0.51; 2017: \$0.51).

- At 31 December 2019, retained earnings included 326,191,804 (\$2,543m) of treasury shares (2018: 326,503,319 (\$2,546m); 2017: 326,843,840 (\$2,542m)).
- HSBC Holdings distributable reserves at 31 December 2019 of \$31,656m (2018: \$30,705m) represents realised profits for the year included in retained earnings of \$11,516m (2018: \$14,974m) and in merger reserve of \$15,731m (2018: \$15,731m). The distributable reserves are lower than retained earnings of \$62,484m (2018: \$61,434m). In 2018, \$44,893m (2019: nil) represented income generated from restructuring the Group's Asia operation to meet resolution and recovery requirements, which does not form part of distributable reserves.
- In August 2019, HSBC announced a share buy-back of up to \$1.0bn, which was completed in September 2019.
- The 2018 year included a re-presentation of the cancellation of shares to retained earnings and capital redemption reserve in respect of the 2017 share buy-back, under which retained earnings has been reduced by \$3,000m, share premium increased by \$2,836m and other reserves increased by \$164m.
- Permitted transfers from the merger reserve to retained earnings were made when the investment in HSBC Overseas Holdings (UK) Limited was previously impaired. In 2018, a part reversal of this impairment resulted in a transfer from retained earnings back to the merger reserve of \$2,200m. At 31 December 2019, an additional impairment of \$2,475m was recognised and a permitted transfer of this amount was made from the merger reserve to retained earnings.

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1 Basis of preparation and significant accounting policies

1.1 Basis of preparation

(a) Compliance with International Financial Reporting Standards

The consolidated financial statements of HSBC and the separate financial statements of HSBC Holdings have been prepared in accordance with International Financial Reporting Standards ('IFRSs') as issued by the International Accounting Standards Board ('IASB'), including interpretations issued by the IFRS Interpretations Committee, and as endorsed by the European Union ('EU'). Interest Rate Benchmark Reform: Amendments to IFRS 9 and IAS 39 'Financial Instruments', was endorsed in January 2020 and has been early adopted as set out below. Therefore, there were no unendorsed standards effective for the year ended 31 December 2019 affecting these consolidated and separate financial statements, and HSBC's application of IFRSs results in no differences between IFRSs as issued by the IASB and IFRSs as endorsed by the EU.

Standards adopted during the year ended 31 December 2019

IFRS 16 'Leases'

On 1 January 2019, we adopted the requirements of IFRS 16 retrospectively. The cumulative effect of initially applying the standard was recognised as an adjustment to the opening balance of retained earnings at that date. Comparatives were not restated. The adoption of the standard increased assets by \$5bn and increased financial liabilities by the same amount with no effect on net assets or retained earnings.

On adoption of IFRS 16, we recognised lease liabilities in relation to leases that had previously been classified as 'operating leases' in accordance with IAS 17 'Leases'. These liabilities were recognised in 'other liabilities' and measured at the present value of the remaining lease payments, discounted at the lessee's incremental borrowing rate at 1 January 2019. The associated right of use ('ROU') assets were recognised in 'other assets' and measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments or provisions for onerous leases recognised on the balance sheet at 31 December 2018. In addition, the following practical expedients permitted by the standard were applied:

- reliance was placed on previous assessments on whether leases were onerous;
- operating leases with a remaining lease term of less than 12 months at 1 January 2019 were treated as short-term leases; and
- initial direct costs were not included in the measurement of ROU assets for leases previously accounted for as operating leases.

The differences between IAS 17 and IFRS 16 are summarised in the table below:

IAS 17	IFRS 16
Leases were classified as either finance or operating leases. Payments made under operating leases were charged to profit or loss on a straight-line basis over the period of the lease.	Leases are recognised as an ROU asset and a corresponding liability at the date at which the leased asset is made available for use. Lease payments are allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease term so as to produce a constant period rate of interest on the remaining balance of the liability. The ROU asset is depreciated over the shorter of the ROU asset's useful economic life and the lease term on a straight-line basis. In determining the lease term, we consider all facts and circumstances that create an economic incentive to exercise an extension option or not exercise a termination option over the planning horizon of five years. In general, it is not expected that the discount rate implicit in the lease is available so the lessee's incremental borrowing rate is used. This is the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of a similar value in a similar economic environment with similar terms and conditions. The rates are determined for each economic environment in which we operate and for each term by adjusting swap rates with funding spreads (own credit spread) and cross-currency basis where appropriate.

Interest Rate Benchmark Reform: Amendments to IFRS 9 and IAS 39 'Financial Instruments'

Amendments to IFRS 9 and IAS 39 issued in September 2019 modify specific hedge accounting requirements so that entities apply those hedge accounting requirements assuming that the interest rate benchmark on which the hedged cash flows and cash flows of the hedging instrument are based is not altered as a result of interest rate benchmark reform. These amendments replace the need for specific judgements to determine whether certain hedge accounting relationships that hedge the variability of cash flows or interest rate risk exposures for periods after the interest rate benchmarks are expected to be reformed or replaced continue to qualify for hedge accounting as at 31 December 2019. For example, in the context of cash flow hedging, the amendments require the interest rate benchmark on which the hedged cash flows are based, or on which the cash flows of the hedging instrument are based, to be assumed to be unaltered over the period of the documented hedge relationship, while uncertainty over the interest rate benchmark reform exists. The IASB is expected to provide further guidance on the implication for hedge accounting during the reform process and after the reform uncertainty is resolved.

These amendments apply from 1 January 2020 with early adoption permitted. HSBC has adopted the amendments that apply to IAS 39 from 1 January 2019 and has made the additional disclosures as required by the amendments. Further information is included in Note 15.

Amendment to IAS 12 'Income Taxes' and other changes

An amendment to IAS 12 was issued in December 2017 as part of the annual improvement cycle. The amendment clarifies that an entity should recognise the tax consequences of dividends where the transactions or events that generated the distributable profits are recognised. This amendment was applied on 1 January 2019 and had no material impact. Comparatives have not been restated.

In addition, HSBC has adopted a number of interpretations and amendments to standards, which have had an insignificant effect on the consolidated financial statements of HSBC and the separate financial statements of HSBC Holdings. In 2018, HSBC adopted IFRS 9 and made voluntary presentation changes, including to certain financial liabilities, which contain both deposit and derivative components, and to cash collateral, margin and settlement accounts. The impact of this is included in the HSBC Holdings statement of changes in equity for that year end and 2017 comparatives were not restated.

(b) Differences between IFRSs and Hong Kong Financial Reporting Standards

There are no significant differences between IFRSs and Hong Kong Financial Reporting Standards in terms of their application to HSBC, and consequently there would be no significant differences had the financial statements been prepared in accordance with Hong Kong Financial Reporting Standards. The 'Notes on the financial statements', taken together with the 'Report of the Directors', include the aggregate of all disclosures necessary to satisfy IFRSs and Hong Kong reporting requirements.

(c) Future accounting developments

Minor amendments to IFRSs

The IASB has published a number of minor amendments to IFRSs that are effective from 1 January 2020, some of which have been endorsed for use in the EU. HSBC expects they will have an insignificant effect, when adopted, on the consolidated financial statements of HSBC and the separate financial statements of HSBC Holdings.

Major new IFRSs

IFRS 17 'Insurance Contracts'

IFRS 17 'Insurance Contracts' was issued in May 2017 and sets out the requirements that an entity should apply in accounting for insurance contracts it issues and reinsurance contracts it holds. IFRS 17 is currently effective from 1 January 2021. However, the IASB is considering delaying the mandatory implementation date by one year and may make additional changes to the standard. The Group is in the process of implementing IFRS 17. Industry practice and interpretation of the standard are still developing and there may be changes to it. Therefore the likely impact of its implementation remains uncertain.

(d) Foreign currencies

HSBC's consolidated financial statements are presented in US dollars because the US dollar and currencies linked to it form the major currency bloc in which HSBC transacts and funds its business. The US dollar is also HSBC Holdings' functional currency because the US dollar and currencies linked to it are the most significant currencies relevant to the underlying transactions, events and conditions of its subsidiaries, as well as representing a significant proportion of its funds generated from financing activities.

Transactions in foreign currencies are recorded at the rate of exchange on the date of the transaction. Assets and liabilities denominated in foreign currencies are translated at the rate of exchange at the balance sheet date, except non-monetary assets and liabilities measured at historical cost, which are translated using the rate of exchange at the initial transaction date. Exchange differences are included in other comprehensive income or in the income statement depending on where the gain or loss on the underlying item is recognised.

In the consolidated financial statements, the assets, liabilities and results of foreign operations, whose functional currency is not US dollars, are translated into the Group's presentation currency at the reporting date. Exchange differences arising are recognised in other comprehensive income. On disposal of a foreign operation, exchange differences previously recognised in other comprehensive income are reclassified to the income statement.

(e) Presentation of information

Certain disclosures required by IFRSs have been included in the sections marked as ('Audited') in this *Annual Report and Accounts 2019* as follows:

- disclosures concerning the nature and extent of risks relating to insurance contracts and financial instruments are included in the 'Report of the Directors: Risk' on pages 73 to 151;
- the 'Own funds disclosure' included in the 'Report of the Directors: Capital' on pages 152 to 155; and
- disclosures relating to HSBC's securitisation activities and structured products are included in the 'Report of the Directors: Risk' on pages 73 to 151.

In accordance with the policy to provide disclosures that help investors and other stakeholders understand the Group's performance, financial position and changes to them, the information provided in the 'Notes on the financial statements' and the 'Report of the Directors' goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements and listing rules.

Notes on the financial statements

In addition, HSBC follows the UK Finance Disclosure Code ('the UKF Disclosure Code'). The UKF Disclosure Code aims to increase the quality and comparability of UK banks' disclosures and sets out five disclosure principles together with supporting guidance agreed in 2010. In line with the principles of the UKF Disclosure Code, HSBC assesses good practice recommendations issued from time to time by relevant regulators and standard setters, and will assess the applicability and relevance of such guidance, enhancing disclosures where appropriate.

(f) Critical accounting estimates and judgements

The preparation of financial information requires the use of estimates and judgements about future conditions. In view of the inherent uncertainties and the high level of subjectivity involved in the recognition or measurement of items, highlighted as the 'critical accounting estimates and judgements' in section 1.2 below, it is possible that the outcomes in the next financial year could differ from those on which management's estimates are based. This could result in materially different estimates and judgements from those reached by management for the purposes of these financial statements. Management's selection of HSBC's accounting policies that contain critical estimates and judgements reflects the materiality of the items to which the policies are applied and the high degree of judgement and estimation uncertainty involved.

(g) Segmental analysis

HSBC's Chief Operating Decision Maker is the Group Chief Executive, who is supported by the rest of the Group Management Board ('GMB'), which operates as a general management committee under the direct authority of the Board. Operating segments are reported in a manner consistent with the internal reporting provided to the Group Chief Executive and the GMB.

Measurement of segmental assets, liabilities, income and expenses is in accordance with the Group's accounting policies. Segmental income and expenses include transfers between segments, and these transfers are conducted at arm's length. Shared costs are included in segments on the basis of the actual recharges made.

(h) Going concern

The financial statements are prepared on a going concern basis, as the Directors are satisfied that the Group and parent company have the resources to continue in business for the foreseeable future. In making this assessment, the Directors have considered a wide range of information relating to present and future conditions, including future projections of profitability, cash flows and capital resources.

1.2 Summary of significant accounting policies

(a) Consolidation and related policies

Investments in subsidiaries

Where an entity is governed by voting rights, HSBC consolidates when it holds – directly or indirectly – the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power to direct relevant activities, and whether power is held as agent or principal.

Business combinations are accounted for using the acquisition method. The amount of non-controlling interest is measured either at fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. This election is made for each business combination.

HSBC Holdings' investments in subsidiaries are stated at cost less impairment losses.

Goodwill

Goodwill is allocated to cash-generating units ('CGUs') for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. HSBC's CGUs are based on geographical regions subdivided by global business, except for Global Banking and Markets, for which goodwill is monitored on a global basis.

Impairment testing is performed at least once a year, or whenever there is an indication of impairment, by comparing the recoverable amount of a CGU with its carrying amount.

Goodwill is included in a disposal group if the disposal group is a CGU to which goodwill has been allocated or it is an operation within such a CGU. The amount of goodwill included in a disposal group is measured on the basis of the relative values of the operation disposed of and the portion of the CGU retained.

Critical accounting estimates and judgements

The review of goodwill for impairment reflects management's best estimate of the future cash flows of the CGUs and the rates used to discount these cash flows, both of which are subject to uncertain factors as follows:

Judgements	Estimates
The accuracy of forecast cash flows is subject to a high degree of uncertainty in volatile market conditions. Where such circumstances are determined to exist, management re-tests goodwill for impairment more frequently than once a year when indicators of impairment exist. This ensures that the assumptions on which the cash flow forecasts are based continue to reflect current market conditions and management's best estimate of future business prospects	- The future cash flows of the CGUs are sensitive to the cash flows projected for the periods for which detailed forecasts are available and to assumptions regarding the long-term pattern of sustainable cash flows thereafter. Forecasts are compared with actual performance and verifiable economic data, but they reflect management's view of future business prospects at the time of the assessment - The rates used to discount future expected cash flows can have a significant effect on their valuation, and are based on the costs of capital assigned to individual CGUs. The cost of capital percentage is generally derived from a capital asset pricing model, which incorporates inputs reflecting a number of financial and economic variables, including the risk-free interest rate in the country concerned and a premium for the risk of the business being evaluated. These variables are subject to fluctuations in external market rates and economic conditions beyond management's control - Key assumptions used in estimating goodwill impairment are described in Note 21

HSBC sponsored structured entities

HSBC is considered to sponsor another entity if, in addition to ongoing involvement with the entity, it had a key role in establishing that entity or in bringing together relevant counterparties so the transaction that is the purpose of the entity could occur. HSBC is generally not considered a sponsor if the only involvement with the entity is merely administrative.

Interests in associates and joint arrangements

Joint arrangements are investments in which HSBC, together with one or more parties, has joint control. Depending on HSBC's rights and obligations, the joint arrangement is classified as either a joint operation or a joint venture. HSBC classifies investments in entities over which it has significant influence, and that are neither subsidiaries nor joint arrangements, as associates.

HSBC recognises its share of the assets, liabilities and results in a joint operation. Investments in associates and interests in joint ventures are recognised using the equity method. The attributable share of the results and reserves of joint ventures and associates is included in the consolidated financial statements of HSBC based on either financial statements made up to 31 December or pro-rated amounts adjusted for any material transactions or events occurring between the date the financial statements are available and 31 December.

Investments in associates and joint ventures are assessed at each reporting date and tested for impairment when there is an indication that the investment may be impaired. Goodwill on acquisitions of interests in joint ventures and associates is not tested separately for impairment, but is assessed as part of the carrying amount of the investment.

Critical accounting estimates and judgements

The most significant critical accounting judgements and estimates relate to the assessment of impairment of our investment in Bank of Communications Co. Limited ('BoCom'), which involves estimations of value in use:

Judgements	Estimates
	- Management's best estimate of BoCom's earnings are based on management's explicit forecasts over the short to medium term and the capital maintenance charge, which is management's forecast of the earnings that need to be withheld in order for BoCom to meet regulatory requirements over the forecast period, both of which are subject to uncertain factors - Key assumptions used in estimating BoCom's value in use, the sensitivity of the value in use calculations to different assumptions and a sensitivity analysis that shows the changes in key assumptions that would reduce the excess of value in use over the carrying amount (the 'headroom') to nil are described in Note 18

(b) Income and expense

Operating income

Interest income and expense

Interest income and expense for all financial instruments, excluding those classified as held for trading or designated at fair value, are recognised in 'Interest income' and 'Interest expense' in the income statement using the effective interest method. However, as an exception to this, interest on debt instruments issued by HSBC for funding purposes that are designated under the fair value option to reduce an accounting mismatch and on derivatives managed in conjunction with those debt instruments is included in interest expense.

Interest on credit-impaired financial assets is recognised using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

Non-interest income and expense

HSBC generates fee income from services provided at a fixed price over time, such as account service and card fees, or when HSBC delivers a specific transaction at a point in time, such as broking services and import/export services. With the exception of certain fund management and performance fees, all other fees are generated at a fixed price. Fund management and performance fees can be variable depending on the size of the customer portfolio and HSBC's performance as fund manager. Variable fees are recognised when all uncertainties are resolved. Fee income is generally earned from short-term contracts with payment terms that do not include a significant financing component.

HSBC acts as principal in the majority of contracts with customers, with the exception of broking services. For most brokerage trades, HSBC acts as agent in the transaction and recognises broking income net of fees payable to other parties in the arrangement.

HSBC recognises fees earned on transaction-based arrangements at a point in time when it has fully provided the service to the customer. Where the contract requires services to be provided over time, income is recognised on a systematic basis over the life of the agreement.

Where HSBC offers a package of services that contains multiple non-distinct performance obligations, such as those included in account service packages, the promised services are treated as a single performance obligation. If a package of services contains distinct performance obligations, such as those including both account and insurance services, the corresponding transaction price is allocated to each performance obligation based on the estimated stand-alone selling prices.

Dividend income is recognised when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders approve the dividend for unlisted equity securities.

Net income/(expense) from financial instruments measured at fair value through profit or loss includes the following:

- 'Net income from financial instruments held for trading or managed on a fair value basis': This comprises net trading income, which includes all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading and other financial instruments managed on a fair value basis, together with the related interest income, expense and dividends, excluding the effect of changes in the credit risk of liabilities managed on a fair value basis. It also includes all gains and losses from changes in the fair value of derivatives that are managed in conjunction with financial assets and liabilities measured at fair value through profit or loss.
- 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss': This includes interest income, interest expense and dividend income in respect of financial assets and liabilities measured at fair value through profit or loss; and those derivatives managed in conjunction with the above that can be separately identifiable from other trading derivatives.
- 'Changes in fair value of designated debt instruments and related derivatives': Interest paid on debt instruments and interest cash flows on related derivatives is presented in interest expense where doing so reduces an accounting mismatch.

Notes on the financial statements

- 'Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss': This includes interest on instruments that fail the solely payments of principal and interest test, see (d) below.

The accounting policies for insurance premium income are disclosed in Note 1.2(j).

(c) Valuation of financial instruments

All financial instruments are initially recognised at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of a financial instrument on initial recognition is generally its transaction price (that is, the fair value of the consideration given or received). However, if there is a difference between the transaction price and the fair value of financial instruments whose fair value is based on a quoted price in an active market or a valuation technique that uses only data from observable markets, HSBC recognises the difference as a trading gain or loss at inception (a 'day 1 gain or loss'). In all other cases, the entire day 1 gain or loss is deferred and recognised in the income statement over the life of the transaction until the transaction matures, is closed out, the valuation inputs become observable or HSBC enters into an offsetting transaction.

The fair value of financial instruments is generally measured on an individual basis. However, in cases where HSBC manages a group of financial assets and liabilities according to its net market or credit risk exposure, the fair value of the group of financial instruments is measured on a net basis but the underlying financial assets and liabilities are presented separately in the financial statements, unless they satisfy the IFRS offsetting criteria.

Critical accounting estimates and judgements

The majority of valuation techniques employ only observable market data. However, certain financial instruments are classified on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them, the measurement of fair value is more judgemental:

Judgements	Estimates
• An instrument in its entirety is classified as valued using significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit or greater than 5% of the instrument's valuation is driven by unobservable inputs • 'Unobservable' in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used)	• Details on the Group's level 3 financial instruments and the sensitivity of their valuation to the effect of applying reasonable possible alternative assumptions in determining their fair value are set out in Note 12

(d) Financial instruments measured at amortised cost

Financial assets that are held to collect the contractual cash flows and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at amortised cost. Such financial assets include most loans and advances to banks and customers and some debt securities. In addition, most financial liabilities are measured at amortised cost. HSBC accounts for regular way amortised cost financial instruments using trade date accounting. The carrying value of these financial assets at initial recognition includes any directly attributable transactions costs. If the initial fair value is lower than the cash amount advanced, such as in the case of some leveraged finance and syndicated lending activities, the difference is deferred and recognised over the life of the loan through the recognition of interest income.

HSBC may commit to underwriting loans on fixed contractual terms for specified periods of time. When the loan arising from the lending commitment is expected to be held for trading, the commitment to lend is recorded as a derivative. When HSBC intends to hold the loan, the loan commitment is included in the impairment calculations set out below.

Non-trading reverse repurchase, repurchase and similar agreements

When debt securities are sold subject to a commitment to repurchase them at a predetermined price ('repos'), they remain on the balance sheet and a liability is recorded in respect of the consideration received. Securities purchased under commitments to resell ('reverse repos') are not recognised on the balance sheet and an asset is recorded in respect of the initial consideration paid. Non-trading repos and reverse repos are measured at amortised cost. The difference between the sale and repurchase price or between the purchase and resale price is treated as interest and recognised in net interest income over the life of the agreement.

Contracts that are economically equivalent to reverse repo or repo agreements (such as sales or purchases of debt securities entered into together with total return swaps with the same counterparty) are accounted for similarly to, and presented together with, reverse repo or repo agreements.

(e) Financial assets measured at fair value through other comprehensive income

Financial assets held for a business model that is achieved by both collecting contractual cash flows and selling and which contain contractual terms that give rise on specified dates to cash flows that are solely payments of principal and interest are measured at fair value through other comprehensive income ('FVOCI'). These comprise primarily debt securities. They are recognised on the trade date when HSBC enters into contractual arrangements to purchase and are normally derecognised when they are either sold or redeemed. They are subsequently remeasured at fair value and changes therein (except for those relating to impairment, interest income and foreign currency exchange gains and losses) are recognised in other comprehensive income until the assets are sold. Upon disposal, the cumulative gains or losses in other comprehensive income are recognised in the income statement as 'Gains less losses from financial instruments'. Financial assets measured at FVOCI are included in the impairment calculations set out below and impairment is recognised in profit or loss.

(f) Equity securities measured at fair value with fair value movements presented in other comprehensive income

The equity securities for which fair value movements are shown in other comprehensive income are business facilitation and other similar investments where HSBC holds the investments other than to generate a capital return. Gains or losses on the derecognition of these equity securities are not transferred to profit or loss. Otherwise, equity securities are measured at fair value through profit or loss (except for dividend income, which is recognised in profit or loss).

(g) Financial instruments designated at fair value through profit or loss

Financial instruments, other than those held for trading, are classified in this category if they meet one or more of the criteria set out below and are so designated irrevocably at inception:

- the use of the designation removes or significantly reduces an accounting mismatch;
- a group of financial assets and liabilities or a group of financial liabilities is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy; and
- the financial liability contains one or more non-closely related embedded derivatives.

Designated financial assets are recognised when HSBC enters into contracts with counterparties, which is generally on trade date, and are normally derecognised when the rights to the cash flows expire or are transferred. Designated financial liabilities are recognised when HSBC enters into contracts with counterparties, which is generally on settlement date, and are normally derecognised when extinguished. Subsequent changes in fair values are recognised in the income statement in 'Net income from financial instruments held for trading or managed on a fair value basis' or 'Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss' except for the effect of changes in the liabilities' credit risk, which is presented in 'Other comprehensive income', unless that treatment would create or enlarge an accounting mismatch in profit or loss.

Under the above criterion, the main classes of financial instruments designated by HSBC are:

- Debt instruments for funding purposes that are designated to reduce an accounting mismatch: The interest and/or foreign exchange exposure on certain fixed-rate debt securities issued has been matched with the interest and/or foreign exchange exposure on certain swaps as part of a documented risk management strategy.
- Financial assets and financial liabilities under unit-linked and non-linked investment contracts: A contract under which HSBC does not accept significant insurance risk from another party is not classified as an insurance contract, other than investment contracts with discretionary participation features ('DPF'), but is accounted for as a financial liability. Customer liabilities under linked and certain non-linked investment contracts issued by insurance subsidiaries are determined based on the fair value of the assets held in the linked funds. If no fair value designation was made for the related assets, at least some of the assets would otherwise be measured at either fair value through other comprehensive income or amortised cost. The related financial assets and liabilities are managed and reported to management on a fair value basis. Designation at fair value of the financial assets and related liabilities allows changes in fair values to be recorded in the income statement and presented in the same line.
- Financial liabilities that contain both deposit and derivative components: These financial liabilities are managed and their performance evaluated on a fair value basis.

(h) Derivatives

Derivatives are financial instruments that derive their value from the price of underlying items such as equities, interest rates or other indices. Derivatives are recognised initially and are subsequently measured at fair value through profit or loss. Derivatives are classified as assets when their fair value is positive or as liabilities when their fair value is negative. This includes embedded derivatives in financial liabilities, which are bifurcated from the host contract when they meet the definition of a derivative on a stand-alone basis.

Where the derivatives are managed with debt securities issued by HSBC that are designated at fair value, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt.

Hedge accounting

When derivatives are not part of fair value designated relationships, if held for risk management purposes they are designated in hedge accounting relationships where the required criteria for documentation and hedge effectiveness are met. HSBC uses these derivatives or, where allowed, other non-derivative hedging instruments in fair value hedges, cash flow hedges or hedges of net investments in foreign operations as appropriate to the risk being hedged.

Fair value hedge

Fair value hedge accounting does not change the recording of gains and losses on derivatives and other hedging instruments, but results in recognising changes in the fair value of the hedged assets or liabilities attributable to the hedged risk that would not otherwise be recognised in the income statement. If a hedge relationship no longer meets the criteria for hedge accounting, hedge accounting is discontinued and the cumulative adjustment to the carrying amount of the hedged item is amortised to the income statement on a recalculated effective interest rate, unless the hedged item has been derecognised, in which case it is recognised in the income statement immediately.

Cash flow hedge

The effective portion of gains and losses on hedging instruments is recognised in other comprehensive income and the ineffective portion of the change in fair value of derivative hedging instruments that are part of a cash flow hedge relationship is recognised immediately in the income statement within 'Net income from financial instruments held for trading or managed on a fair value basis'. The accumulated gains and losses recognised in other comprehensive income are reclassified to the income statement in the same periods in which the hedged item affects profit or loss. When a hedge relationship is discontinued, or partially discontinued, any cumulative gain or loss recognised in other comprehensive income remains in equity until the forecast transaction is recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss previously recognised in other comprehensive income is immediately reclassified to the income statement.

Net investment hedge

Hedges of net investments in foreign operations are accounted for in a similar way to cash flow hedges. The effective portion of gains and losses on the hedging instrument is recognised in other comprehensive income and other gains and losses are recognised immediately in the income statement. Gains and losses previously recognised in other comprehensive income are reclassified to the income statement on the disposal, or part disposal, of the foreign operation.

Derivatives that do not qualify for hedge accounting

Non-qualifying hedges are derivatives entered into as economic hedges of assets and liabilities for which hedge accounting was not applied.

(i) Impairment of amortised cost and FVOCI financial assets

Expected credit losses ('ECL') are recognised for loans and advances to banks and customers, non-trading reverse repurchase agreements, other financial assets held at amortised cost, debt instruments measured at FVOCI, and certain loan commitments and financial guarantee contracts. At initial recognition, allowance (or provision in the case of some loan commitments and financial guarantees) is required for ECL resulting from default events that are possible within the next 12 months, or less, where the remaining life is less than 12 months ('12-month ECL'). In the event of a significant increase in credit risk, allowance (or provision) is required for ECL resulting from all possible default events over the expected life of the financial instrument ('lifetime ECL'). Financial assets where 12-month ECL is recognised are considered to be 'stage 1'; financial assets that are considered to have experienced a significant increase in credit risk are in 'stage 2'; and financial assets for which there is objective evidence of impairment so are considered to be in default or otherwise credit impaired are in 'stage 3'. Purchased or originated credit-impaired financial assets ('POCI') are treated differently, as set out below.

Credit impaired (stage 3)

HSBC determines that a financial instrument is credit impaired and in stage 3 by considering relevant objective evidence, primarily whether:

- contractual payments of either principal or interest are past due for more than 90 days;
- there are other indications that the borrower is unlikely to pay, such as when a concession has been granted to the borrower for economic or legal reasons relating to the borrower's financial condition; and
- the loan is otherwise considered to be in default.

If such unlikelihood to pay is not identified at an earlier stage, it is deemed to occur when an exposure is 90 days past due, even where regulatory rules permit default to be defined based on 180 days past due. Therefore, the definitions of credit impaired and default are aligned as far as possible so that stage 3 represents all loans that are considered defaulted or otherwise credit impaired.

Interest income is recognised by applying the effective interest rate to the amortised cost amount, i.e. gross carrying amount less ECL allowance.

Write-off

Financial assets (and the related impairment allowances) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realisation of security. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

Renegotiation

Loans are identified as renegotiated and classified as credit impaired when we modify the contractual payment terms due to significant credit distress of the borrower. Renegotiated loans remain classified as credit impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows and retain the designation of renegotiated until maturity or derecognition.

A loan that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement is made on substantially different terms, or if the terms of an existing agreement are modified such that the renegotiated loan is a substantially different financial instrument. Any new loans that arise following derecognition events in these circumstances are considered to be POCI and will continue to be disclosed as renegotiated loans.

Other than originated credit-impaired loans, all other modified loans could be transferred out of stage 3 if they no longer exhibit any evidence of being credit impaired and, in the case of renegotiated loans, there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows over the minimum observation period, and there are no other indicators of impairment. These loans could be transferred to stage 1 or 2 based on the mechanism as described below by comparing the risk of a default occurring at the reporting date (based on the modified contractual terms) and the risk of a default occurring at initial recognition (based on the original, unmodified contractual terms). Any amount written off as a result of the modification of contractual terms would not be reversed.

Loan modifications that are not credit impaired

Loan modifications that are not identified as renegotiated are considered to be commercial restructuring. Where a commercial restructuring results in a modification (whether legalised through an amendment to the existing terms or the issuance of a new loan contract) such that HSBC's rights to the cash flows under the original contract have expired, the old loan is derecognised and the new loan is recognised at fair value. The rights to cash flows are generally considered to have expired if the commercial restructure is at market rates and no payment-related concession has been provided.

Significant increase in credit risk (stage 2)

An assessment of whether credit risk has increased significantly since initial recognition is performed at each reporting period by considering the change in the risk of default occurring over the remaining life of the financial instrument. The assessment explicitly or implicitly compares the risk of default occurring at the reporting date compared with that at initial recognition, taking into account reasonable and supportable information, including information about past events, current conditions and future economic conditions. The assessment is unbiased, probability-weighted, and to the extent relevant, uses forward-looking information consistent with that used in the measurement of ECL. The analysis of credit risk is multifactor. The determination of whether a specific factor is relevant and its weight compared with other factors depends on the type of product, the characteristics of the financial instrument and the borrower, and the geographical region. Therefore, it is not possible to provide a single set of criteria that will determine what is considered to be a significant increase in credit risk, and these criteria will differ for different types of lending, particularly between retail and wholesale. However, unless identified at an earlier stage, all financial assets are deemed to have suffered a significant increase in credit risk when 30 days past due. In addition, wholesale loans that are individually assessed, which are typically corporate and commercial customers, and included on a watch or worry list, are included in stage 2.

For wholesale portfolios, the quantitative comparison assesses default risk using a lifetime probability of default ('PD'), which encompasses a wide range of information including the obligor's customer risk rating ('CRR'), macroeconomic condition forecasts and credit transition probabilities. For origination CRRs up to 3.3, significant increase in credit risk is measured by comparing the average PD

for the remaining term estimated at origination with the equivalent estimation at the reporting date. The quantitative measure of significance varies depending on the credit quality at origination as follows:

Origination CRR	Significance trigger – PD to increase by
0.1–1.2	15bps
2.1–3.3	30bps

For CRRs greater than 3.3 that are not impaired, a significant increase in credit risk is considered to have occurred when the origination PD has doubled. The significance of changes in PD was informed by expert credit risk judgement, referenced to historical credit migrations and to relative changes in external market rates.

For loans originated prior to the implementation of IFRS 9, the origination PD does not include adjustments to reflect expectations of future macroeconomic conditions since these are not available without the use of hindsight. In the absence of this data, origination PD must be approximated assuming through-the-cycle ('TTC') PDs and TTC migration probabilities, consistent with the instrument's underlying modelling approach and the CRR at origination. For these loans, the quantitative comparison is supplemented with additional CRR deterioration-based thresholds, as set out in the table below:

Origination CRR	Additional significance criteria – number of CRR grade notches deterioration required to identify as significant credit deterioration (stage 2) (> or equal to)
0.1	5 notches
1.1–4.2	4 notches
4.3–5.1	3 notches
5.2–7.1	2 notches
7.2–8.2	1 notch
8.3	0 notch

Further information about the 23-grade scale used for CRR can be found on page 85.

For certain portfolios of debt securities where external market ratings are available and credit ratings are not used in credit risk management, the debt securities will be in stage 2 if their credit risk increases to the extent they are no longer considered investment grade. Investment grade is where the financial instrument has a low risk of incurring losses, the structure has a strong capacity to meet its contractual cash flow obligations in the near term, and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil their contractual cash flow obligations.

For retail portfolios, default risk is assessed using a reporting date 12-month PD derived from credit scores, which incorporates all available information about the customer. This PD is adjusted for the effect of macroeconomic forecasts for periods longer than 12 months and is considered to be a reasonable approximation of a lifetime PD measure. Retail exposures are first segmented into homogeneous portfolios, generally by country, product and brand. Within each portfolio, the stage 2 accounts are defined as accounts with an adjusted 12-month PD greater than the average 12-month PD of loans in that portfolio 12 months before they become 30 days past due. The expert credit risk judgement is that no prior increase in credit risk is significant. This portfolio-specific threshold identifies loans with a PD higher than would be expected from loans that are performing as originally expected, and higher than what would have been acceptable at origination. It therefore approximates a comparison of origination to reporting date PDs.

Unimpaired and without significant increase in credit risk (stage 1)

ECL resulting from default events that are possible within the next 12 months ('12-month ECL') are recognised for financial instruments that remain in stage 1.

Purchased or originated credit impaired

Financial assets that are purchased or originated at a deep discount that reflects the incurred credit losses are considered to be POCI. This population includes the recognition of a new financial instrument following a renegotiation where concessions have been granted for economic or contractual reasons relating to the borrower's financial difficulty that otherwise would not have been considered. The amount of change-in-lifetime ECL is recognised in profit or loss until the POCI is derecognised, even if the lifetime ECL are less than the amount of ECL included in the estimated cash flows on initial recognition.

Movement between stages

Financial assets can be transferred between the different categories (other than POCI) depending on their relative increase in credit risk since initial recognition. Financial instruments are transferred out of stage 2 if their credit risk is no longer considered to be significantly increased since initial recognition based on the assessments described above. Except for renegotiated loans, financial instruments are transferred out of stage 3 when they no longer exhibit any evidence of credit impairment as described above. Renegotiated loans that are not POCI will continue to be in stage 3 until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, observed over a minimum one-year period and there are no other indicators of impairment. For loans that are assessed for impairment on a portfolio basis, the evidence typically comprises a history of payment performance against the original or revised terms, as appropriate to the circumstances. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case-by-case basis.

Measurement of ECL

The assessment of credit risk and the estimation of ECL are unbiased and probability-weighted, and incorporate all available information that is relevant to the assessment including information about past events, current conditions and reasonable and supportable forecasts of future events and economic conditions at the reporting date. In addition, the estimation of ECL should take into account the time value of money.

In general, HSBC calculates ECL using three main components: a probability of default, a loss given default ('LGD') and the exposure at default ('EAD').

The 12-month ECL is calculated by multiplying the 12-month PD, LGD and EAD. Lifetime ECL is calculated using the lifetime PD instead. The 12-month and lifetime PDs represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively.

Notes on the financial statements

The EAD represents the expected balance at default, taking into account the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdowns of committed facilities. The LGD represents expected losses on the EAD given the event of default, taking into account, among other attributes, the mitigating effect of collateral value at the time it is expected to be realised and the time value of money.

HSBC leverages the Basel II IRB framework where possible, with recalibration to meet the differing IFRS 9 requirements as set out in the following table:

Model	Regulatory capital	IFRS 9
PD	- Through the cycle (represents long-run average PD throughout a full economic cycle) - The definition of default includes a backstop of 90+ days past due, although this has been modified to 180+ days past due for some portfolios, particularly UK and US mortgages	- Point in time (based on current conditions, adjusted to take into account estimates of future conditions that will impact PD) - Default backstop of 90+ days past due for all portfolios
EAD	Cannot be lower than current balance	Amortisation captured for term products
LGD	- Downturn LGD (consistent losses expected to be suffered during a severe but plausible economic downturn) - Regulatory floors may apply to mitigate risk of underestimating downturn LGD due to lack of historical data - Discounted using cost of capital - All collection costs included	- Expected LGD (based on estimate of loss given default including the expected impact of future economic conditions such as changes in value of collateral) - No floors - Discounted using the original effective interest rate of the loan - Only costs associated with obtaining/selling collateral included
Other		Discounted back from point of default to balance sheet date

While 12-month PDs are recalibrated from Basel II models where possible, the lifetime PDs are determined by projecting the 12-month PD using a term structure. For the wholesale methodology, the lifetime PD also takes into account credit migration, i.e. a customer migrating through the CRR bands over its life.

The ECL for wholesale stage 3 is determined on an individual basis using a discounted cash flow ('DCF') methodology. The expected future cash flows are based on the credit risk officer's estimates as at the reporting date, reflecting reasonable and supportable assumptions and projections of future recoveries and expected future receipts of interest. Collateral is taken into account if it is likely that the recovery of the outstanding amount will include realisation of collateral based on the estimated fair value of collateral at the time of expected realisation, less costs for obtaining and selling the collateral. The cash flows are discounted at a reasonable approximation of the original effective interest rate. For significant cases, cash flows under four different scenarios are probability-weighted by reference to the economic scenarios applied more generally by the Group and the judgement of the credit risk officer in relation to the likelihood of the workout strategy succeeding or receivership being required. For less significant cases, the effect of different economic scenarios and work-out strategies is approximated and applied as an adjustment to the most likely outcome.

Period over which ECL is measured

Expected credit loss is measured from the initial recognition of the financial asset. The maximum period considered when measuring ECL (be it 12-month or lifetime ECL) is the maximum contractual period over which HSBC is exposed to credit risk. For wholesale overdrafts, credit risk management actions are taken no less frequently than on an annual basis and therefore this period is to the expected date of the next substantive credit review. The date of the substantive credit review also represents the initial recognition of the new facility. However, where the financial instrument includes both a drawn and undrawn commitment and the contractual ability to demand repayment and cancel the undrawn commitment does not serve to limit HSBC's exposure to credit risk to the contractual notice period, the contractual period does not determine the maximum period considered. Instead, ECL is measured over the period HSBC remains exposed to credit risk that is not mitigated by credit risk management actions. This applies to retail overdrafts and credit cards, where the period is the average time taken for stage 2 exposures to default or close as performing accounts, determined on a portfolio basis and ranging from between two and six years. In addition, for these facilities it is not possible to identify the ECL on the loan commitment component separately from the financial asset component. As a result, the total ECL is recognised in the loss allowance for the financial asset unless the total ECL exceeds the gross carrying amount of the financial asset, in which case the ECL is recognised as a provision.

Forward-looking economic inputs

HSBC applies multiple forward-looking global economic scenarios determined with reference to external forecast distributions representative of our view of forecast economic conditions. This approach is considered sufficient to calculate unbiased expected loss in most economic environments. In certain economic environments, additional analysis may be necessary and may result in additional scenarios or adjustments, to reflect a range of possible economic outcomes sufficient for an unbiased estimate. The detailed methodology is disclosed in 'Measurement uncertainty and sensitivity analysis of ECL estimates' on page 92.

Critical accounting estimates and judgements

The calculation of the Group's ECL under IFRS 9 requires the Group to make a number of judgements, assumptions and estimates. The most significant are set out below:

Judgements	Estimates
- Defining what is considered to be a significant increase in credit risk - Determining the lifetime and point of initial recognition of overdrafts and credit cards - Selecting and calibrating the PD, LGD and EAD models, which support the calculations, including making reasonable and supportable judgements about how models react to current and future economic conditions - Selecting model inputs and economic forecasts, including determining whether sufficient and appropriately weighted economic forecasts are incorporated to calculate unbiased expected loss	The sections marked as audited on pages 92 to 103, 'Measurement uncertainty and sensitivity analysis of ECL estimates' set out the assumptions used in determining ECL and provide an indication of the sensitivity of the result to the application of different weightings being applied to different economic assumptions

(j) Insurance contracts

A contract is classified as an insurance contract where HSBC accepts significant insurance risk from another party by agreeing to compensate that party on the occurrence of a specified uncertain future event. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant. In addition, HSBC issues investment contracts with discretionary participation features ('DPF'), which are also accounted for as insurance contracts as required by IFRS 4 'Insurance Contracts'.

Net insurance premium income

Premiums for life insurance contracts are accounted for when receivable, except in unit-linked insurance contracts where premiums are accounted for when liabilities are established.

Reinsurance premiums are accounted for in the same accounting period as the premiums for the direct insurance contracts to which they relate.

Net insurance claims and benefits paid and movements in liabilities to policyholders

Gross insurance claims for life insurance contracts reflect the total cost of claims arising during the year, including claim handling costs and any policyholder bonuses allocated in anticipation of a bonus declaration.

Maturity claims are recognised when due for payment. Surrenders are recognised when paid or at an earlier date on which, following notification, the policy ceases to be included within the calculation of the related insurance liabilities. Death claims are recognised when notified.

Reinsurance recoveries are accounted for in the same period as the related claim.

Liabilities under insurance contracts

Liabilities under non-linked life insurance contracts are calculated by each life insurance operation based on local actuarial principles. Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value, which is calculated by reference to the value of the relevant underlying funds or indices.

Future profit participation on insurance contracts with DPF

Where contracts provide discretionary profit participation benefits to policyholders, liabilities for these contracts include provisions for the future discretionary benefits to policyholders. These provisions reflect the actual performance of the investment portfolio to date and management's expectation of the future performance of the assets backing the contracts, as well as other experience factors such as mortality, lapses and operational efficiency, where appropriate. The benefits to policyholders may be determined by the contractual terms, regulation, or past distribution policy.

Investment contracts with DPF

While investment contracts with DPF are financial instruments, they continue to be treated as insurance contracts as required by IFRS 4. The Group therefore recognises the premiums for these contracts as revenue and recognises as an expense the resulting increase in the carrying amount of the liability.

In the case of net unrealised investment gains on these contracts, whose discretionary benefits principally reflect the actual performance of the investment portfolio, the corresponding increase in the liabilities is recognised in either the income statement or other comprehensive income, following the treatment of the unrealised gains on the relevant assets. In the case of net unrealised losses, a deferred participating asset is recognised only to the extent that its recoverability is highly probable. Movements in the liabilities arising from realised gains and losses on relevant assets are recognised in the income statement.

Present value of in-force long-term insurance business

HSBC recognises the value placed on insurance contracts and investment contracts with DPF, which are classified as long-term and in-force at the balance sheet date, as an asset. The asset represents the present value of the equity holders' interest in the issuing insurance companies' profits expected to emerge from these contracts written at the balance sheet date. The present value of in-force business ('PVIF') is determined by discounting those expected future profits using appropriate assumptions in assessing factors such as future mortality, lapse rates and levels of expenses, and a risk discount rate that reflects the risk premium attributable to the respective contracts. The PVIF incorporates allowances for both non-market risk and the value of financial options and guarantees. The PVIF asset is presented gross of attributable tax in the balance sheet and movements in the PVIF asset are included in 'Other operating income' on a gross of tax basis.

(k) Employee compensation and benefits

Share-based payments

HSBC enters into both equity-settled and cash-settled share-based payment arrangements with its employees as compensation for the provision of their services.

The vesting period for these schemes may commence before the legal grant date if the employees have started to render services in respect of the award before the legal grant date, where there is a shared understanding of the terms and conditions of the arrangement. Expenses are recognised when the employee starts to render service to which the award relates.

Cancellations result from the failure to meet a non-vesting condition during the vesting period, and are treated as an acceleration of vesting recognised immediately in the income statement. Failure to meet a vesting condition by the employee is not treated as a cancellation, and the amount of expense recognised for the award is adjusted to reflect the number of awards expected to vest.

Post-employment benefit plans

HSBC operates a number of pension schemes including defined benefit, defined contribution and post-employment benefit schemes.

Payments to defined contribution schemes are charged as an expense as the employees render service.

Defined benefit pension obligations are calculated using the projected unit credit method. The net charge to the income statement mainly comprises the service cost and the net interest on the net defined benefit asset or liability, and is presented in operating expenses.

Remeasurements of the net defined benefit asset or liability, which comprise actuarial gains and losses, return on plan assets excluding interest and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive income. The net defined benefit asset or liability represents the present value of defined benefit obligations reduced by the fair value of plan assets, after applying the asset ceiling test, where the net defined benefit surplus is limited to the present value of available refunds and reductions in future contributions to the plan.

The cost of obligations arising from other post-employment plans are accounted for on the same basis as defined benefit pension plans.

Critical accounting estimates and judgements

The most significant critical accounting judgements and estimates relate to the determination of key assumptions applied in calculating the defined benefit pension obligation for the principal plan.

Judgements	Estimates
	- A range of assumptions could be applied, and different assumptions could significantly alter the defined benefit obligation and the amounts recognised in profit or loss or OCI. - The calculation of the defined benefit pension obligation includes assumptions with regard to the discount rate, inflation rate, pension payments and deferred pensions, pay and mortality. Management determines these assumptions in consultation with the plan's actuaries. - Key assumptions used in calculating the defined benefit pension obligation for the principal plan and the sensitivity of the calculation to different assumptions are described in Note 5

(l) Tax

Income tax comprises current tax and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case the tax is recognised in the same statement as the related item appears.

Current tax is the tax expected to be payable on the taxable profit for the year and on any adjustment to tax payable in respect of previous years. HSBC provides for potential current tax liabilities that may arise on the basis of the amounts expected to be paid to the tax authorities.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the balance sheet, and the amounts attributed to such assets and liabilities for tax purposes. Deferred tax is calculated using the tax rates expected to apply in the periods in which the assets will be realised or the liabilities settled.

Current and deferred tax are calculated based on tax rates and laws enacted, or substantively enacted, by the balance sheet date.

Critical accounting estimates and judgements

The recognition of deferred tax assets depends on judgements

Judgements	Estimates
- Assessing the probability and sufficiency of future taxable profits, future reversals of existing taxable temporary differences and ongoing tax planning strategies - In the absence of a history of taxable profits, assessing the expected future profitability and the applicability of tax planning strategies, including corporate reorganisations	

(m) Provisions, contingent liabilities and guarantees

Provisions

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation that has arisen as a result of past events and for which a reliable estimate can be made.

Critical accounting estimates and judgements

The recognition and measurement of provisions requires the Group to make a number of judgements, assumptions and estimates. The most significant are set out below:

Judgements	Estimates
- Determining whether a present obligation exists. Professional advice is taken on the assessment of litigation and similar obligations - Provisions for legal proceedings and regulatory matters typically require a higher degree of judgement than other types of provisions. When matters are at an early stage, accounting judgements can be difficult because of the high degree of uncertainty associated with determining whether a present obligation exists, and estimating the probability and amount of any outflows that may arise. As matters progress, management and legal advisers evaluate on an ongoing basis whether provisions should be recognised, revising previous estimates as appropriate. At more advanced stages, it is typically easier to make estimates around a better defined set of possible outcomes	- Provisions for legal proceedings and regulatory matters remain very sensitive to the assumptions used in the estimate. There could be a wider range of possible outcomes for any pending legal proceedings, investigations or inquiries. As a result it is often not practicable to quantify a range of possible outcomes for individual matters. It is also not practicable to meaningfully quantify ranges of potential outcomes in aggregate for these types of provisions because of the diverse nature and circumstances of such matters and the wide range of uncertainties involved - Provisions for customer remediation also require significant levels of estimation. The amounts of provisions recognised depend on a number of different assumptions, such as the volume of inbound complaints, the projected period of inbound complaint volumes, the decay rate of complaint volumes, the populations identified as systemically mis-sold and the number of policies per customer complaint. More information about these assumptions is included in Note 27

Contingent liabilities, contractual commitments and guarantees

Contingent liabilities

Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security, and contingent liabilities related to legal proceedings or regulatory matters, are not recognised in the financial statements but are disclosed unless the probability of settlement is remote.

Financial guarantee contracts

Liabilities under financial guarantee contracts that are not classified as insurance contracts are recorded initially at their fair value, which is generally the fee received or present value of the fee receivable.

HSBC Holdings has issued financial guarantees and similar contracts to other Group entities. HSBC elects to account for certain guarantees as insurance contracts in HSBC Holdings' financial statements, in which case they are measured and recognised as insurance liabilities. This election is made on a contract-by-contract basis, and is irrevocable.

2 Net fee income

Net fee income by global business

	2019					Total \$m
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Corporate Centre	
	\$m	\$m	\$m	\$m	\$m	
Funds under management	1,295	120	460	302	—	2,177
Account services	890	654	365	101	(7)	2,003
Cards	1,602	358	15	—	—	1,975
Credit facilities	75	785	743	15	—	1,618
Broking income	366	40	532	119	—	1,057
Unit trusts	921	22	2	90	—	1,035
Underwriting	—	6	821	3	(1)	829
Remittances	73	362	311	4	(3)	747
Global custody	90	18	564	45	—	717
Imports/exports	—	497	164	1	—	662
Insurance agency commission	324	20	1	32	—	377
Other	1,097	891	2,362	193	(2,301)	2,242
Fee income	6,733	3,773	6,340	905	(2,312)	15,439
Less: fee expense	(1,861)	(370)	(3,287)	(134)	2,236	(3,416)
Net fee income	4,872	3,403	3,053	771	(76)	12,023

	2018					2017	
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Corporate Centre	Total	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Funds under management	1,383	134	421	284	(1)	2,221	2,188
Account services	991	748	332	106	—	2,177	2,244
Cards	1,575	370	16	—	(5)	1,956	1,994
Credit facilities	71	824	813	16	(1)	1,723	1,718
Broking income	494	44	533	139	—	1,210	1,191
Unit trusts	937	25	3	73	—	1,038	1,010
Underwriting	1	10	708	4	—	723	829
Remittances	96	357	320	5	—	778	759
Global custody	100	18	584	35	(1)	736	692
Imports/exports	3	532	176	2	(4)	709	736
Insurance agency commission	354	23	1	27	(1)	404	410
Other	1,110	858	2,362	186	(2,147)	2,369	2,082
Fee income	7,115	3,943	6,269	877	(2,160)	16,044	15,853
Less: fee expense	(1,917)	(388)	(3,040)	(135)	2,056	(3,424)	(3,042)
Net Fee income	5,198	3,555	3,229	742	(104)	12,620	12,811

Net fee income includes \$6,647m of fees earned on financial assets that are not at fair value through profit or loss (other than amounts included in determining the effective interest rate) (2018: \$7,522m; 2017: \$7,577m), \$1,450m of fees payable on financial liabilities that are not at fair value through profit or loss (other than amounts included in determining the effective interest rate) (2018: \$1,682m; 2017: \$1,475m), \$3,110m of fees earned on trust and other fiduciary activities (2018: \$3,165m; 2017: \$3,088m) and \$237m of fees payable relating to trust and other fiduciary activities (2018: \$175m; 2017: \$134m).

3 Net income from financial instruments measured at fair value through profit or loss

	Footnotes	2019 \$m	2018 \$m	2017 \$m
Net income/(expense) arising on:				
Net trading activities	1	16,121	6,982	8,236
Other instruments managed on a fair value basis	1	(5,890)	2,549	190
Net income from financial instruments held for trading or managed on a fair value basis		10,231	9,531	8,426
Financial assets held to meet liabilities under insurance and investment contracts		3,830	(1,585)	3,211
Liabilities to customers under investment contracts		(352)	97	(375)
Net income/(expense) from assets and liabilities of insurance businesses, including related derivatives, measured at fair value through profit or loss		3,478	(1,488)	2,836
Derivatives managed in conjunction with HSBC's issued debt securities		2,561	(626)	(343)
Other changes in fair value		(2,471)	529	498
Changes in fair value of designated debt and related derivatives	2	90	(97)	155
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss		812	695	N/A
Year ended 31 Dec		14,611	8,641	11,417

1 At 1 January 2018 we changed our accounting policy for financial liabilities that contain both deposit and derivative components. As a result, net income from these instruments is reported in 'Other instruments managed on a fair value basis' rather than 'Trading activities'. Comparative periods have not been re-presented.

2 The debt instruments, issued for funding purposes, are designated under the fair value option to reduce an accounting mismatch.

HSBC Holdings

	2019 \$m	2018 \$m	2017 \$m
Net income/(expense) arising on:			
– trading activities	(559)	(176)	(392)
– other instruments managed at on a fair value basis	2,036	421	211
Net income from financial instruments held for trading or managed on a fair value basis	1,477	245	(181)
– Derivatives managed in conjunction with HSBC Holdings-issued debt securities	764	(337)	292
– Other changes in fair value	(1,124)	260	(189)
Changes in fair value of designated debt and related derivatives	(360)	(77)	103
Changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	1,659	43	—
Year ended 31 Dec	2,776	211	(78)

4 Insurance business

Net insurance premium income

	Non-linked insurance \$m	Linked life insurance \$m	Investment contracts with DPF ¹ \$m	Total \$m
Gross insurance premium income	9,353	489	2,266	12,108
Reinsurers' share of gross insurance premium income	(1,465)	(7)	—	(1,472)
Year ended 31 Dec 2019	7,888	482	2,266	10,636
Gross insurance premium income	8,616	422	2,300	11,338
Reinsurers' share of gross insurance premium income	(672)	(7)	—	(679)
Year ended 31 Dec 2018	7,944	415	2,300	10,659
Gross insurance premium income	8,424	351	2,027	10,802
Reinsurers' share of gross insurance premium income	(1,016)	(7)	—	(1,023)
Year ended 31 Dec 2017	7,408	344	2,027	9,779

1 Discretionary participation features.

Net insurance claims and benefits paid and movement in liabilities to policyholders

	Non-linked insurance \$m	Linked life insurance \$m	Investment contracts with DPF ¹ \$m	Total \$m
Gross claims and benefits paid and movement in liabilities	11,305	1,217	3,810	16,332
– claims, benefits and surrenders paid	3,783	900	1,921	6,604
– movement in liabilities	7,522	317	1,889	9,728
Reinsurers' share of claims and benefits paid and movement in liabilities	(1,402)	(4)	–	(1,406)
– claims, benefits and surrenders paid	(411)	(17)	–	(428)
– movement in liabilities	(991)	13	–	(978)
Year ended 31 Dec 2019	9,903	1,213	3,810	14,926
Gross claims and benefits paid and movement in liabilities	8,943	(446)	1,724	10,221
– claims, benefits and surrenders paid	3,852	1,088	1,869	6,809
– movement in liabilities	5,091	(1,534)	(145)	3,412
Reinsurers' share of claims and benefits paid and movement in liabilities	(605)	191	–	(414)
– claims, benefits and surrenders paid	(311)	(181)	–	(492)
– movement in liabilities	(294)	372	–	78
Year ended 31 Dec 2018	8,338	(255)	1,724	9,807
Gross claims and benefits paid and movement in liabilities	8,894	1,413	2,901	13,208
– claims, benefits and surrenders paid	2,883	1,044	2,002	5,929
– movement in liabilities	6,011	369	899	7,279
Reinsurers' share of claims and benefits paid and movement in liabilities	(942)	65	–	(877)
– claims, benefits and surrenders paid	(297)	(223)	–	(520)
– movement in liabilities	(645)	288	–	(357)
Year ended 31 Dec 2017	7,952	1,478	2,901	12,331

1 Discretionary participation features.

Liabilities under insurance contracts

	Non-linked insurance \$m	Linked life insurance \$m	Investment contracts with DPF ¹ \$m	Total \$m
Gross liabilities under insurance contracts at 1 Jan 2019	57,283	5,789	24,258	87,330
Claims and benefits paid	(3,804)	(900)	(1,900)	(6,604)
Increase in liabilities to policyholders	11,326	1,217	3,789	16,332
Exchange differences and other movements ²	519	45	(183)	381
Gross liabilities under insurance contracts at 31 Dec 2019	65,324	6,151	25,964	97,439
Reinsurers' share of liabilities under insurance contracts	(3,521)	(71)	–	(3,592)
Net liabilities under insurance contracts at 31 Dec 2019	61,803	6,080	25,964	93,847
Gross liabilities under insurance contracts at 1 Jan 2018	52,112	7,548	26,007	85,667
Impact on transition to IFRS 9	(69)	–	–	(69)
Claims and benefits paid	(3,852)	(1,088)	(1,869)	(6,809)
Increase in liabilities to policyholders	8,943	(446)	1,724	10,221
Exchange differences and other movements ²	149	(225)	(1,604)	(1,680)
Gross liabilities under insurance contracts at 31 Dec 2018	57,283	5,789	24,258	87,330
Reinsurers' share of liabilities under insurance contracts	(2,438)	(68)	–	(2,506)
Net liabilities under insurance contracts at 31 Dec 2018	54,845	5,721	24,258	84,824

1 Discretionary participation features.

2 'Exchange differences and other movements' includes movements in liabilities arising from net unrealised investment gains recognised in other comprehensive income.

The key factors contributing to the movement in liabilities to policyholders included movements in the market value of assets supporting policyholder liabilities, death claims, surrenders, lapses, liabilities to policyholders created at the initial inception of the policies, the declaration of bonuses and other amounts attributable to policyholders.

5 Employee compensation and benefits

	2019 \$m	2018 \$m	2017 \$m
Wages and salaries	15,581	14,751	15,227
Social security costs	1,472	1,490	1,419
Post-employment benefits	949	1,132	669
Year ended 31 Dec	18,002	17,373	17,315

Notes on the financial statements

Average number of persons employed by HSBC during the year by global business

	Footnotes	2019	2018	2017
Retail Banking and Wealth Management		141,044	135,239	134,021
Commercial Banking		46,416	48,757	46,716
Global Banking and Markets		51,127	48,990	49,100
Global Private Banking		7,099	8,206	7,817
Corporate Centre	1	1,369	1,658	7,134
Year ended 31 Dec		247,055	242,850	244,788

1 The reduction in the average number of people employed was due to the completion of the cost to achieve transformation programme at the end of 2017.

Average number of persons employed by HSBC during the year by geographical region

	2019	2018	2017
Europe	66,392	67,007	70,301
Asia	133,624	127,992	125,004
Middle East and North Africa	9,798	9,798	10,408
North America	16,615	17,350	18,610
Latin America	20,626	20,703	20,465
Year ended 31 Dec	247,055	242,850	244,788

Reconciliation of total incentive awards granted to income statement charge

	2019 \$m	2018 \$m	2017 \$m
Total incentive awards approved for the current year	3,341	3,473	3,303
Less: deferred bonuses awarded, expected to be recognised in future periods	(337)	(351)	(337)
Total incentives awarded and recognised in the current year	3,004	3,122	2,966
Add: current year charges for deferred bonuses from previous years	327	322	336
Other	(55)	(70)	(78)
Income statement charge for incentive awards	3,276	3,374	3,224

Share-based payments

'Wages and salaries' includes the effect of share-based payments arrangements, of which \$478m were equity settled (2018: \$450m; 2017: \$500m), as follows:

	2019 \$m	2018 \$m	2017 \$m
Conditional share awards	521	499	520
Savings-related and other share award option plans	30	23	26
Year ended 31 Dec	551	522	546

HSBC share awards

Award	Policy
Deferred share awards (including annual incentive awards, LTI awards delivered in shares) and Group Performance Share Plans ('GPSP')	- An assessment of performance over the relevant period ending on 31 December is used to determine the amount of the award to be granted. - Deferred awards generally require employees to remain in employment over the vesting period and are generally not subject to performance conditions after the grant date. An exception to these are the LTI, which is subject to performance conditions. - Deferred share awards generally vest over a period of three, five or seven years. - Vested shares may be subject to a retention requirement post-vesting. GPSP awards are retained until cessation of employment. - Awards are subject to a malus provision prior to vesting. - Awards granted to Material Risk Takers from 2015 onwards are subject to clawback post-vesting.
International Employee Share Purchase Plan ('ShareMatch')	- The plan was first introduced in Hong Kong in 2013 and now includes employees based in 27 jurisdictions. - Shares are purchased in the market each quarter up to a maximum value of £750, or the equivalent in local currency. - Matching awards are added at a ratio of one free share for every three purchased. - Matching awards vest subject to continued employment and the retention of the purchased shares for a maximum period of two years and nine months.

Movement on HSBC share awards

	2019 Number (000s)	2018 Number (000s)
Conditional share awards outstanding at 1 Jan	94,897	104,525
Additions during the year	71,858	61,569
Released in the year	(67,737)	(67,899)
Forfeited in the year	(1,963)	(3,298)
Conditional share awards outstanding at 31 Dec	97,055	94,897
Weighted average fair value of awards granted (\$)	7.89	7.66

HSBC share option plans

Main plans	Policy
Savings-related share option plans ('Sharesave')	- From 2014, employees eligible for the UK plan could save up to £500 per month with the option to use the savings to acquire shares. - These are generally exercisable within six months following either the third or fifth anniversary of the commencement of a three-year or five-year contract, respectively. - The exercise price is set at a 20% (2018: 20%) discount to the market value immediately preceding the date of invitation.

Calculation of fair values

The fair values of share options are calculated using a Black-Scholes model. The fair value of a share award is based on the share price at the date of the grant.

Movement on HSBC share option plans

	Footnotes	Savings-related share option plans	
		Number (000s)	WAEP ¹ £
Outstanding at 1 Jan 2019		57,065	4.92
Granted during the year	2	32,130	4.69
Exercised during the year	3	(11,806)	4.40
Expired during the year		(11,321)	5.46
Forfeited during the year		(1,008)	4.99
Outstanding at 31 Dec 2019		65,060	4.81
<i>Of which exercisable</i>		<i>2,149</i>	<i>4.53</i>
Weighted average remaining contractual life (years)		2.77	
Outstanding at 1 Jan 2018		64,670	4.49
Granted during the year	2	20,501	5.45
Exercised during the year	3	(23,260)	4.14
Expired during the year		(3,148)	5.20
Forfeited during the year		(1,698)	4.53
Outstanding at 31 Dec 2018		57,065	4.92
<i>Of which exercisable</i>		<i>3,513</i>	<i>4.09</i>
Weighted average remaining contractual life (years)		2.59	

1 Weighted average exercise price.

2 The weighted average fair value of options granted during the year was \$1.36 (2018: \$1.40).

3 The weighted average share price at the date the options were exercised was \$7.99 (2018: \$8.28).

Post-employment benefit plans

The Group operates pension plans throughout the world for its employees. 'Pension risk' on page 134 contains details of the policies and practices associated with these pension plans. Some are defined benefit plans, of which the largest is the HBUK section of the HSBC Bank (UK) Pension Scheme ('the principal plan').

The principal plan has changed from being the combined HSBC Bank (UK) Pension Scheme to being only the HBUK section of the scheme. This is because the HSBC Bank (UK) Pension Scheme was fully sectionalised in 2018 to meet the requirements of the Banking Reform Act.

HSBC holds on its balance sheet the net surplus or deficit, which is the difference between the fair value of plan assets and the discounted value of scheme liabilities at the balance sheet date for each plan. Surpluses are only recognised to the extent that they are recoverable through reduced contributions in the future or through potential future refunds from the schemes. In assessing whether a surplus is recoverable, HSBC has considered its current right to obtain a future refund or a reduction in future contributions.

The principal plan

The principal plan has a defined benefit section and a defined contribution section. The defined benefit section was closed to future benefit accrual in 2015, with defined benefits earned by employees at that date continuing to be linked to their salary while they remain employed by HSBC. The plan is overseen by an independent corporate trustee, who has a fiduciary responsibility for the operation of the plan. Its assets are held separately from the assets of the Group.

The investment strategy of the plan is to hold the majority of assets in bonds, with the remainder in a diverse range of investments. It also includes some interest rate swaps to reduce interest rate risk and inflation swaps to reduce inflation risk.

The latest funding valuation of the plan at 31 December 2016 was carried out by Colin G Singer of Willis Towers Watson Limited, who is a Fellow of the UK Institute and Faculty of Actuaries, using the projected unit credit method. At that date, the market value of the plan's assets was £28.8bn (\$38.1bn) and this exceeded the value placed on its liabilities on an ongoing basis by £1.4bn (\$1.9bn), giving a funding level of 105%. These figures include defined contribution assets amounting to £2.0bn (\$2.6bn). The main differences between the assumptions used for assessing the defined benefit liabilities for this funding valuation and those used for IAS 19 are more prudent assumptions for discount rate, inflation rate and life expectancy. The next funding valuation will have an effective date of 31 December 2019.

Notes on the financial statements

Although the plan was in surplus at the valuation date, HSBC continues to make further contributions to the plan to support a lower-risk investment strategy over the longer term. The remaining contributions are £160m (\$212m) in each of 2020 and 2021. The main employer of the principal plan is HSBC UK Bank plc, with additional support from HSBC Holdings plc. The HSBC Bank (UK) Pension Scheme is fully sectionalised and no entities outside the ring fence participate in the HBUK section of the scheme. The sectionalisation, which took place in 2018, did not materially affect the overall funding position of the plan.

The actuary also assessed the value of the liabilities if the plan was to be stopped and an insurance company asked to secure all future pension payments. This is generally larger than the amount needed on the ongoing basis described above because an insurance company would use more prudent assumptions and include an explicit allowance for the future administrative expenses of the plan. Under this approach, the amount of assets needed was estimated to be £37bn (\$49bn) at 31 December 2016.

Guaranteed minimum pension equalisation

Following a judgment issued by the High Court of Justice of England and Wales in 2018, we estimated the financial effect of equalising benefits in respect of guaranteed minimum pension ('GMP') equalisation, and any potential conversion of GMPs into non-GMP benefits, to be an approximate 0.9% increase in the principal plan's liabilities, or £187m (\$239m). This was recognised in the income statement in 2018. We continue to assess the impact of GMP equalisation, although no further amounts have been recognised in 2019.

Income statement charge

	2019	2018	2017
	\$m	\$m	\$m
Defined benefit pension plans	176	355	100
Defined contribution pension plans	758	756	603
Pension plans	934	1,111	703
Defined benefit and contribution healthcare plans	15	21	(34)
Year ended 31 Dec	949	1,132	669

Net assets/(liabilities) recognised on the balance sheet in respect of defined benefit plans

	Fair value of plan assets	Present value of defined benefit obligations	Effect of limit on plan surpluses	Total
	\$m	\$m	\$m	\$m
Defined benefit pension plans	47,567	(40,582)	(16)	6,969
Defined benefit healthcare plans	121	(580)	—	(459)
At 31 Dec 2019	47,688	(41,162)	(16)	6,510
Total employee benefit liabilities (within Note 26 'Accruals, deferred income and other liabilities')				(1,771)
Total employee benefit assets (within Note 22 'Prepayments, accrued income and other assets')				8,280
Defined benefit pension plans	42,799	(36,583)	(35)	6,181
Defined benefit healthcare plans	110	(524)	—	(414)
At 31 Dec 2018	42,909	(37,107)	(35)	5,767
Total employee benefit liabilities (within Note 26 'Accruals, deferred income and other liabilities')				(2,167)
Total employee benefit assets (within Note 22 'Prepayments, accrued income and other assets')				7,934

HSBC Holdings

Employee compensation and benefit expense in respect of HSBC Holdings' employees in 2019 amounted to \$37m (2018: \$37m). The average number of persons employed during 2019 was 60 (2018: 43). Employees who are members of defined benefit pension plans are principally members of either the HSBC Bank (UK) Pension Scheme or the HSBC International Staff Retirement Benefits Scheme. HSBC Holdings pays contributions to such plans for its own employees in accordance with the schedules of contributions determined by the trustees of the plans and recognises these contributions as an expense as they fall due.

Defined benefit pension plans

Net asset/(liability) under defined benefit pension plans

	Fair value of plan assets		Present value of defined benefit obligations		Effect of the asset ceiling		Net defined benefit asset/(liability)	
	Principal ¹ plan \$m	Other plans \$m	Principal ¹ plan \$m	Other plans \$m	Principal ¹ plan \$m	Other plans \$m	Principal ¹ plan \$m	Other plans \$m
At 1 Jan 2019	34,074	8,725	(26,616)	(9,967)	—	(35)	7,458	(1,277)
Service cost	—	—	(64)	(246)	—	—	(64)	(246)
– current service cost	—	—	(40)	(183)	—	—	(40)	(183)
– past service cost and gains/(losses) from settlements	—	—	(24)	(63)	—	—	(24)	(63)
Net interest income/(cost) on the net defined benefit asset/(liability)	939	269	(728)	(293)	—	—	211	(24)
Remeasurement effects recognised in other comprehensive income	2,205	867	(2,548)	(521)	—	20	(343)	366
– return on plan assets (excluding interest income)	2,205	870	—	—	—	—	2,205	870
– actuarial gains/(losses)	—	—	(2,548)	(1,348)	—	—	(2,548)	(1,348)
– other changes	—	(3)	—	827	—	20	—	844
Exchange differences	1,300	181	(1,036)	(180)	—	(1)	264	—
Benefits paid	(1,014)	(620)	1,014	694	—	—	—	74
Other movements ²	370	271	(180)	89	—	—	190	360
At 31 Dec 2019	37,874	9,693	(30,158)	(10,424)	—	(16)	7,716	(747)
At 1 Jan 2018	37,747	9,518	(29,552)	(10,537)	—	(37)	8,195	(1,056)
Service cost	—	—	(293)	(202)	—	—	(293)	(202)
– current service cost	—	—	(44)	(179)	—	—	(44)	(179)
– past service cost and losses from settlements	—	—	(249)	(23)	—	—	(249)	(23)
Net interest income/(cost) on the net defined benefit asset/(liability)	955	235	(743)	(265)	—	(1)	212	(31)
Remeasurement effects recognised in other comprehensive income	(1,478)	(591)	1,153	440	—	—	(325)	(151)
– return on plan assets (excluding interest income)	(1,478)	(591)	—	—	—	—	(1,478)	(591)
– actuarial gains	—	—	1,153	403	—	—	1,153	403
– other changes	—	—	—	37	—	—	—	37
Exchange differences	(2,002)	(187)	1,565	122	—	3	(437)	(62)
Benefits paid	(1,132)	(544)	1,132	550	—	—	—	6
Other movements ²	(16)	294	122	(75)	—	—	106	219
At 31 Dec 2018	34,074	8,725	(26,616)	(9,967)	—	(35)	7,458	(1,277)

1 Refer to page 255 for details on the principal plan.

2 Other movements include contributions by HSBC, contributions by employees, administrative costs and taxes paid by plan.

HSBC expects to make \$384m of contributions to defined benefit pension plans during 2020. Benefits expected to be paid from the plans to retirees over each of the next five years, and in aggregate for the five years thereafter, are as follows:

Benefits expected to be paid from plans

	2020 \$m	2021 \$m	2022 \$m	2023 \$m	2024 \$m	2025-2029 \$m
The principal plan ^{1,2}	1,081	1,113	1,145	1,178	1,212	6,611
Other plans ¹	471	525	521	486	479	2,332

1 The duration of the defined benefit obligation is 18.1 years for the principal plan under the disclosure assumptions adopted (2018: 17.0 years) and 13.2 years for all other plans combined (2018: 12.3 years).

2 Refer to page 255 for details on the principal plan.

Notes on the financial statements

Fair value of plan assets by asset classes

	31 Dec 2019				31 Dec 2018			
	Value	Quoted market price in active market	No quoted market price in active market	Thereof HSBC ¹	Value	Quoted market price in active market	No quoted market price in active market	Thereof HSBC ¹
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
The principal plan²								
Fair value of plan assets	37,874	33,921	3,953	—	34,074	30,670	3,404	—
– equities	662	312	350	—	3,152	3,152	—	—
– bonds	31,699	31,699	—	—	26,509	26,509	—	—
– derivatives	2,052	—	2,052	—	2,030	—	2,030	—
– other	3,461	1,910	1,551	—	2,383	1,009	1,374	—
Other plans								
Fair value of plan assets	9,693	8,702	991	1,422	8,725	7,425	1,300	1,216
– equities	2,065	1,455	610	2	2,186	1,265	921	2
– bonds	6,608	6,376	232	8	5,707	5,559	148	7
– derivatives	—	—	—	1,183	37	—	37	1,034
– other	1,020	871	149	229	795	601	194	173

1 The fair value of plan assets includes derivatives entered into with HSBC Bank plc as detailed in Note 35.

2 Refer to page 255 for details on the principal plan.

Post-employment defined benefit plans' principal actuarial financial assumptions

HSBC determines the discount rates to be applied to its obligations in consultation with the plans' local actuaries, on the basis of current average yields of high-quality (AA-rated or equivalent) debt instruments with maturities consistent with those of the defined benefit obligations.

Key actuarial assumptions for the principal plan¹

	Discount rate	Inflation rate	Rate of increase for pensions	Rate of pay increase
	%	%	%	%
UK				
At 31 Dec 2019	2.00	3.10	2.90	3.65
At 31 Dec 2018	2.80	3.40	3.10	3.65

1 Refer to page 255 for details on the principal plan.

Mortality tables and average life expectancy at age 60⁴ for the principal plan³

	Mortality table	Life expectancy at age 60 ⁴ for a male member currently:		Life expectancy at age 60 ⁴ for a female member currently:	
		Aged 60	Aged 40	Aged 60	Aged 40
UK					
At 31 Dec 2019	SAPS S2¹	28.0	29.4	28.2	29.8
At 31 Dec 2018	SAPS S2 ²	28.1	29.6	28.4	30.0

1 Self-administered pension scheme ('SAPS') S2 table (males: 'Normal health pensioners' version; females: 'All pensioners' version) with a multiplier of 0.94 for male and 1.15 for female pensioners. Improvements are projected in accordance with the continual mortality investigation ('CMI') 2018 core projection model with an initial addition to improvements of 0.25% per annum and a long-term rate of improvement of 1.25% per annum. Separate tables have been applied to lower-paid pensioners and dependant members.

2 Self-administered pension scheme ('SAPS') S2 table (males: 'Normal health pensioners' version; females: 'All pensioners' version) with a multiplier of 0.94 for male and 1.15 for female pensioners. Improvements are projected in accordance with the continual mortality investigation ('CMI') 2017 core projection model with a long-term rate of improvement of 1.25% per annum. Separate tables have been applied to lower-paid pensioners and dependant members.

3 Refer to page 255 for details on the principal plan.

4 The presentation of the mortality table has been updated to show life expectancies at the age of 60 rather than 65 as presented in prior years to better reflect market disclosure practices. The prior year data have been updated accordingly.

The effect of changes in key assumptions on the principal plan¹

	Impact on HBUK section of the HSBC Bank (UK) Pension Scheme obligation			
	Financial impact of increase		Financial impact of decrease	
	2019	2018	2019	2018
	\$m	\$m	\$m	\$m
Discount rate – increase/decrease of 0.25%	(1,305)	(1,078)	1,395	1,149
Inflation rate – increase/decrease of 0.25%	781	726	(738)	(716)
Pension payments and deferred pensions – increase/decrease of 0.25%	1,100	1,181	(1,026)	(1,112)
Pay – increase/decrease of 0.25%	73	28	(72)	(29)
Change in mortality – increase of 1 year	1,267	995	N/A	N/A

1 Refer to page 255 for details on the principal plan.

Directors' emoluments

Details of Directors' emoluments, pensions and their interests are disclosed in the Directors' remuneration report on page 184.

6 Auditor's remuneration

	2019 \$m	2018 \$m	2017 \$m
Audit fees payable to PwC	85.2	86.6	84.8
Other audit fees payable	0.9	0.9	1.2
Year ended 31 Dec	86.1	87.5	86.0

Fees payable by HSBC to PwC

	Footnotes	2019 \$m	2018 \$m	2017 \$m
Fees for HSBC Holdings' statutory audit	1	15.7	16.4	15.1
Fees for other services provided to HSBC		95.0	103.1	114.6
– audit of HSBC's subsidiaries		69.5	70.2	69.7
– audit-related assurance services	2	10.0	11.4	10.8
– other assurance services	3	12.2	13.5	25.2
– taxation compliance services		1.6	1.4	1.2
– taxation advisory services		–	0.1	–
– other non-audit services	3	1.7	6.5	7.7
Year ended 31 Dec		110.7	119.5	129.7

- 1 Fees payable to PwC for the statutory audit of the consolidated financial statements of HSBC and the separate financial statements of HSBC Holdings. They include amounts payable for services relating to the consolidation returns of HSBC Holdings' subsidiaries, which are clearly identifiable as being in support of the Group audit opinion.
- 2 Including services for assurance and other services that relate to statutory and regulatory filings, including comfort letters and interim reviews.
- 3 Including permitted services relating to attestation reports on internal controls of a service organisation primarily prepared for and used by third party end user.

No fees were payable by HSBC to PwC as principal auditor for the following types of services: internal audit services and services related to litigation, recruitment and remuneration.

Fees payable by HSBC's associated pension schemes to PwC

	2019 \$000	2018 \$000	2017 \$000
Audit of HSBC's associated pension schemes	250	172	260
Audit-related assurance services	–	–	4
Year ended 31 Dec	250	172	264

No fees were payable by HSBC's associated pension schemes to PwC as principal auditor for the following types of services: internal audit services, other assurance services, services related to corporate finance transactions, valuation and actuarial services, litigation, recruitment and remuneration, and information technology.

In addition to the above, the estimated fees paid to PwC by third parties associated with HSBC amount to \$17.2m (2018: \$14.0m; 2017: \$3.5m). In these cases, HSBC is connected with the contracting party and may therefore be involved in appointing PwC. These fees arise from services such as auditing mutual funds managed by HSBC and reviewing the financial position of corporate concerns that borrow from HSBC.

Fees payable for non-audit services for HSBC Holdings are not disclosed separately because such fees are disclosed on a consolidated basis for the HSBC Group.

7 Tax

Tax expense

	Footnotes	2019 \$m	2018 \$m	2017 \$m
Current tax	1	3,768	4,195	4,264
– for this year		3,689	4,158	4,115
– adjustments in respect of prior years		79	37	149
Deferred tax		871	670	1,024
– origination and reversal of temporary differences		684	656	(228)
– effect of changes in tax rates		(11)	17	1,337
– adjustments in respect of prior years		198	(3)	(85)
Year ended 31 Dec	2	4,639	4,865	5,288

- 1 Current tax included Hong Kong profits tax of \$1,413m (2018: \$1,532m; 2017: \$1,350m). The Hong Kong tax rate applying to the profits of subsidiaries assessable in Hong Kong was 16.5% (2018: 16.5%; 2017: 16.5%).
- 2 In addition to amounts recorded in the income statement, a tax charge of \$6m (2018: credit of \$234m) was recorded directly to equity.

Tax reconciliation

The tax charged to the income statement differs from the tax charge that would apply if all profits had been taxed at the UK corporation tax rate as follows:

	2019		2018		2017	
	\$m	%	\$m	%	\$m	%
Profit before tax	13,347		19,890		17,167	
Tax expense						
Taxation at UK corporation tax rate of 19.00% (2018: 19.00%; 2017: 19.25%)	2,536	19.0	3,779	19.0	3,305	19.25
Impact of differently taxed overseas profits in overseas locations	253	1.9	264	1.3	407	2.3
Items increasing tax charge in 2019:						
– non-deductible goodwill write-down	1,421	10.7	—	—	—	—
– local taxes and overseas withholding taxes	484	3.6	437	2.2	618	3.6
– other permanent disallowables	481	3.6	396	2.0	400	2.3
– non-deductible UK customer compensation	382	2.9	16	0.1	166	1.0
– UK tax losses not recognised	364	2.7	435	2.2	70	0.4
– adjustments in respect of prior period liabilities	277	2.1	34	0.2	64	0.4
– bank levy	184	1.4	191	1.0	180	1.0
– impacts of hyperinflation	29	0.2	78	0.4	—	—
– UK banking surcharge	29	0.2	229	1.1	136	0.8
– non-UK movements in unrecognised deferred tax	12	0.1	32	0.2	(16)	(0.1)
– non-deductible regulatory settlements	5	—	153	0.8	(132)	(0.8)
– deferred tax remeasurement due to US federal tax rate reduction	—	—	—	—	1,288	7.5
Items reducing tax charge in 2019:						
– non-taxable income and gains	(844)	(6.3)	(691)	(3.5)	(766)	(4.4)
– effect of profits in associates and joint ventures	(467)	(3.5)	(492)	(2.5)	(481)	(2.8)
– deductions for AT1 coupon payments	(263)	(2.0)	—	—	—	—
– non-taxable gain on dilution of shareholding in SABB	(181)	(1.3)	—	—	—	—
– impact of changes in tax rates	(11)	(0.1)	17	0.1	49	0.3
– other items	(52)	(0.4)	(13)	(0.1)	—	—
Year ended 31 Dec	4,639	34.8	4,865	24.5	5,288	30.8

The Group's profits are taxed at different rates depending on the country or territory in which the profits arise. The key applicable tax rates for 2019 include Hong Kong (16.5%), the US (21%) and the UK (19%). If the Group's profits were taxed at the statutory rates of the countries in which the profits arose, then the tax rate for the year would have been 20.90% (2018: 20.30%). The effective tax rate for the year was 34.8% (2018: 24.5%). The effective tax rate for 2019 was significantly higher than for 2018 as 2019 included a non-deductible impairment of goodwill of \$7.3bn.

Following an amendment to IAS 12 effective 1 January 2019, the income tax consequences of distributions, including AT1 coupon payments, are recorded in the income statement tax expense. Prior periods have not been restated.

Accounting for taxes involves some estimation because the tax law is uncertain and its application requires a degree of judgement, which authorities may dispute. Liabilities are recognised based on best estimates of the probable outcome, taking into account external advice where appropriate. We do not expect significant liabilities to arise in excess of the amounts provided. HSBC only recognises current and deferred tax assets where recovery is probable.

Movement of deferred tax assets and liabilities

		Loan impairment provisions	Unused tax losses and tax credits	Derivatives, FVOD ¹ and other investments	Insurance business	Expense provisions	Fixed assets	Retirement obligations	Other	Total
	Footnotes	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Assets		982	1,156	492	—	629	1,151	—	738	5,148
Liabilities		—	—	(376)	(1,271)	—	—	(1,387)	(283)	(3,317)
At 1 Jan 2019		982	1,156	116	(1,271)	629	1,151	(1,387)	455	1,831
Income statement		45	266	(386)	(303)	(18)	(185)	(149)	(141)	(871)
Other comprehensive income		—	—	544	—	—	—	30	(391)	183
Equity		—	—	—	—	—	—	—	—	—
Foreign exchange and other adjustments		(44)	(8)	147	(47)	39	36	(107)	98	114
At 31 Dec 2019		983	1,414	421	(1,621)	650	1,002	(1,613)	21	1,257
Assets	2	983	1,414	979	—	650	1,002	—	422	5,450
Liabilities	2	—	—	(558)	(1,621)	—	—	(1,613)	(401)	(4,193)
Assets		713	1,373	1,282	—	643	1,201	352	760	6,324
Liabilities		—	—	(93)	(1,182)	—	—	(1,387)	(968)	(3,630)
At 1 Jan 2018		713	1,373	1,189	(1,182)	643	1,201	(1,035)	(208)	2,694
IFRS 9 transitional adjustment		358	—	(411)	—	—	—	—	459	406
Income statement		(72)	(203)	51	(104)	19	(68)	35	(328)	(670)
Other comprehensive income		—	—	(722)	—	—	—	25	165	(532)
Equity		—	—	—	—	—	—	(15)	(8)	(23)
Foreign exchange and other adjustments		(17)	(14)	9	15	(33)	18	(397)	375	(44)
At 31 Dec 2018		982	1,156	116	(1,271)	629	1,151	(1,387)	455	1,831
Assets	2	982	1,156	492	—	629	1,151	—	738	5,148
Liabilities	2	—	—	(376)	(1,271)	—	—	(1,387)	(283)	(3,317)

1 Fair value of own debt.

2 After netting off balances within countries, the balances as disclosed in the accounts are as follows: deferred tax assets \$4,632m (2018: \$4,450m) and deferred tax liabilities \$3,375m (2018: \$2,619m).

In applying judgement in recognising deferred tax assets, management has critically assessed all available information, including future business profit projections and the track record of meeting forecasts.

The net deferred tax asset of \$1.3bn (2018: \$1.8bn) includes \$2.8bn (2018: \$3.0bn) of deferred tax assets relating to the US, of which \$1.1bn relates to US tax losses that expire in 14 to 18 years. Management expects the US deferred tax asset to be substantially recovered in six to seven years, with the majority recovered in the first five years. The most recent financial forecasts approved by management cover a five-year period and the forecasts have been extrapolated beyond five years by assuming that performance remains constant after the fifth year.

Unrecognised deferred tax

The amount of gross temporary differences, unused tax losses and tax credits for which no deferred tax asset is recognised in the balance sheet was \$8.3bn (2018: \$7.2bn). This amount includes unused UK corporation tax losses of \$6.2bn (2018: \$4.6bn) which are not recognised due to uncertainty regarding the availability of sufficient future taxable profits against which to recover them. Of the total amounts unrecognised, \$6.4bn (2018: \$4.7bn) had no expiry date, \$1.3bn (2018: \$1.3bn) was scheduled to expire within 10 years and the remaining balance is expected to expire after 10 years.

Deferred tax is not recognised in respect of the Group's investments in subsidiaries and branches where HSBC is able to control the timing of remittance or other realisation and where remittance or realisation is not probable in the foreseeable future. The aggregate temporary differences relating to unrecognised deferred tax liabilities arising on investments in subsidiaries and branches is \$13.4bn (2018: \$13.2bn) and the corresponding unrecognised deferred tax liability is \$1.0bn (2018: \$0.9bn).

8 Dividends

Dividends to shareholders of the parent company

	2019			2018			2017		
	Per share \$	Total \$m	Settled in scrip \$m	Per share \$	Total \$m	Settled in scrip \$m	Per share \$	Total \$m	Settled in scrip \$m
Dividends paid on ordinary shares									
In respect of previous year:									
– fourth interim dividend	0.21	4,206	1,160	0.21	4,197	393	0.21	4,169	1,945
In respect of current year:									
– first interim dividend	0.10	2,013	375	0.10	2,008	213	0.10	2,005	826
– second interim dividend	0.10	2,021	795	0.10	1,990	181	0.10	2,014	193
– third interim dividend	0.10	2,029	357	0.10	1,992	707	0.10	2,005	242
Total	0.51	10,269	2,687	0.51	10,187	1,494	0.51	10,193	3,206
Total dividends on preference shares classified as equity (paid quarterly)	62.00	90		62.00	90		62.00	90	
Total coupons on capital securities classified as equity		1,324			1,270			1,268	
Dividends to shareholders		11,683			11,547			11,551	

Notes on the financial statements

Total coupons on capital securities classified as equity

	Footnotes	First call date	2019		2018	2017
			Per security	Total \$m	Total \$m	Total \$m
Perpetual subordinated capital securities	1, 3					
\$2,200m issued at 8.125%		Apr 2013	\$0.000	—	89	179
\$3,800m issued at 8.000%		Dec 2015	\$0.000	—	76	304
Perpetual subordinated contingent convertible securities	2, 3					
\$1,500m issued at 5.625%	4	Nov 2019	\$56.250	84	84	84
\$2,000m issued at 6.875%		Jun 2021	\$68.750	138	138	138
\$2,250m issued at 6.375%		Sep 2024	\$63.750	143	143	143
\$2,450m issued at 6.375%		Mar 2025	\$63.750	156	156	156
\$3,000m issued at 6.000%		May 2027	\$60.000	180	180	90
\$2,350m issued at 6.250%		Mar 2023	\$62.500	147	73	—
\$1,800m issued at 6.500%		Mar 2028	\$65.000	117	59	—
€1,500m issued at 5.250%		Sep 2022	€52.500	88	95	89
€1,000m issued at 6.000%		Sep 2023	€60.000	66	72	68
€1,250m issued at 4.750%		July 2029	€47.500	68	70	—
SGD1,000m issued at 4.700%		Jun 2022	SGD47.000	34	35	17
£1,000m issued at 5.875%		Sep 2026	£58.750	75	—	—
SGD750m issued at 5%		Sep 2023	SGD50.000	28	—	—
Total				1,324	1,270	1,268

- 1 Discretionary coupons are paid quarterly on the perpetual subordinated capital securities, in denominations of \$25 per security.
- 2 Discretionary coupons are paid semi-annually on the perpetual subordinated contingent convertible securities, in denominations of each security's issuance currency 1,000 per security.
- 3 Further details of these securities can be found in Note 31.
- 4 This security was called by HSBC Holdings on 22 November 2019 and was redeemed and cancelled on 17 January 2020. Between the date of exercise of the call option and the redemption, this security was considered to be a subordinated liability. Refer to Note 31 for further details on additional tier 1 securities.

After the end of the year, the Directors declared a fourth interim dividend in respect of the financial year ended 31 December 2019 of \$0.21 per ordinary share, a distribution of approximately \$4,266m. The fourth interim dividend will be payable on 14 April 2020 to holders on the Principal Register in the UK, the Hong Kong Overseas Branch Register or the Bermuda Overseas Branch Register on 28 February 2020. No liability was recorded in the financial statements in respect of the fourth interim dividend for 2019.

On 6 January 2020, HSBC paid a coupon on its €1,250m subordinated capital securities, representing a total distribution of €30m (\$33m). No liability was recorded in the balance sheet at 31 December 2019 in respect of this coupon payment.

9 Earnings per share

Basic earnings per ordinary share is calculated by dividing the profit attributable to ordinary shareholders of the parent company by the weighted average number of ordinary shares outstanding, excluding own shares held. Diluted earnings per ordinary share is calculated by dividing the basic earnings, which require no adjustment for the effects of dilutive potential ordinary shares, by the weighted average number of ordinary shares outstanding, excluding own shares held, plus the weighted average number of ordinary shares that would be issued on conversion of dilutive potential ordinary shares.

Profit attributable to the ordinary shareholders of the parent company

	2019 \$m	2018 \$m	2017 \$m
Profit attributable to shareholders of the parent company	7,383	13,727	10,798
Dividend payable on preference shares classified as equity	(90)	(90)	(90)
Coupon payable on capital securities classified as equity	(1,324)	(1,029)	(1,025)
Year ended 31 Dec	5,969	12,608	9,683

Basic and diluted earnings per share

	Footnotes	2019			2018			2017		
		Profit \$m	Number of shares (millions)	Per share \$	Profit \$m	Number of shares (millions)	Per share \$	Profit \$m	Number of shares (millions)	Per share \$
Basic	1	5,969	20,158	0.30	12,608	19,896	0.63	9,683	19,972	0.48
Effect of dilutive potential ordinary shares			75			87			100	
Diluted	1	5,969	20,233	0.30	12,608	19,983	0.63	9,683	20,072	0.48

- 1 Weighted average number of ordinary shares outstanding (basic) or assuming dilution (diluted).

The number of anti-dilutive employee share options excluded from the weighted average number of dilutive potential ordinary shares is 1.1m (2018: nil; 2017: nil).

10 Segmental analysis

The Group Chief Executive, supported by the rest of the GMB, is considered the Chief Operating Decision Maker ('CODM') for the purposes of identifying the Group's reportable segments. Global business results are assessed by the CODM on the basis of adjusted performance that removes the effects of significant items and currency translation from reported results. We therefore present these results on an adjusted basis as required by IFRSs. The 2018 and 2017 adjusted performance information is presented on a constant currency basis. The 2018 and 2017 income statements are converted at the average rates of exchange for 2019, and the balance sheets at 31 December 2018 and 31 December 2017 at the prevailing rates of exchange on 31 December 2019.

Our operations are closely integrated and, accordingly, the presentation of data includes internal allocations of certain items of income and expense. These allocations include the costs of certain support services and global functions to the extent that they can be meaningfully attributed to global businesses. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity. Costs that are not allocated to global businesses are included in Corporate Centre.

Where relevant, income and expense amounts presented include the results of inter-segment funding along with inter-company and inter-business line transactions. All such transactions are undertaken on arm's length terms. The intra-Group elimination items for the global businesses are presented in Corporate Centre.

Our global businesses

HSBC provides a comprehensive range of banking and related financial services to its customers in its four global businesses. The products and services offered to customers are organised by these global businesses.

- RBWM offers a broad range of products and services to meet the personal banking and wealth management needs of individual customers. Typically, customer offerings include personal banking products, such as current and savings accounts, mortgages and personal loans, credit cards, debit cards and local and international payment services, as well as wealth management services, including insurance and investment products, global asset management services and financial planning services.
- CMB offers a broad range of products and services to serve the needs of our commercial customers, including small and medium-sized enterprises, mid-market enterprises and corporates. These include credit and lending, international trade and receivables finance, treasury management and liquidity solutions (payments and cash management and commercial cards), commercial insurance and investments. CMB also offers its customers access to products and services offered by other global businesses, such as GB&M, which include foreign exchange products, raising capital on debt and equity markets and advisory services.
- GB&M provides tailored financial solutions to major government, corporate and institutional clients and private investors worldwide. The client-focused business lines deliver a full range of banking capabilities including financing, advisory and transaction services, a markets business that provides services in credit, rates, foreign exchange, equities, money markets and securities services, and principal investment activities.
- GPB provides a range of services to high net worth individuals and families with complex and international needs within the Group's major markets.

HSBC adjusted profit before tax and balance sheet data

	2019					
	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Global Private Banking	Corporate Centre	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Net operating income/(expense) before change in expected credit losses and other credit impairment charges	23,400	15,292	14,916	1,848	(47)	55,409
– external	17,026	14,805	18,517	1,445	3,616	55,409
– inter-segment	6,374	487	(3,601)	403	(3,663)	–
<i>of which: net interest income/(expense)</i>	<i>16,525</i>	<i>11,226</i>	<i>5,601</i>	<i>879</i>	<i>(3,612)</i>	<i>30,619</i>
Change in expected credit losses and other credit impairment charges	(1,390)	(1,184)	(153)	(22)	(7)	(2,756)
Net operating income/(expense)	22,010	14,108	14,763	1,826	(54)	52,653
Total operating expenses	(14,017)	(6,801)	(9,417)	(1,424)	(1,136)	(32,795)
Operating profit/(loss)	7,993	7,307	5,346	402	(1,190)	19,858
Share of profit in associates and joint ventures	55	–	–	–	2,299	2,354
Adjusted profit before tax	8,048	7,307	5,346	402	1,109	22,212
	%	%	%	%	%	%
Share of HSBC's adjusted profit before tax	36.2	32.9	24.1	1.8	5.0	100.0
Adjusted cost efficiency ratio	59.9	44.5	63.1	77.1	(2,417.0)	59.2
Adjusted balance sheet data	\$m	\$m	\$m	\$m	\$m	\$m
Loans and advances to customers (net)	395,393	346,060	246,266	47,593	1,431	1,036,743
Interests in associates and joint ventures	449	–	–	–	24,025	24,474
Total external assets	526,621	367,509	1,066,584	52,224	702,214	2,715,152
Customer accounts	689,283	386,522	292,284	62,943	8,083	1,439,115

Notes on the financial statements

HSBC adjusted profit before tax and balance sheet data (continued)

	Footnotes	2018					Total \$m
		Retail Banking and Wealth Management \$m	Commercial Banking \$m	Global Banking and Markets \$m	Global Private Banking \$m	Corporate Centre \$m	
Net operating income/(expense) before change in expected credit losses and other credit impairment charges	1	21,374	14,465	15,025	1,757	(290)	52,331
– external		16,794	14,226	17,554	1,474	2,283	52,331
– inter-segment		4,580	239	(2,529)	283	(2,573)	—
of which: net interest income/(expense)		15,432	10,380	5,122	873	(2,189)	29,618
Change in expected credit losses and other credit impairment (charges)/recoveries		(1,134)	(712)	31	7	119	(1,689)
Net operating income/(expense)		20,240	13,753	15,056	1,764	(171)	50,642
Total operating expenses		(13,255)	(6,275)	(9,170)	(1,425)	(1,781)	(31,906)
Operating profit/(loss)		6,985	7,478	5,886	339	(1,952)	18,736
Share of profit in associates and joint ventures		33	—	—	—	2,413	2,446
Adjusted profit before tax		7,018	7,478	5,886	339	461	21,182
		%	%	%	%	%	%
Share of HSBC's adjusted profit before tax		33.1	35.3	27.8	1.6	2.2	100.0
Adjusted cost efficiency ratio		62.0	43.4	61.0	81.1	(614.1)	61.0
Adjusted balance sheet data		\$m	\$m	\$m	\$m	\$m	\$m
Loans and advances to customers (net)		367,917	337,099	247,125	39,602	2,533	994,276
Interests in associates and joint ventures		398	—	—	—	21,903	22,301
Total external assets		482,967	364,638	1,025,737	45,520	670,333	2,589,195
Customer accounts		649,172	362,274	294,584	65,053	8,655	1,379,738

	Footnotes	2017					Total \$m
		Retail Banking and Wealth Management \$m	Commercial Banking \$m	Global Banking and Markets \$m	Global Private Banking \$m	Corporate Centre \$m	
Net operating income before loan impairment charges and other credit risk provisions	1	19,708	12,883	14,823	1,698	1,061	50,173
– external		16,582	13,009	16,086	1,433	3,063	50,173
– inter-segment		3,126	(126)	(1,263)	265	(2,002)	—
of which: net interest income/(expense)		13,573	8,822	4,746	812	(499)	27,454
Loan impairment charges and other credit risk provisions/(recoveries)		(941)	(468)	(439)	(17)	179	(1,686)
Net operating income		18,767	12,415	14,384	1,681	1,240	48,487
Total operating expenses		(12,386)	(5,770)	(8,709)	(1,384)	(2,010)	(30,259)
Operating profit/(loss)		6,381	6,645	5,675	297	(770)	18,228
Share of profit in associates and joint ventures		12	—	—	—	2,316	2,328
Adjusted profit before tax		6,393	6,645	5,675	297	1,546	20,556
		%	%	%	%	%	%
Share of HSBC's adjusted profit before tax		31.1	32.3	27.6	1.4	7.6	100.0
Adjusted cost efficiency ratio		62.8	44.8	58.8	81.5	189.4	60.3
Adjusted balance sheet data		\$m	\$m	\$m	\$m	\$m	\$m
Loans and advances to customers (net)		337,768	308,870	246,890	40,013	7,382	940,923
Interests in associates and joint ventures		364	—	—	—	21,558	21,922
Total external assets		457,126	340,211	960,732	46,706	667,822	2,472,597
Customer accounts		629,442	356,488	276,634	65,491	11,017	1,339,072

1 Net operating income before change in expected credit losses and other credit impairment charges/Loan impairment charges and other credit risk provisions, also referred to as revenue.

Reported external net operating income is attributed to countries and territories on the basis of the location of the branch responsible for reporting the results or advancing the funds:

	Footnotes	2019 \$m	2018 \$m	2017 \$m
Reported external net operating income by country/territory	1	56,098	53,780	51,445
– UK		9,011	10,340	11,057
– Hong Kong		18,449	17,162	14,992
– US		4,471	4,379	4,573
– France		1,942	1,898	2,203
– other countries		22,225	20,001	18,620

1 Net operating income before change in expected credit losses and other credit impairment charges/Loan impairment charges and other credit risk provisions, also referred to as revenue.

Adjusted results reconciliation

	Footnotes	2019			2018				2017			
		Adjusted	Significant items	Reported	Adjusted	Currency translation	Significant items	Reported	Adjusted	Currency translation	Significant items	Reported
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Revenue	1	55,409	689	56,098	52,331	1,617	(168)	53,780	50,173	1,344	(72)	51,445
ECL		(2,756)	—	(2,756)	(1,689)	(78)	—	(1,767)	N/A	N/A	N/A	N/A
LICs		N/A	N/A	N/A	N/A	N/A	N/A	N/A	(1,686)	(83)	—	(1,769)
Operating expenses		(32,795)	(9,554)	(42,349)	(31,906)	(1,109)	(1,644)	(34,659)	(30,259)	(915)	(3,710)	(34,884)
Share of profit in associates and joint ventures		2,354	—	2,354	2,446	90	—	2,536	2,328	47	—	2,375
Profit(loss) before tax		22,212	(8,865)	13,347	21,182	520	(1,812)	19,890	20,556	393	(3,782)	17,167

1 Net operating income before change in expected credit losses and other credit impairment charges/Loan impairment charges and other credit risk provisions, also referred to as revenue.

Adjusted balance sheet reconciliation

	2019		2018		2017	
	Reported and adjusted	Adjusted	Currency translation	Reported	Adjusted	Currency translation
	\$m	\$m	\$m	\$m	\$m	\$m
Loans and advances to customers (net)	1,036,743	994,276	(12,580)	981,696	940,923	22,041
Interests in associates and joint ventures	24,474	22,301	106	22,407	21,922	822
Total external assets	2,715,152	2,589,195	(31,071)	2,558,124	2,472,597	49,174
Customer accounts	1,439,115	1,379,738	(17,095)	1,362,643	1,339,072	25,390

Adjusted profit reconciliation

	Footnotes	2019 \$m	2018 \$m	2017 \$m
Year ended 31 Dec				
Adjusted profit before tax		22,212	21,182	20,556
Significant items		(8,865)	(1,812)	(3,782)
– customer redress programmes (revenue)		(163)	53	(108)
– disposals, acquisitions and investment in new businesses (revenue)		768	(113)	274
– fair value movements on financial instruments	1	84	(100)	(245)
– costs of structural reform	2	(158)	(361)	(420)
– costs to achieve		—	—	(3,002)
– customer redress programmes (operating expenses)		(1,281)	(146)	(655)
– disposals, acquisitions and investment in new businesses (operating expenses)		—	(52)	(53)
– gain on partial settlement of pension obligation		—	—	188
– goodwill impairment		(7,349)	—	—
– past service costs of guaranteed minimum pension benefits equalisation		—	(228)	—
– restructuring and other related costs		(827)	(66)	—
– settlements and provisions in connection with legal and other regulatory matters		61	(816)	198
– currency translation on significant items		—	17	41
Currency translation		—	520	393
Reported profit before tax		13,347	19,890	17,167

1 Fair value movements on financial instruments include non-qualifying hedges and debt value adjustments on derivatives.

2 Comprises costs associated with preparations for the UK's exit from the European Union, costs to establish the UK ring-fenced bank (including the UK ServCo group) and costs associated with establishing an intermediate holding company in Hong Kong.

11 Trading assets

	Footnotes	2019 \$m	2018 \$m
Treasury and other eligible bills		21,789	22,674
Debt securities		126,043	130,539
Equity securities		78,827	60,896
Trading securities		226,659	214,109
Loans and advances to banks	1	8,402	10,425
Loans and advances to customers	1	19,210	13,596
Year ended 31 Dec		254,271	238,130

1 Loans and advances to banks and customers include reverse repos, stock borrowing and other accounts.

Notes on the financial statements

Trading securities¹

	Footnotes	2019 \$m	2018 \$m
US Treasury and US Government agencies	2	25,722	34,664
UK Government		10,040	9,710
Hong Kong Government		9,783	10,772
Other governments		72,456	66,530
Asset-backed securities	3	4,691	3,351
Corporate debt and other securities		25,140	28,186
Equity securities		78,827	60,896
At 31 Dec		226,659	214,109

1 Included within these figures are debt securities issued by banks and other financial institutions of \$17,846m (2018: \$18,918m), of which \$2,637m (2018: \$2,367m) are guaranteed by various governments.

2 Includes securities that are supported by an explicit guarantee issued by the US Government.

3 Excludes asset-backed securities included under US Treasury and US Government agencies.

12 Fair values of financial instruments carried at fair value

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk taker.

Where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is used. For inactive markets, HSBC sources alternative market information, with greater weight given to information that is considered to be more relevant and reliable. Examples of the factors considered are price observability, instrument comparability, consistency of data sources, underlying data accuracy and timing of prices.

For fair values determined using valuation models, the control framework includes development or validation by independent support functions of the model logic, inputs, model outputs and adjustments. Valuation models are subject to a process of due diligence before becoming operational and are calibrated against external market data on an ongoing basis.

Changes in fair value are generally subject to a profit and loss analysis process and are disaggregated into high-level categories including portfolio changes, market movements and other fair value adjustments.

The majority of financial instruments measured at fair value are in GB&M. GB&M's fair value governance structure comprises its Finance function, Valuation Committees and a Valuation Committee Review Group. Finance is responsible for establishing procedures governing valuation and ensuring fair values are in compliance with accounting standards. The fair values are reviewed by the Valuation Committees, which consist of independent support functions. These committees are overseen by the Valuation Committee Review Group, which considers all material subjective valuations.

Financial liabilities measured at fair value

In certain circumstances, HSBC records its own debt in issue at fair value, based on quoted prices in an active market for the specific instrument. When quoted market prices are unavailable, the own debt in issue is valued using valuation techniques, the inputs for which are either based on quoted prices in an inactive market for the instrument or are estimated by comparison with quoted prices in an active market for similar instruments. In both cases, the fair value includes the effect of applying the credit spread that is appropriate to HSBC's liabilities. The change in fair value of issued debt securities attributable to the Group's own credit spread is computed as follows: for each security at each reporting date, an externally verifiable price is obtained or a price is derived using credit spreads for similar securities for the same issuer. Then, using discounted cash flow, each security is valued using a Libor-based discount curve. The difference in the valuations is attributable to the Group's own credit spread. This methodology is applied consistently across all securities.

Structured notes issued and certain other hybrid instruments are included within trading liabilities and are measured at fair value. The credit spread applied to these instruments is derived from the spreads at which HSBC issues structured notes.

Gains and losses arising from changes in the credit spread of liabilities issued by HSBC, recorded in other comprehensive income, reverse over the contractual life of the debt, provided that the debt is not repaid at a premium or a discount.

Fair value hierarchy

Fair values of financial assets and liabilities are determined according to the following hierarchy:

- Level 1 – valuation technique using quoted market price. These are financial instruments with quoted prices for identical instruments in active markets that HSBC can access at the measurement date.
- Level 2 – valuation technique using observable inputs. These are financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.
- Level 3 – valuation technique with significant unobservable inputs. These are financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

Financial instruments carried at fair value and bases of valuation

	2019				2018			
	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m	Level 1 \$m	Level 2 \$m	Level 3 \$m	Total \$m
Recurring fair value measurements at 31 Dec								
Assets								
Trading assets	186,653	62,639	4,979	254,271	178,100	53,271	6,759	238,130
Financial assets designated and otherwise mandatorily measured at fair value through profit or loss	26,505	9,373	7,749	43,627	23,125	12,494	5,492	41,111
Derivatives	1,728	239,131	2,136	242,995	1,868	203,534	2,423	207,825
Financial investments	271,467	84,087	2,023	357,577	263,885	78,882	2,000	344,767
Liabilities								
Trading liabilities	66,925	16,192	53	83,170	66,300	18,073	58	84,431
Financial liabilities designated at fair value	9,549	149,901	5,016	164,466	6,815	136,362	5,328	148,505
Derivatives	1,331	235,864	2,302	239,497	2,845	201,234	1,756	205,835

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 31 Dec 2019							
Transfers from Level 1 to Level 2	5,257	3,304	1,332	24	278	—	—
Transfers from Level 2 to Level 1	3,486	2,726	673	111	220	—	117
At 31 Dec 2018							
Transfers from Level 1 to Level 2	367	435	2	1	79	—	—
Transfers from Level 2 to Level 1	17,861	4,959	85	128	1,821	—	138

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarterly reporting period. Transfers into and out of levels of the fair value hierarchy are primarily attributable to observability of valuation inputs and price transparency.

Fair value adjustments

Fair value adjustments are adopted when HSBC determines there are additional factors considered by market participants that are not incorporated within the valuation model. Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement, such as when models are enhanced and therefore fair value adjustments may no longer be required.

Global Banking and Markets and Corporate Centre fair value adjustments

	2019		2018	
	GB&M \$m	Corporate Centre \$m	GB&M \$m	Corporate Centre \$m
Type of adjustment				
Risk-related	1,040	125	1,042	138
– bid-offer	428	79	430	76
– uncertainty	115	1	99	6
– credit valuation adjustment	355	38	442	52
– debt valuation adjustment	(126)	—	(198)	—
– funding fair value adjustment	241	7	256	4
– other	27	—	13	—
Model-related	71	3	79	3
– model limitation	68	3	79	3
– other	3	—	—	—
Inception profit (Day 1 P&L reserves)	72	—	85	—
At 31 Dec	1,183	128	1,206	141

Bid-offer

IFRS 13 'Fair value measurement' requires the use of the price within the bid-offer spread that is most representative of fair value. Valuation models will typically generate mid-market values. The bid-offer adjustment reflects the extent to which bid-offer costs would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments or by disposing of or unwinding the position.

Notes on the financial statements

Uncertainty

Certain model inputs may be less readily determinable from market data and/or the choice of model itself may be more subjective. In these circumstances, an adjustment may be necessary to reflect the likelihood that market participants would adopt more conservative values for uncertain parameters and/or model assumptions than those used in HSBC's valuation model.

Credit and debt valuation adjustments

The credit valuation adjustment ('CVA') is an adjustment to the valuation of over-the-counter ('OTC') derivative contracts to reflect the possibility that the counterparty may default and that HSBC may not receive the full market value of the transactions.

The debt valuation adjustment ('DVA') is an adjustment to the valuation of OTC derivative contracts to reflect the possibility that HSBC may default, and that it may not pay the full market value of the transactions.

HSBC calculates a separate CVA and DVA for each legal entity, and for each counterparty to which the entity has exposure. With the exception of central clearing parties, all third-party counterparties are included in the CVA and DVA calculations, and these adjustments are not netted across Group entities.

HSBC calculates the CVA by applying the probability of default ('PD') of the counterparty, conditional on the non-default of HSBC, to HSBC's expected positive exposure to the counterparty and multiplying the result by the loss expected in the event of default. Conversely, HSBC calculates the DVA by applying the PD of HSBC, conditional on the non-default of the counterparty, to the expected positive exposure of the counterparty to HSBC and multiplying the result by the loss expected in the event of default. Both calculations are performed over the life of the potential exposure.

For most products HSBC uses a simulation methodology, which incorporates a range of potential exposures over the life of the portfolio, to calculate the expected positive exposure to a counterparty. The simulation methodology includes credit mitigants, such as counterparty netting agreements and collateral agreements with the counterparty.

The methodologies do not, in general, account for 'wrong-way risk'. Wrong-way risk is an adverse correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. The risk can either be general, perhaps related to the currency of the issuer country, or specific to the transaction concerned. When there is significant wrong-way risk, a trade-specific approach is applied to reflect this risk in the valuation.

Funding fair value adjustment

The funding fair value adjustment ('FFVA') is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. The expected future funding exposure is calculated by a simulation methodology, where available, and is adjusted for events that may terminate the exposure, such as the default of HSBC or the counterparty. The FFVA and DVA are calculated independently.

Model limitation

Models used for portfolio valuation purposes may be based upon a simplified set of assumptions that do not capture all current and future material market characteristics. In these circumstances, model limitation adjustments are adopted.

Inception profit (Day 1 P&L reserves)

Inception profit adjustments are adopted when the fair value estimated by a valuation model is based on one or more significant unobservable inputs. The accounting for inception profit adjustments is discussed in Note 1.

Fair value valuation bases

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs – Level 3

	Assets					Liabilities			
	Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Total	Trading liabilities	Designated at fair value	Derivatives	Total
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Private equity including strategic investments	716	4	7,289	—	8,009	4	—	—	4
Asset-backed securities	874	934	28	—	1,836	—	—	—	—
Loans held for securitisation	—	1	39	—	40	—	—	—	—
Structured notes	—	3	—	—	3	47	5,016	—	5,063
Derivatives with monolines	—	—	—	66	66	—	—	—	—
Other derivatives	—	—	—	2,070	2,070	—	—	2,302	2,302
Other portfolios	433	4,037	393	—	4,863	2	—	—	2
At 31 Dec 2019	2,023	4,979	7,749	2,136	16,887	53	5,016	2,302	7,371
Private equity including strategic investments	427	20	5,106	—	5,553	12	—	—	12
Asset-backed securities	1,030	1,140	32	—	2,202	—	—	—	—
Loans held for securitisation	—	—	49	—	49	—	—	—	—
Structured notes	—	3	—	—	3	46	5,328	—	5,374
Derivatives with monolines	—	—	—	65	65	—	—	—	—
Other derivatives	—	—	—	2,358	2,358	—	—	1,755	1,755
Other portfolios	543	5,596	305	—	6,444	—	—	1	1
At 31 Dec 2018	2,000	6,759	5,492	2,423	16,674	58	5,328	1,756	7,142

Level 3 instruments are present in both ongoing and legacy businesses. Loans held for securitisation, derivatives with monolines, certain 'other derivatives' and predominantly all Level 3 ABSs are legacy positions. HSBC has the capability to hold these positions.

Private equity including strategic investments

The fair value of a private equity investment (including strategic investments) is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors; by reference to market valuations for similar entities quoted in an active market; or the price at which similar companies have changed ownership.

Asset-backed securities

While quoted market prices are generally used to determine the fair value of the asset-backed securities ('ABSs'), valuation models are used to substantiate the reliability of the limited market data available and to identify whether any adjustments to quoted market prices are required. For certain ABSs, such as residential mortgage-backed securities, the valuation uses an industry standard model with assumptions relating to prepayment speeds, default rates and loss severity based on collateral type, and performance, as appropriate. The valuations output is benchmarked for consistency against observable data for securities of a similar nature.

Structured notes

The fair value of Level 3 structured notes is derived from the fair value of the underlying debt security, and the fair value of the embedded derivative is determined as described in the paragraph below on derivatives. These structured notes comprise principally equity-linked notes issued by HSBC, which provide the counterparty with a return linked to the performance of equity securities and other portfolios.

Examples of the unobservable parameters include long-dated equity volatilities and correlations between equity prices, and interest and foreign exchange rates.

Derivatives

OTC derivative valuation models calculate the present value of expected future cash flows, based upon 'no arbitrage' principles. For many vanilla derivative products, the modelling approaches used are standard across the industry. For more complex derivative products, there may be some differences in market practice. Inputs to valuation models are determined from observable market data wherever possible, including prices available from exchanges, dealers, brokers or providers of consensus pricing. Certain inputs may not be observable in the market directly, but can be determined from observable prices via model calibration procedures or estimated from historical data or other sources.

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

Movement in Level 3 financial instruments

	Assets					Liabilities	
	Financial invest- ments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value	Derivatives
	\$m	\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2019	2,000	6,759	5,492	2,423	58	5,328	1,756
Total gains/(losses) recognised in profit or loss	6	(112)	598	278	(4)	195	930
– net income from financial instruments held for trading or managed on a fair value basis	–	(112)	–	278	(4)	–	930
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	598	–	–	195	–
– gains less losses from financial investments at fair value through other comprehensive income	10	–	–	–	–	–	–
– expected credit loss charges and other credit risk charges	(4)	–	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI') ¹	269	76	(1)	49	1	18	52
– financial investments: fair value gains/(losses)	261	–	–	–	–	–	–
– exchange differences	8	76	(1)	49	1	18	52
Purchases	271	2,206	2,353	–	8	157	–
New issuances	–	154	–	–	6	1,601	–
Sales	(10)	(895)	(276)	–	(9)	(193)	–
Settlements	(329)	(2,107)	(434)	(100)	(7)	(1,048)	(162)
Transfers out	(471)	(1,558)	(23)	(710)	(9)	(1,079)	(473)
Transfers in	287	456	40	196	9	37	199
At 31 Dec 2019	2,023	4,979	7,749	2,136	53	5,016	2,302
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2019	(4)	(22)	477	279	–	57	(407)
– net income from financial instruments held for trading or managed on a fair value basis	–	(22)	–	279	–	–	(407)
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss	–	–	477	–	–	57	–
– loan impairment recoveries and other credit risk provisions	(4)	–	–	–	–	–	–

Notes on the financial statements

Movement in Level 3 financial instruments (continued)

	Footnotes	Assets				Liabilities	
		Financial investments	Trading assets	Designated and otherwise mandatorily measured at fair value through profit or loss	Derivatives	Trading liabilities	Designated at fair value
		\$m	\$m	\$m	\$m	\$m	\$m
At 1 Jan 2018		1,767	5,080	3,958	2,444	93	4,107
Total gains/(losses) recognised in profit or loss		251	284	608	597	(4)	(637)
– net income from financial instruments held for trading or managed on a fair value basis		–	284	–	597	(4)	255
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss		–	–	608	–	–	(637)
– gains less losses from financial investments at fair value through other comprehensive income		251	–	–	–	–	–
Total gains/(losses) recognised in other comprehensive income ('OCI')	1	17	(274)	(107)	(113)	(3)	(144)
– financial investments: fair value gains/(losses)		15	–	–	–	–	–
– cash flow hedges: fair value gains/(losses)		–	–	6	6	–	2
– exchange differences		2	(274)	(113)	(119)	(3)	(84)
Purchases		275	4,377	2,172	–	3	76
New issuances		–	975	–	–	6	2,442
Sales		(51)	(1,589)	(395)	–	(11)	–
Settlements		(141)	(2,021)	(541)	(191)	(2)	(18)
Transfers out		(685)	(1,402)	(285)	(337)	(24)	(464)
Transfers in		567	1,329	82	23	–	628
At 31 Dec 2018		2,000	6,759	5,492	2,423	58	5,328
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 Dec 2018		–	(5)	199	342	(5)	274
– net income from financial instruments held for trading or managed on a fair value basis		–	(5)	–	342	(5)	(351)
– changes in fair value of other financial instruments mandatorily measured at fair value through profit or loss		–	–	199	–	–	274
– loan impairment recoveries and other credit risk provisions		–	–	–	–	–	–

1 Included in 'financial investments: fair value gains/(losses)' in the current year and 'exchange differences' in the consolidated statement of comprehensive income.

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each quarterly reporting period. Transfers into and out of levels of the fair value hierarchy are primarily attributable to observability of valuation inputs and price transparency.

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

Sensitivity of Level 3 fair values to reasonably possible alternative assumptions

	Footnotes	2019				2018			
		Reflected in profit or loss		Reflected in OCI		Reflected in profit or loss		Reflected in OCI	
		Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes	Favourable changes	Un-favourable changes
		\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Derivatives, trading assets and trading liabilities	1	255	(230)	–	–	269	(257)	–	–
Designated and otherwise mandatorily measured at fair value through profit or loss		532	(417)	–	–	394	(310)	–	–
Financial investments		48	(53)	22	(22)	34	(36)	23	(22)
At 31 Dec		835	(700)	22	(22)	697	(603)	23	(22)

1 Derivatives, trading assets and trading liabilities are presented as one category to reflect the manner in which these instruments are risk managed.

The sensitivity analysis aims to measure a range of fair values consistent with the application of a 95% confidence interval. Methodologies take account of the nature of the valuation technique employed, as well as the availability and reliability of observable proxy and historical data.

When the fair value of a financial instrument is affected by more than one unobservable assumption, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

Key unobservable inputs to Level 3 financial instruments

The following table lists key unobservable inputs to Level 3 financial instruments and provides the range of those inputs at 31 December 2019. The core range of inputs is the estimated range within which 90% of the inputs fall.

Quantitative information about significant unobservable inputs in Level 3 valuations

Footnotes	Fair value		Valuation techniques	Key unobservable inputs	2019				2018			
	Assets	Liabilities			Full range of inputs		Core range of inputs ¹		Full range of inputs		Core range of inputs ¹	
	\$m	\$m			Lower	Higher	Lower	Higher	Lower	Higher	Lower	Higher
Private equity including strategic investments	8,009	4	See below	See below	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Asset-backed securities ²	1,836	–										
– CLO/CDO	373	–	Market proxy	Prepayment rate	0%	9%	0%	9%	0%	10%	0%	10%
			Market proxy	Bid quotes	0	100	0	100	0	100	50	100
– other ABSs	1,463	–	Market proxy	Bid quotes	0	101	61	98	0	271	71	99
Loans held for securitisation	40	–										
Structured notes	3	5,063										
– equity-linked notes	–	3,768	Model – Option model	Equity volatility	5%	90%	6%	56%	8%	79%	13%	53%
			Model – Option model	Equity correlation	9%	93%	9%	93%	17%	93%	40%	77%
– FX-linked notes	–	1,046	Model – Option model	FX volatility	1%	23%	3%	22%	1%	27%	3%	25%
– other	3	249										
Derivatives with monolines	66	–	Model – Discounted cash flow	Credit spread	0.4%	2%	0.4%	2%	0.2%	1%	0.2%	1%
Other derivatives	2,070	2,302										
– Interest rate derivatives:												
securitisation swaps	314	640	Model – Discounted cash flow	Prepayment rate	6%	7%	6%	7%	6%	7%	6%	7%
long-dated swaptions	838	51	Model – Option model	IR volatility	8%	22%	8%	21%	13%	39%	14%	36%
other	255	155										
– FX derivatives:												
FX options	93	218	Model – Option model	FX volatility	1%	25%	5%	11%	1%	27%	7%	12%
other	119	104										
– Equity derivatives:												
long-dated single stock options	230	293	Model – Option model	Equity volatility	0%	89%	7%	74%	5%	83%	5%	81%
other	78	712										
– Credit derivatives:												
other	143	129										
Other portfolios	4,863	2										
– structured certificates	1,515	–	Model – Discounted cash flow	Credit volatility	4%	4%	4%	4%	2%	4%	2%	4%
– repurchase agreements	1,604	–										
– other ³	1,744	2										
At 31 Dec 2019	16,887	7,371										

¹ The core range of inputs is the estimated range within which 90% of the inputs fall.

² Collateralised loan obligation/collateralised debt obligation.

³ 'Other' includes a range of smaller asset holdings.

Private equity including strategic investments

Given the bespoke nature of the analysis in respect of each private equity holding, it is not practical to quote a range of key unobservable inputs.

Prepayment rates

Prepayment rates are a measure of the anticipated future speed at which a loan portfolio will be repaid in advance of the due date. They vary according to the nature of the loan portfolio and expectations of future market conditions, and may be estimated using a variety of evidence, such as prepayment rates implied from proxy observable security prices, current or historical prepayment rates and macroeconomic modelling.

Market proxy

Market proxy pricing may be used for an instrument when specific market pricing is not available but there is evidence from instruments with common characteristics. In some cases it might be possible to identify a specific proxy, but more generally evidence across a wider range of instruments will be used to understand the factors that influence current market pricing and the manner of that influence.

Volatility

Volatility is a measure of the anticipated future variability of a market price. It varies by underlying reference market price, and by strike and maturity of the option.

Certain volatilities, typically those of a longer-dated nature, are unobservable and are estimated from observable data. The range of unobservable volatilities reflects the wide variation in volatility inputs by reference market price. The core range is significantly narrower than the full range because these examples with extreme volatilities occur relatively rarely within the HSBC portfolio.

Correlation

Correlation is a measure of the inter-relationship between two market prices and is expressed as a number between minus one and one. It is used to value more complex instruments where the payout is dependent upon more than one market price. There is a wide range of instruments for which correlation is an input, and consequently a wide range of both same-asset correlations and cross-asset correlations is used. In general, the range of same-asset correlations will be narrower than the range of cross-asset correlations.

Unobservable correlations may be estimated based upon a range of evidence, including consensus pricing services, HSBC trade prices, proxy correlations and examination of historical price relationships. The range of unobservable correlations quoted in the table reflects the wide variation in correlation inputs by market price pair.

Credit spread

Credit spread is the premium over a benchmark interest rate required by the market to accept lower credit quality. In a discounted cash flow model, the credit spread increases the discount factors applied to future cash flows, thereby reducing the value of an asset. Credit spreads may be implied from market prices and may not be observable in more illiquid markets.

Inter-relationships between key unobservable inputs

Key unobservable inputs to Level 3 financial instruments may not be independent of each other. As described above, market variables may be correlated. This correlation typically reflects the manner in which different markets tend to react to macroeconomic or other events. Furthermore, the effect of changing market variables on the HSBC portfolio will depend on HSBC's net risk position in respect of each variable.

HSBC Holdings

Basis of valuing HSBC Holdings' financial assets and liabilities measured at fair value

	Footnotes	2019 \$m	2018 \$m
Valuation technique using observable inputs: Level 2			
Assets at 31 Dec			
– derivatives		2,002	707
– financial investments		–	–
– designated and otherwise mandatorily measured at fair value through profit or loss	1	61,964	23,513
Liabilities at 31 Dec			
– designated at fair value		30,303	25,049
– derivatives		2,021	2,159

1 In 2019, due to the restructuring of the Group's Asia and UK operations to meet resolution and recovery requirements, changes in the terms of financial assets have resulted in the derecognition of principal amounts of \$33.3bn, relating to financial assets measured at amortised cost. Under the revised terms, financial assets with principal amounts of \$33.3bn (2018: nil) measured on fair value basis have been recognised.

13 Fair values of financial instruments not carried at fair value

Fair values of financial instruments not carried at fair value and bases of valuation

	Fair value				Total \$m
	Carrying amount \$m	Quoted market price Level 1 \$m	Observable inputs Level 2 \$m	Significant unobservable inputs Level 3 \$m	
At 31 Dec 2019					
Assets					
Loans and advances to banks	69,203	—	68,508	739	69,247
Loans and advances to customers	1,036,743	—	10,365	1,027,178	1,037,543
Reverse repurchase agreements – non-trading	240,862	16	240,199	691	240,906
Financial investments – at amortised cost	85,735	26,202	62,572	287	89,061
Liabilities					
Deposits by banks	59,022	—	58,951	—	58,951
Customer accounts	1,439,115	—	1,439,362	150	1,439,512
Repurchase agreements – non-trading	140,344	—	140,344	—	140,344
Debt securities in issue	104,555	—	104,936	—	104,936
Subordinated liabilities	24,600	—	28,861	385	29,246
At 31 Dec 2018					
Assets					
Loans and advances to banks	72,167	—	68,378	3,791	72,169
Loans and advances to customers	981,696	—	10,518	974,559	985,077
Reverse repurchase agreements – non-trading	242,804	81	241,407	1,369	242,857
Financial investments – at amortised cost	62,666	1,790	60,073	216	62,079
Liabilities					
Deposits by banks	56,331	—	56,308	—	56,308
Customer accounts	1,362,643	—	1,362,794	151	1,362,945
Repurchase agreements – non-trading	165,884	—	165,884	—	165,884
Debt securities in issue	85,342	—	85,430	—	85,430
Subordinated liabilities	22,437	—	24,968	373	25,341

Other financial instruments not carried at fair value are typically short term in nature and reprice to current market rates frequently. Accordingly, their carrying amount is a reasonable approximation of fair value. They include cash and balances at central banks, items in the course of collection from and transmission to other banks, Hong Kong Government certificates of indebtedness and Hong Kong currency notes in circulation, all of which are measured at amortised cost.

Valuation

Fair value is an estimate of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It does not reflect the economic benefits and costs that HSBC expects to flow from an instrument's cash flow over its expected future life. Our valuation methodologies and assumptions in determining fair values for which no observable market prices are available may differ from those of other companies.

Loans and advances to banks and customers

To determine the fair value of loans and advances to banks and customers, loans are segregated, as far as possible, into portfolios of similar characteristics. Fair values are based on observable market transactions, when available. When they are unavailable, fair values are estimated using valuation models incorporating a range of input assumptions. These assumptions may include: value estimates from third-party brokers reflecting over-the-counter trading activity; forward-looking discounted cash flow models, taking account of expected customer prepayment rates, using assumptions that HSBC believes are consistent with those that would be used by market participants in valuing such loans; new business rates estimates for similar loans; and trading inputs from other market participants including observed primary and secondary trades. From time to time, we may engage a third-party valuation specialist to measure the fair value of a pool of loans.

The fair value of loans reflects expected credit losses at the balance sheet date and estimates of market participants' expectations of credit losses over the life of the loans, and the fair value effect of repricing between origination and the balance sheet date. For credit-impaired loans, fair value is estimated by discounting the future cash flows over the time period they are expected to be recovered.

Financial investments

The fair values of listed financial investments are determined using bid market prices. The fair values of unlisted financial investments are determined using valuation techniques that incorporate the prices and future earnings streams of equivalent quoted securities.

Deposits by banks and customer accounts

The fair values of on-demand deposits are approximated by their carrying value. For deposits with longer-term maturities, fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities.

Debt securities in issue and subordinated liabilities

Fair values in debt securities in issue and subordinated liabilities are determined using quoted market prices at the balance sheet date where available, or by reference to quoted market prices for similar instruments.

Notes on the financial statements

Repurchase and reverse repurchase agreements – non-trading

Fair values of repurchase and reverse repurchase agreements that are held on a non-trading basis provide approximate carrying amounts. This is due to the fact that balances are generally short dated.

HSBC Holdings

The methods used by HSBC Holdings to determine fair values of financial instruments for the purposes of measurement and disclosure are described above.

Fair values of HSBC Holdings' financial instruments not carried at fair value on the balance sheet

	Footnotes	2019		2018	
		Carrying amount	Fair value ¹	Carrying amount	Fair value ¹
		\$m	\$m	\$m	\$m
Assets at 31 Dec					
Loans and advances to HSBC undertakings		10,218	10,504	56,144	56,801
Financial investments – at amortised cost	2	16,106	16,121		
Liabilities at 31 Dec					
Amounts owed to HSBC undertakings		464	464	949	949
Debt securities in issue		56,844	59,140	50,800	51,552
Subordinated liabilities		18,361	22,536	17,715	20,224

1 Fair values (other than Level 1 financial investments) were determined using valuation techniques with observable inputs (Level 2).

2 The 2019 period includes \$16.1bn (2018: nil) of investments in highly liquid securities.

14 Financial assets designated and otherwise mandatorily measured at fair value through profit or loss

	2019			2018		
	Designated at fair value \$m	Mandatorily measured at fair value \$m	Total \$m	Designated at fair value \$m	Mandatorily measured at fair value \$m	Total \$m
Securities	2,344	35,808	38,152	2,349	30,217	32,566
– treasury and other eligible bills	630	31	661	641	29	670
– debt securities	1,714	4,838	6,552	1,708	4,839	6,547
– equity securities	–	30,939	30,939	–	25,349	25,349
Loans and advances to banks and customers	1	4,555	4,556	–	7,717	7,717
Other	–	919	919	–	828	828
At 31 Dec	2,345	41,282	43,627	2,349	38,762	41,111

Securities¹

	Footnotes	2019			2018		
		Designated at fair value \$m	Mandatorily measured at fair value \$m	Total \$m	Designated at fair value \$m	Mandatorily measured at fair value \$m	Total \$m
Hong Kong Government		4	–	4	4	–	4
Other governments		666	754	1,420	673	713	1,386
Asset-backed securities	2	–	363	363	–	399	399
Corporate debt and other securities		1,674	3,752	5,426	1,672	3,756	5,428
Equities		–	30,939	30,939	–	25,349	25,349
At 31 Dec		2,344	35,808	38,152	2,349	30,217	32,566

1 Included within these figures are debt securities issued by banks and other financial institutions of \$366m (2018 re-presented: \$676m), of which nil (2018: nil) are guaranteed by various governments.

2 Excludes asset-backed securities included under US Treasury and US Government agencies.

15 Derivatives

Notional contract amounts and fair values of derivatives by product contract type held by HSBC

	Notional contract amount		Fair value – Assets			Fair value – Liabilities		
	Trading \$m	Hedging \$m	Trading \$m	Hedging \$m	Total \$m	Trading \$m	Hedging \$m	Total \$m
Foreign exchange	8,207,629	31,899	84,083	455	84,538	84,498	740	85,238
Interest rate	17,895,349	177,006	183,668	1,208	184,876	175,095	2,031	177,126
Equities	1,077,347	–	9,053	–	9,053	11,237	–	11,237
Credit	345,644	–	4,744	–	4,744	5,597	–	5,597
Commodity and other	93,245	–	1,523	–	1,523	2,038	–	2,038
Gross total fair values	27,619,214	208,905	283,071	1,663	284,734	278,465	2,771	281,236
Offset (Note 30)					(41,739)			(41,739)
At 31 Dec 2019	27,619,214	208,905	283,071	1,663	242,995	278,465	2,771	239,497

Foreign exchange	7,552,462	29,969	85,959	458	86,417	82,494	653	83,147
Interest rate	24,589,916	163,271	155,293	1,080	156,373	154,257	2,261	156,518
Equities	1,256,550	–	10,198	–	10,198	10,750	–	10,750
Credit	346,596	–	3,414	–	3,414	3,776	–	3,776
Commodity and other	74,159	–	1,134	–	1,134	1,355	–	1,355
Gross total fair values	33,819,683	193,240	255,998	1,538	257,536	252,632	2,914	255,546
Offset (Note 30)					(49,711)			(49,711)
At 31 Dec 2018	33,819,683	193,240	255,998	1,538	207,825	252,632	2,914	205,835

The notional contract amounts of derivatives held for trading purposes and derivatives designated in hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.

Derivative assets and liabilities increased during 2019, driven by yield curve movements and changes in foreign exchange rates.

Notional contract amounts and fair values of derivatives by product contract type held by HSBC Holdings with subsidiaries

	Notional contract amount		Assets			Liabilities		
	Trading \$m	Hedging \$m	Trading \$m	Hedging \$m	Total \$m	Trading \$m	Hedging \$m	Total \$m
Foreign exchange	24,980	–	161	–	161	766	–	766
Interest rate	48,937	36,769	435	1,406	1,841	1,072	183	1,255
At 31 Dec 2019	73,917	36,769	596	1,406	2,002	1,838	183	2,021

Foreign exchange	16,623	1,120	207	–	207	628	155	783
Interest rate	44,059	38,418	283	217	500	538	838	1,376
At 31 Dec 2018	60,682	39,538	490	217	707	1,166	993	2,159

Use of derivatives

For details regarding the use of derivatives, see page 139 under 'Market Risk'.

Trading derivatives

Most of HSBC's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making and risk management. Market-making entails quoting bid and offer prices to other market participants for the purpose of generating revenue based on spread and volume. Risk management activity is undertaken to manage the risk arising from client transactions, with the principal purpose of retaining client margin. Other derivatives classified as held for trading include non-qualifying hedging derivatives.

Substantially all of HSBC Holdings' derivatives entered into with subsidiaries are managed in conjunction with financial liabilities designated at fair value.

Derivatives valued using models with unobservable inputs

The difference between the fair value at initial recognition (the transaction price) and the value that would have been derived had valuation techniques used for subsequent measurement been applied at initial recognition, less subsequent releases, is as shown in the following table:

Notes on the financial statements

Unamortised balance of derivatives valued using models with significant unobservable inputs

	Footnotes	2019 \$m	2018 \$m
Unamortised balance at 1 Jan		86	106
Deferral on new transactions		145	161
Recognised in the income statement during the year:		(154)	(158)
– amortisation		(80)	(96)
– subsequent to unobservable inputs becoming observable		(3)	(2)
– maturity, termination or offsetting derivative		(71)	(60)
Exchange differences		1	(4)
Other		(5)	(19)
Unamortised balance at 31 Dec	¹	73	86

¹ This amount is yet to be recognised in the consolidated income statement.

Hedge accounting derivatives

HSBC applies hedge accounting to manage the following risks: interest rate, foreign exchange and net investment in foreign operations. Further details on how these risks arise and how they are managed by the Group can be found in the 'Report of the Directors'.

Fair value hedges

HSBC enters into fixed-for-floating-interest-rate swaps to manage the exposure to changes in fair value caused by movements in market interest rates on certain fixed-rate financial instruments that are not measured at fair value through profit or loss, including debt securities held and issued.

HSBC hedging instrument by hedged risk

	Hedging instrument				
	Notional amount ¹	Carrying amount		Balance sheet presentation	Change in fair value ²
		Assets	Liabilities		
Hedged risk	\$m	\$m	\$m		\$m
Interest rate ³	122,753	1,056	2,208	Derivatives	(1,531)
At 31 Dec 2019	122,753	1,056	2,208		(1,531)
Interest rate ³	123,551	915	2,123	Derivatives	283
At 31 Dec 2018	123,551	915	2,123		283

¹ The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.

² Used in effectiveness testing; comprising the full fair value change of the hedging instrument not excluding any component.

³ The hedged risk 'interest rate' includes inflation risk.

HSBC hedged item by hedged risk

	Hedged item				Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²		Change in fair value ¹ \$m	Recognised in profit and loss \$m	Profit and loss presentation
	Assets \$m	Liabilities \$m	Assets \$m	Liabilities \$m			
Hedged risk							
					Financial assets designated and otherwise mandatorily measured at fair value through other comprehensive income		
	90,617		1,859		2,304		
Interest rate ³					Loans and advances to banks	(7)	Net income from financial instruments held for trading or managed on a fair value basis
	153		4		5		
	1,897		12		Loans and advances to customers		
					24		
	15,206		797		Debt securities in issue	(1,011)	
	3,009		39		Deposits by banks	202	
At 31 Dec 2019	92,667	18,215	1,875	836	1,524	(7)	

HSBC hedged item by hedged risk (continued)

Hedged risk	Hedged item					Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²			Change in fair value ¹	Recognised in profit and loss	Profit and loss presentation
	Assets	Liabilities	Assets	Liabilities	Balance sheet presentation			
	\$m	\$m	\$m	\$m		\$m	\$m	
Interest rate ³	93,469		231		Financial assets designated and otherwise mandatorily measured at fair value through other comprehensive income	(425)	(37)	Net income from financial instruments held for trading or managed on a fair value basis
	1,455		(6)		Loans and advances to customers	(4)		
		14,171		(155)	Debt securities in issue	124		
		4,780		45	Deposits by banks	(15)		
At 31 Dec 2018	94,924	18,951	225	(110)		(320)	(37)	

1 Used in effectiveness testing; comprising amount attributable to the designated hedged risk that can be a risk component.

2 The accumulated amount of fair value adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses were assets of \$482m for FVOCI and assets of \$2m for debt issued.

3 The hedged risk 'interest rate' includes inflation risk.

HSBC Holdings hedging instrument by hedged risk

Hedged risk	Hedging instrument				
	Carrying amount				
	Notional amount ^{1,4}	Assets	Liabilities	Balance sheet presentation	Change in fair value ²
	\$m	\$m	\$m		\$m
Interest rate ³	36,769	1,406	183	Derivatives	1,704
At 31 Dec 2019	36,769	1,406	183		1,704

1 The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.

2 Used in effectiveness testing; comprising the full fair value change of the hedging instrument not excluding any component.

3 The hedged risk 'interest rate' includes foreign exchange risk.

4 The notional amount of non-dynamic fair value hedges is equal to \$36,769m, of which the weighted-average maturity date is March 2027 and the weighted-average swap rate is 1.53%. The majority of these hedges are internal to HSBC Group.

HSBC Holdings hedged item by hedged risk

Hedged risk	Hedged item					Ineffectiveness		
	Carrying amount		Accumulated fair value hedge adjustments included in carrying amount ²			Change in fair value ¹	Recognised in profit and loss	Profit and loss presentation
	Assets	Liabilities	Assets	Liabilities	Balance sheet presentation			
	\$m	\$m	\$m	\$m		\$m	\$m	
Interest rate ³		38,126		1,088	Debt securities in issue	(1,697)	7	Net income from financial instruments held for trading or managed on a fair value basis
At 31 Dec 2019	—	38,126	—	1,088		(1,697)	7	

1 Used in effectiveness testing; comprising amount attributable to the designated hedged risk that can be a risk component.

2 The accumulated amount of fair value adjustments remaining in the statement of financial position for hedged items that have ceased to be adjusted for hedging gains and losses were liabilities of \$71m for debt issued.

3 The hedged risk 'interest rate' includes foreign exchange risk.

Sources of hedge ineffectiveness may arise from basis risk, including but not limited to the discount rates used for calculating the fair value of derivatives, hedges using instruments with a non-zero fair value, and notional and timing differences between the hedged items and hedging instruments.

For some debt securities held, HSBC manages interest rate risk in a dynamic risk management strategy. The assets in scope of this strategy are high-quality fixed-rate debt securities, which may be sold to meet liquidity and funding requirements.

The interest rate risk of the HSBC fixed-rate debt securities issued is managed in a non-dynamic risk management strategy.

Cash flow hedges

HSBC's cash flow hedging instruments consist principally of interest rate swaps and cross-currency swaps that are used to manage the variability in future interest cash flows of non-trading financial assets and liabilities, arising due to changes in market interest rates and foreign-currency basis.

HSBC applies macro cash flow hedging for interest rate risk exposures on portfolios of replenishing current and forecasted issuances of non-trading assets and liabilities that bear interest at variable rates, including rolling such instruments. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities on the basis of their contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate cash flows representing both principal balances and interest cash flows across all portfolios are used to determine the effectiveness and ineffectiveness. Macro cash flow hedges are considered to be dynamic hedges.

HSBC also hedges the variability in future cash flows on foreign-denominated financial assets and liabilities arising due to changes in foreign exchange market rates with cross-currency swaps, which are considered dynamic hedges.

Notes on the financial statements

Hedging instrument by hedged risk

	Hedging instrument				Hedged item		Ineffectiveness	
	Carrying amount			Change in fair value ²	Change in fair value ³	Recognised in profit and loss	Profit and loss presentation	
	Notional amount ¹	Assets	Liabilities					Balance sheet presentation
Hedged risk	\$m	\$m	\$m		\$m	\$m	\$m	
Foreign currency	21,385	455	254	Derivatives	341	341	—	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	54,253	152	46	Derivatives	195	193	2	
At 31 Dec 2019	75,638	607	300		536	534	2	
Foreign currency	24,954	295	653	Derivatives	(198)	(200)	2	Net income from financial instruments held for trading or managed on a fair value basis
Interest rate	39,720	165	138	Derivatives	(77)	(67)	(10)	
At 31 Dec 2018	64,674	460	791		(275)	(267)	(8)	

1 The notional contract amounts of derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date. They do not represent amounts at risk.

2 Used in effectiveness testing; comprising the full fair value change of the hedging instrument not excluding any component.

3 Used in effectiveness assessment; comprising amount attributable to the designated hedged risk that can be a risk component.

Sources of hedge ineffectiveness may arise from basis risk, including but not limited to timing differences between the hedged items and hedging instruments and hedges using instruments with a non-zero fair value.

Reconciliation of equity and analysis of other comprehensive income by risk type

	Interest rate	Foreign currency
	\$m	\$m
Cash flow hedging reserve at 1 Jan 2019	(26)	(182)
Fair value gains/(losses)	193	341
Fair value (gains)/losses reclassified from the cash flow hedge reserve to the income statement in respect of:		
Hedged items that have affected profit or loss	99	(371)
Income taxes	(53)	4
Others	(9)	3
Cash flow hedging reserve at 31 Dec 2019	204	(205)
Cash flow hedging reserve at 1 Jan 2018	(40)	(187)
Fair value gains/(losses)	(67)	(200)
Fair value (gains)/losses reclassified from the cash flow hedge reserve to the income statement in respect of:		
Hedged items that has affected profit or loss	90	227
Income taxes	(11)	(13)
Others	2	(9)
Cash flow hedging reserve at 31 Dec 2018	(26)	(182)

Hedges of net investments in foreign operations

The Group applies hedge accounting in respect of certain consolidated net investments. Hedging is undertaken using forward foreign exchange contracts or by financing with foreign currency borrowings. At 31 December 2019, the fair values of outstanding financial instruments designated as hedges of net investments in foreign operations were assets of nil (2018: \$163m), liabilities of \$485m (2018: nil) and notional contract values of \$10,500m (2018: \$5,000m). Ineffectiveness recognised in 'Net income from financial instruments held for trading or managed on a fair value basis' in the year ended 31 December 2019 was nil (2018: nil).

Interest rate benchmark reform: Amendments to IFRS 9 and IAS 39 'Financial Instruments'

Following the request received by the Financial Stability Board from the G20, a fundamental review and reform of the major interest rate benchmarks is underway across the world's largest financial markets. This reform was not contemplated when IAS 39 was published, and consequently the IASB has published a set of temporary exceptions from applying specific hedge accounting requirements to provide clarification on how the standard should be applied in these circumstances.

Amendments to IFRS 9 and IAS 39 were endorsed in January 2020 and modify specific hedge accounting requirements. Under these temporary exceptions, interbank offered rates ('Ibors') are assumed to continue unaltered for the purposes of hedge accounting until such time as the uncertainty is resolved.

The application of this set of temporary exceptions is mandatory for accounting periods starting on or after 1 January 2020, but early adoption is permitted. HSBC elected to apply these exceptions for the year ended 31 December 2019. Significant judgement will be required in determining when uncertainty is expected to be resolved and therefore when the temporary exceptions will cease to apply. However, at 31 December 2019, the uncertainty continued to exist and so the temporary exceptions apply to all of the Group's hedge accounting relationships that reference benchmarks subject to reform or replacement.

The Group has cash flow and fair value hedge accounting relationships that are exposed to different Ibors, predominantly US dollar Libor, sterling Libor, and Euribor as well as overnight rates subject to the market-wide benchmarks reform, such as the European overnight Index Average rate ('Eonia'). Many of the existing derivatives, loans, bonds and other financial instruments designated in relationships referencing these benchmarks will transition to new risk-free rates ('RFRs') in different ways and at different times. External progress on the transition to RFRs is being monitored, with the objective of ensuring a smooth transition for the Group's hedge accounting relationships. The specific issues arising will vary with the details of each hedging relationship, but may arise due to the transition of

existing products included in the designation, a change in expected volumes of products to be issued, a change in contractual terms of new products issued, or a combination of these factors. Some hedges may need to be de-designated and new relationships entered into, while others may survive the market-wide benchmarks reform.

The hedge accounting relationships that are affected by the adoption of the temporary exceptions hedge items presented in the balance sheet as 'Financial assets designated and otherwise mandatorily measured at fair value through other comprehensive income', 'Loans and advances to customers', 'Debt securities in issue' and 'Deposits by banks'.

The notional amounts of interest rate derivatives designated in hedge accounting relationships represent the extent of the risk exposure managed by the Group that is directly affected by market-wide benchmarks reform and impacted by the temporary exceptions. The cross-currency swaps designated in hedge accounting relationships and affected by Ibor reform are not significant and have not been presented below:

Hedging instrument impacted by Ibor reform

	Hedging instrument					Not impacted by Ibor reform	Notional amount ¹
	Impacted by Ibor reform						
	€ \$m	£ \$m	\$ \$m	Other \$m	Total \$m	\$m	\$m
Fair value hedges	20,378	4,533	41,274	13,435	79,620	43,133	122,753
Cash flow hedges	5,724	6,594	15,750	15,979	44,047	10,206	54,253
At 31 Dec 2019	26,102	11,127	57,024	29,414	123,667	53,339	177,006

¹ The notional contract amounts of interest rate derivatives designated in qualifying hedge accounting relationships indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.

The calculation of Eonia changed on 2 October 2019 so that going forward it is calculated as the euro short-term rate ('€STR') plus a fixed spread of 8.5 basis points. This change has triggered a structural change in the sale and repurchase agreement ('repo') market in France, whereby the overnight floating rate repo market referencing Eonia has significantly shifted into an overnight fixed rate repo market referencing repo rates. In this context, regarding the accounting standard setters' activities, management consider that continuing to apply hedge accounting to the existing hedge relationships using forecast issuances of overnight repos, provides the most relevant accounting.

For further information on Ibor transition, see our Areas of Special interest on page 81.

Hedging instrument impacted by Ibor reform held by HSBC Holdings

	Hedging instrument						Notional amount
	Impacted by Ibor reform					Not impacted by Ibor reform	
	€	£	\$	Other	Total		
	\$m	\$m	\$m	\$m	\$m		
Fair value hedges	3,928	5,222	24,500	3,119	36,769	—	36,769
Cash flow hedges	—	—	—	—	—	—	—
At 31 Dec 2019	3,928	5,222	24,500	3,119	36,769	—	36,769

16 Financial investments

Carrying amount of financial investments

	Footnotes	2019 \$m	2018 \$m
Financial investments measured at fair value through other comprehensive income		357,577	344,767
– treasury and other eligible bills		95,043	96,642
– debt securities		260,536	246,371
– equity securities		1,913	1,657
– other instruments	¹	85	97
Debt instruments measured at amortised cost	²	85,735	62,666
– treasury and other eligible bills		10,476	679
– debt securities		75,259	61,987
At 31 Dec		443,312	407,433

¹ 'Other instruments' comprises of loans and advances.

² Fair value \$89.1bn (2018: \$62.1bn).

Notes on the financial statements

Equity instruments measured at fair value through other comprehensive income

Type of equity instruments	Fair value \$m	Dividends recognised \$m
Investments required by central institutions	738	22
Business facilitation	1,124	19
Others	51	9
At 31 Dec 2019	1,913	50
Investments required by central institutions	848	34
Business facilitation	758	21
Others	51	9
At 31 Dec 2018	1,657	64

Financial investments at amortised cost and fair value

	Footnotes	2019		2018	
		Amortised cost \$m	Fair value ¹ \$m	Amortised cost \$m	Fair value ¹ \$m
US Treasury		79,633	80,589	54,941	54,763
US Government agencies	2	26,356	26,387	21,058	20,580
US Government-sponsored entities	2	8,070	8,259	12,867	12,701
UK Government		28,621	28,973	20,576	21,083
Hong Kong Government		47,824	47,820	49,956	49,955
Other governments		140,510	142,511	142,495	144,099
Asset-backed securities	3	2,954	2,889	3,579	3,390
Corporate debt and other securities		101,750	107,364	97,286	98,419
Equities		1,241	1,913	1,353	1,657
At 31 Dec		436,959	446,705	404,111	406,647

1 Included within 'fair value' figures are debt securities issued by banks and other financial institutions of \$61bn (2018: \$56bn), of which \$11bn (2018: \$8bn) are guaranteed by various governments.

2 Includes securities that are supported by an explicit guarantee issued by the US Government.

3 Excludes asset-backed securities included under US Government agencies and sponsored entities.

Maturities of investments in debt securities at their carrying amount

	Up to 1 year \$m	1 to 5 years \$m	5 to 10 years \$m	Over 10 years \$m	Total \$m
Debt securities measured at fair value through other comprehensive income	61,833	123,740	42,831	32,132	260,536
Debt securities measured at amortised cost	5,472	14,395	21,431	33,961	75,259
At 31 Dec 2019	67,305	138,135	64,262	66,093	335,795
Debt securities measured at fair value through other comprehensive income	61,598	124,075	36,194	24,504	246,371
Debt securities measured at amortised cost	2,519	10,086	16,065	33,317	61,987
At 31 Dec 2018	64,117	134,161	52,259	57,821	308,358

Contractual maturities and weighted average yields of investment debt securities

	Up to 1 year		1 to 5 years		5 to 10 years		Over 10 years	
	Amount	Yield	Amount	Yield	Amount	Yield	Amount	Yield
	\$m	%	\$m	%	\$m	%	\$m	%
Debt securities measured at fair value through other comprehensive income								
US Treasury	6,322	2.1	26,834	2.0	18,208	2.0	3,268	2.9
US Government agencies	—	—	79	2.2	1	4.7	15,581	2.6
US Government-sponsored agencies	725	2.8	167	3.1	1,940	2.8	2,191	3.0
UK Government	4,681	1.3	4,393	1.1	4,443	0.2	2,811	2.8
Hong Kong Government	559	1.3	145	1.8	152	3.2	—	—
Other governments	39,144	2.3	54,689	2.8	11,478	1.7	1,862	3.6
Asset-backed securities	18	2.7	1	0.5	325	3.1	2,610	2.2
Corporate debt and other securities	9,735	2.0	34,921	1.8	4,879	2.2	2,795	3.4
Total amortised cost at 31 Dec 2019	61,184		121,229		41,426		31,118	
Total carrying value	61,833		123,740		42,831		32,132	
Debt securities measured at amortised cost								
US Treasury	3,010	1.9	4,879	1.8	2,931	1.9	141	4.2
US Government agencies	—	—	13	3.8	19	3.5	10,286	2.6
US Government-sponsored agencies	—	—	482	2.7	551	2.3	2,015	3.2
Hong Kong Government	10	1.6	20	1.6	9	1.4	—	—
Other governments	128	4.4	552	3.4	487	3.1	832	4.2
Asset-backed securities	—	—	—	—	—	—	2	7.5
Corporate debt and other securities	2,324	3.5	8,449	3.4	17,434	3.3	20,685	3.8
Total amortised cost at 31 Dec 2019	5,472		14,395		21,431		33,961	
Total carrying value	5,472		14,395		21,431		33,961	

The maturity distributions of ABSs are presented in the above table on the basis of contractual maturity dates. The weighted average yield for each range of maturities is calculated by dividing the annualised interest income for the year ended 31 December 2019 by the book amount of debt securities at that date. The yields do not include the effect of related derivatives.

HSBC Holdings

HSBC Holdings carrying amount of financial investments

	Footnotes	2019 \$m	2018 \$m
Debt instruments measured at amortised cost	1		
– treasury and other eligible bills		10,081	—
– debt securities		6,025	—
At 31 Dec		16,106	—

1 The 2019 period includes \$16.1bn (2018: nil) of investments in highly liquid securities.

Financial investments at amortised cost and fair value

	2019		2018	
	Amortised cost	Fair value	Amortised cost	Fair value
	\$m	\$m	\$m	\$m
US Treasury	16,106	16,121	—	—
US Government agencies	—	—	—	—
US Government-sponsored entities	—	—	—	—
At 31 Dec	16,106	16,121	—	—

Maturities of investments in debt securities at their carrying amount

	Up to 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total
	\$m	\$m	\$m	\$m	\$m
Debt securities measured at amortised cost	3,010	3,015	—	—	6,025
At 31 Dec 2019	3,010	3,015	—	—	6,025
Debt securities measured at amortised cost	—	—	—	—	—
At 31 Dec 2018	—	—	—	—	—

Contractual maturities and weighted average yields of investment debt securities

	Up to 1 year		1 to 5 years		5 to 10 years		Over 10 years	
	Amount \$m	Yield %	Amount \$m	Yield %	Amount \$m	Yield %	Amount \$m	Yield %
Debt securities measured at amortised cost								
US Treasury	3,010	1.9	3,015	1.7	—	—	—	—
US Government agencies	—	—	—	—	—	—	—	—
US Government-sponsored agencies	—	—	—	—	—	—	—	—
Total amortised cost at 31 Dec 2019	3,010		3,015		—		—	
Total carrying value	3,010		3,015		—		—	

The weighted average yield for each range of maturities is calculated by dividing the annualised interest income for the year ended 31 December 2019 by the book amount of debt securities at that date. The yields do not include the effect of related derivatives.

17 Assets pledged, collateral received and assets transferred

Assets pledged

Financial assets pledged as collateral

	2019 \$m	2018 \$m
Treasury bills and other eligible securities	14,034	11,470
Loans and advances to banks	1,975	151
Loans and advances to customers	26,017	51,659
Debt securities	60,995	95,210
Equity securities	24,626	22,510
Other	50,231	34,028
Assets pledged at 31 Dec	177,878	215,028

Assets pledged as collateral include all assets categorised as encumbered in the disclosure on page 73 of the Pillar 3 Disclosures at 31 December 2019.

The amount of assets pledged to secure liabilities may be greater than the book value of assets utilised as collateral. For example, in the case of securitisations and covered bonds, the amount of liabilities issued plus mandatory over-collateralisation is less than the book value of the pool of assets available for use as collateral. This is also the case where assets are placed with a custodian or a settlement agent that has a floating charge over all the assets placed to secure any liabilities under settlement accounts.

These transactions are conducted under terms that are usual and customary to collateralised transactions including, where relevant, standard securities lending and borrowing, repurchase agreements and derivative margining. HSBC places both cash and non-cash collateral in relation to derivative transactions.

Hong Kong currency notes in circulation are secured by the deposit of funds in respect of which the Hong Kong Government certificates of indebtedness are held.

Financial assets pledged as collateral which the counterparty has the right to sell or repledge

	2019 \$m	2018 \$m
Trading assets	63,163	76,121
Financial investments	10,782	15,741
At 31 Dec	73,945	91,862

Collateral received

The fair value of assets accepted as collateral relating primarily to standard securities lending, reverse repurchase agreements, swaps of securities and derivative margining that HSBC is permitted to sell or repledge in the absence of default was \$468,798m (2018: \$482,818m). The fair value of any such collateral sold or repledged was \$304,261m (2018: \$350,848m).

HSBC is obliged to return equivalent securities. These transactions are conducted under terms that are usual and customary to standard securities lending, reverse repurchase agreements and derivative margining.

Assets transferred

The assets pledged include transfers to third parties that do not qualify for derecognition, notably secured borrowings such as debt securities held by counterparties as collateral under repurchase agreements and equity securities lent under securities lending agreements, as well as swaps of equity and debt securities. For secured borrowings, the transferred asset collateral continues to be recognised in full while a related liability, reflecting the Group's obligation to repurchase the assets for a fixed price at a future date, is also recognised on the balance sheet. Where securities are swapped, the transferred asset continues to be recognised in full. There is no associated liability as the non-cash collateral received is not recognised on the balance sheet. The Group is unable to use, sell or pledge the transferred assets for the duration of the transaction, and remains exposed to interest rate risk and credit risk on these pledged assets. With the exception of 'Other sales' in the following table, the counterparty's recourse is not limited to the transferred assets.

Transferred financial assets not qualifying for full derecognition and associated financial liabilities

	Carrying amount of:		Fair value of:		Net position
	Transferred assets	Associated liabilities	Transferred assets	Associated liabilities	
	\$m	\$m	\$m	\$m	\$m
At 31 Dec 2019					
Repurchase agreements	45,831	45,671			
Securities lending agreements	35,122	3,225			
Other sales (recourse to transferred assets only)	2,971	2,885	2,974	2,897	77
At 31 Dec 2018					
Repurchase agreements	62,216	60,361			
Securities lending agreements	32,486	2,426			
Other sales (recourse to transferred assets only)	2,647	2,647	2,625	2,630	(5)

18 Interests in associates and joint ventures

Carrying amount of HSBC's interests in associates and joint ventures

	2019 \$m	2018 \$m
Interests in associates	24,384	22,244
Interests in joint ventures ¹	90	163
Interests in associates and joint ventures	24,474	22,407

¹ During 2019, HSBC increased its shareholding in HSBC Saudi Arabia, which is now recognised as a subsidiary.

Principal associates of HSBC

	2019		2018	
	Carrying amount \$m	Fair value ¹ \$m	Carrying amount \$m	Fair value ¹ \$m
Bank of Communications Co., Limited	18,982	10,054	17,754	10,991
The Saudi British Bank	4,370	5,550	3,557	5,222

¹ Principal associates are listed on recognised stock exchanges. The fair values are based on the quoted market prices of the shares held (Level 1 in the fair value hierarchy).

	Footnotes	At 31 Dec 2019		
		Country of incorporation and principal place of business	Principal activity	HSBC's interest %
Bank of Communications Co., Limited		People's Republic of China	Banking services	19.03
The Saudi British Bank	¹	Saudi Arabia	Banking services	29.20

¹ In June 2019, the merger between The Saudi British Bank ('SABB') and Alawwal bank ('Alawwal') became effective. The merger involved SABB issuing a fixed number of new shares to Alawwal's shareholders in exchange for the transfer of Alawwal's net assets and cancellation of its shares. HSBC's 40.0% interest in SABB reduced to 29.2% of the combined entity, resulting in a dilution gain of \$828m recognised in HSBC's consolidated income statement. The dilution gain represents the difference between the carrying amount of HSBC's interest in SABB that was derecognised proportionate to the percentage reduction, and HSBC's share of the increase in the combined entity's net assets. The combined entity continues to be an associate of HSBC.

A list of all associates and joint ventures is set out in Note 37.

Bank of Communications Co., Limited

The Group's investment in Bank of Communications Co., Limited ('BoCom') is classified as an associate. Significant influence in BoCom was established via representation on BoCom's Board of Directors and participation in a technical cooperation and exchange programme ('TCEP'). Under the TCEP, a number of HSBC staff have been seconded to assist in the maintenance of BoCom's financial and operating policies. Investments in associates are recognised using the equity method of accounting in accordance with IAS 28, whereby the investment is initially recognised at cost and adjusted thereafter for the post-acquisition change in the Group's share of BoCom's net assets. An impairment test is required if there is any indication of impairment.

Impairment testing

At 31 December 2019, the fair value of the Group's investment in BoCom had been below the carrying amount for approximately eight years. As a result, the Group performed an impairment test on the carrying amount, which confirmed that there was no impairment at 31 December 2019 as the recoverable amount as determined by a value-in-use ('VIU') calculation was higher than the carrying value.

	At 31 Dec 2019			At 31 Dec 2018		
	VIU \$bn	Carrying value \$bn	Fair value \$bn	VIU \$bn	Carrying value \$bn	Fair value \$bn
BoCom	21.5	19.0	10.1	18.0	17.8	11.0

Notes on the financial statements

In future periods, the VIU may increase or decrease depending on the effect of changes to model inputs. The main model inputs are described below and are based on factors observed at period-end. The factors that could result in a change in the VIU and an impairment include a short-term underperformance by BoCom, a change in regulatory capital requirements or an increase in uncertainty regarding the future performance of BoCom resulting in a downgrade of the future asset growth or profitability. An increase in the discount rate as a result of an increase in the risk premium or risk-free rates could also result in a reduction of VIU and an impairment. At the point where the carrying value exceeds the VIU, impairment would be recognised.

If the Group did not have significant influence in BoCom, the investment would be carried at fair value rather than the current carrying value.

Basis of recoverable amount

The impairment test was performed by comparing the recoverable amount of BoCom, determined by a VIU calculation, with its carrying amount. The VIU calculation uses discounted cash flow projections based on management's best estimates of future earnings available to ordinary shareholders prepared in accordance with IAS 36. Significant management judgement is required in arriving at the best estimate. There are two main components to the VIU calculation. The first component is management's best estimate of BoCom's earnings, which is based on explicit forecasts over the short to medium term. This results in forecast earnings growth that is lower than recent historical actual growth and also reflects the uncertainty arising from the current economic outlook. Earnings beyond the short to medium term are then extrapolated in perpetuity using a long-term growth rate to derive a terminal value, which comprises the majority of the VIU. The second component is the capital maintenance charge ('CMC'), which is management's forecast of the earnings that need to be withheld in order for BoCom to meet regulatory capital requirements over the forecast period, meaning that CMC is deducted when arriving at management's estimate of future earnings available to ordinary shareholders. The principal inputs to the CMC calculation include estimates of asset growth, the ratio of risk-weighted assets to total assets and the expected minimum regulatory capital requirements. An increase in the CMC as a result of a change to these principal inputs would reduce VIU. Additionally, management considers other factors, including qualitative factors, to ensure that the inputs to the VIU calculation remain appropriate.

Key assumptions in value-in-use calculation

We used a number of assumptions in our VIU calculation, in accordance with the requirements of IAS 36:

- Long-term profit growth rate: 3% (2018: 3%) for periods after 2023, which does not exceed forecast GDP growth in mainland China and is consistent with forecasts by external analysts.
- Long-term asset growth rate: 3% (2018: 3%) for periods after 2023, which is the rate that assets are expected to grow to achieve long-term profit growth of 3%.
- Discount rate: 11.24% (2018: 11.82%). This is based on a capital asset pricing model ('CAPM') calculation for BoCom, using market data. Management also compares the rate derived from the CAPM with discount rates from external sources. The discount rate used is within the range of 10.0% to 15.0% (2018: 10.4% to 15.0%) indicated by external sources.
- Expected credit losses as a percentage of customer advances: 0.95% (2018: ranges from 0.73% to 0.79%) in the short to medium term and reflect increases due to the US-China trade tensions and BoCom's actual results. For periods after 2023, the ratio is 0.76% (2018: 0.70%). This ratio was increased to provide greater weighting to the most recent data points and analyst forecasts.
- Risk-weighted assets as a percentage of total assets: 61% (2018: 62%) for all forecast periods. This is consistent with BoCom's actual results and slightly higher than the forecasts disclosed by external analysts.
- Cost-income ratio: ranges from 37.1% to 38.8% (2018: 38.7% to 39.0%) in the short to medium term. This is slightly above BoCom's actual results in recent years and within the range of forecasts disclosed by external analysts.
- Effective tax rate: ranges from 12.0% to 17.0% (2018: 13.8% to 22.3%) in the short to medium term reflecting BoCom's actual results and an expected increase towards the long-term assumption. For periods after 2023, the rate is 22.5% (2018: 22.5%), which is slightly higher than the historical average.
- Capital requirements: Capital adequacy ratio of 11.5% (2018: 11.5%) and tier 1 capital adequacy ratio of 9.5% (2018: 9.5%), based on the minimum regulatory requirements.

The following table shows the change to each key assumption in the VIU calculation that on its own would reduce the headroom to nil:

Key assumption	Changes to key assumption to reduce headroom to nil
• Long-term profit growth rate	• Decrease by 99 basis points
• Long-term asset growth rate	• Increase by 80 basis points
• Discount rate	• Increase by 122 basis points
• Expected credit losses as a percentage of customer advances	• Increase by 16 basis points
• Risk-weighted assets as a percentage of total assets	• Increase by 624 basis points
• Cost-income ratio	• Increase by 373 basis points
• Long-term effective tax rate	• Increase by 900 basis points
• Capital requirements – capital adequacy ratio	• Increase by 118 basis points
• Capital requirements – tier 1 capital adequacy ratio	• Increase by 190 basis points

The following table further illustrates the impact on VIU of reasonably possible changes to key assumptions. This reflects the sensitivity of the VIU to each key assumption on its own and it is possible that more than one favourable and/or unfavourable change may occur at the same time. The selected rates of reasonably possible changes to key assumptions are largely based on external analysts' forecasts, which can change period to period.

Sensitivity of VIU to reasonably possible changes in key assumptions

	Favourable change			Unfavourable change		
		Increase in VIU	VIU		Decrease in VIU	VIU
	bps	\$bn	\$bn	bps	\$bn	\$bn
At 31 Dec 2019						
Long-term profit growth rate	—	—	21.5	(50)	(1.3)	20.2
Long-term asset growth rate	(50)	1.4	22.9	—	—	21.5
Discount rate	(54)	1.4	22.9	56	(1.2)	20.3
Expected credit losses as a percentage of customer advances	2019 to 2023: 90 2024 onwards: 70	1.0	22.5	2019 to 2023: 108 2024 onwards: 81	(1.2)	20.3
Risk-weighted assets as a percentage of total assets	(96)	0.4	21.9	12	—	21.5
Cost-income ratio	(175)	1.0	22.5	95	(1.2)	20.3
Long-term effective tax rate	(352)	1.0	22.5	250	(0.7)	20.8
Earnings in short to medium term – compound annual growth rate ¹	107	0.5	22.0	(346)	(2.4)	19.1
Capital requirements – capital adequacy ratio	—	—	21.5	337	(8.2)	13.3
Capital requirements – tier 1 capital adequacy ratio	—	—	21.5	322	(6.0)	15.5
At 31 Dec 2018						
Long-term profit growth rate	100	2.6	20.6	(10)	(0.2)	17.8
Long-term asset growth rate	(10)	0.3	18.3	100	(2.8)	15.3
Discount rate	(142)	3.2	21.3	28	(0.5)	17.5
Expected credit losses as a percentage of customer advances	2018 to 2022: 70 2023 onwards: 65	0.9	18.9	2018 to 2022: 83 2023 onwards: 77	(1.0)	17.0
Risk-weighted assets as a percentage of total assets	(140)	0.5	18.6	80	(0.3)	17.8
Cost-income ratio	(160)	1.1	19.2	200	(1.4)	16.7
Long-term effective tax rate	(280)	0.7	18.7	250	(0.6)	17.5
Earnings in short to medium term – compound annual growth rate ^{1,2}	204	1.1	19.1	(366)	(1.8)	16.2
Capital requirements – capital adequacy ratio	—	—	18.0	258	(5.0)	13.0
Capital requirements – tier 1 capital adequacy ratio	—	—	18.0	243	(3.2)	14.8

¹ Based on management's explicit forecasts over the short to medium term.

² Amounts at 31 December 2018 have been updated to align with the 2019 approach to describe the impact of the change in isolation.

Considering the interrelationship of the changes set out in the table above, management estimates that the reasonably possible range of VIU is \$18.5bn to \$22.8bn (2018: \$15.5bn to \$19.6bn). The range is based on the favourable/unfavourable change in the earnings in the short- to medium-term and long-term expected credit losses as a percentage of customer advances as set out in the table above. All other long-term assumptions, the discount rate and the basis of the CMC have been kept unchanged when determining the reasonably possible range of the VIU.

Selected financial information of BoCom

The statutory accounting reference date of BoCom is 31 December. For the year ended 31 December 2019, HSBC included the associate's results on the basis of the financial statements for the 12 months ended 30 September 2019, taking into account changes in the subsequent period from 1 October 2019 to 31 December 2019 that would have materially affected the results.

Selected balance sheet information of BoCom

	At 30 Sep	
	2019 \$m	2018 \$m
Cash and balances at central banks	112,239	125,414
Loans and advances to banks and other financial institutions	108,026	102,980
Loans and advances to customers	730,510	686,951
Other financial assets	435,740	408,136
Other assets	40,101	42,106
Total assets	1,426,616	1,365,587
Deposits by banks and other financial institutions	290,492	304,395
Customer accounts	868,627	829,539
Other financial liabilities	131,772	94,900
Other liabilities	23,074	36,332
Total liabilities	1,313,965	1,265,166
Total equity	112,651	100,421

Reconciliation of BoCom's total shareholders' equity to the carrying amount in HSBC's consolidated financial statements

	At 30 Sep	
	2019 \$m	2018 \$m
HSBC's share of total shareholders' equity	18,509	17,275
Goodwill and other intangible assets	473	479
Carrying amount	18,982	17,754

Notes on the financial statements

Selected income statement information of BoCom

	For the 12 months ended 30 Sep	
	2019 \$m	2018 \$m
Net interest income	20,558	19,295
Net fee and commission income	6,411	6,245
Change in expected credit losses and other credit impairment charges	(7,479)	(5,602)
Depreciation and amortisation	(1,934)	(767)
Tax expense	(1,636)	(1,554)
Profit for the year	11,175	11,116
Other comprehensive income	315	190
Total comprehensive income	11,490	11,306
Dividends received from BoCom	613	611

Associates and joint ventures

For the year ended 31 December 2019, HSBC's share of associates' and joint ventures' tax on profit was \$314m (2018: \$306m). This is included within 'Share of profit in associates and joint ventures' in the consolidated income statement.

19 Investments in subsidiaries

Main subsidiaries of HSBC Holdings

	At 31 Dec 2019		
	Place of incorporation or registration	HSBC's interest %	Share class
Europe			
HSBC Bank plc	England and Wales	100	£1 Ordinary, \$0.01 Non-cumulative third Dollar Preference
HSBC UK Bank plc	England and Wales	100	£1 Ordinary
HSBC France	France	99.99	€5 Actions
HSBC Trinkaus & Burkhardt AG	Germany	80.67	Stückaktien no par value
Asia			
Hang Seng Bank Limited	Hong Kong	62.14	HK\$5 Ordinary
HSBC Bank (China) Company Limited	People's Republic of China	100	CNY1 Ordinary
HSBC Bank Malaysia Berhad	Malaysia	100	RM0.50 Ordinary
HSBC Life (International) Limited	Bermuda	100	HK\$1 Ordinary
The Hongkong and Shanghai Banking Corporation Limited	Hong Kong	100	Ordinary no par value
Middle East and North Africa			
HSBC Bank Middle East Limited	United Arab Emirates	100	\$1 Ordinary and \$1 Cumulative Redeemable Preference shares (CRP)
North America			
HSBC Bank Canada	Canada	100	Common no par value and Preference no par value
HSBC Bank USA, N.A.	US	100	\$100 Common and \$0.01 Preference
Latin America			
HSBC Mexico, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC	Mexico	99.99	MXN2 Ordinary

Details of the debt, subordinated debt and preference shares issued by the main subsidiaries to parties external to the Group are included in Note 25 'Debt securities in issue' and Note 28 'Subordinated liabilities', respectively.

A list of all related undertakings is set out in Note 37. The principal countries of operation are the same as the countries and territories of incorporation except for HSBC Life (International) Limited, which operates mainly in Hong Kong.

HSBC is structured as a network of regional banks and locally incorporated regulated banking entities. Each bank is separately capitalised in accordance with applicable prudential requirements and maintains a capital buffer consistent with the Group's risk appetite for the relevant country or region. HSBC's capital management process is incorporated in the annual operating plan, which is approved by the Board.

HSBC Holdings is the primary provider of equity capital to its subsidiaries and also provides them with non-equity capital where necessary. These investments are substantially funded by HSBC Holdings' issuance of equity and non-equity capital, and by profit retention. The increase in HSBC Holdings' investments in subsidiaries during the year is primarily driven by new capital injections of \$3,721m (2018: net increase of \$65,222m), partially offset by \$2,562m impairment charges (2018: net reversal of \$2,064m), which includes \$2,475m impairment of HSBC Overseas Holdings (UK) Limited.

As part of its capital management process, HSBC Holdings seeks to maintain a balance between the composition of its capital and its investment in subsidiaries. Subject to this, there is no current or foreseen impediment to HSBC Holdings' ability to provide funding for such investments. During 2019, consistent with the Group's capital plan, the Group's subsidiaries did not experience any significant restrictions on paying dividends or repaying loans and advances. Also, there are no foreseen restrictions envisaged with regard to planned dividends or payments. However, the ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance.

The amount of guarantees by HSBC Holdings in favour of other Group entities is set out in Note 32.

Information on structured entities consolidated by HSBC where HSBC owns less than 50% of the voting rights is included in Note 20 'Structured entities'. In each of these cases, HSBC controls and consolidates an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries with significant non-controlling interests

	2019	2018
Hang Seng Bank Limited		
Proportion of ownership interests and voting rights held by non-controlling interests	37.86%	37.86%
Place of business	Hong Kong	Hong Kong
	\$m	\$m
Profit attributable to non-controlling interests	1,229	1,194
Accumulated non-controlling interests of the subsidiary	7,262	6,637
Dividends paid to non-controlling interests	720	647
Summarised financial information:		
– total assets	212,485	197,867
– total liabilities	191,819	179,450
– net operating income before changes in expected credit losses and other credit impairment charges	5,558	5,294
– profit for the year	3,251	3,159
– total comprehensive income for the year	3,461	2,950

20 Structured entities

HSBC is mainly involved with both consolidated and unconsolidated structured entities through the securitisation of financial assets, conduits and investment funds, established either by HSBC or a third party.

Consolidated structured entities

Total assets of HSBC's consolidated structured entities, split by entity type

	Conduits	Securitisations	HSBC managed funds	Other	Total
	\$bn	\$bn	\$bn	\$bn	\$bn
At 31 Dec 2019	8.6	9.6	6.8	6.7	31.7
At 31 Dec 2018	9.2	5.7	6.5	4.4	25.8

Conduits

HSBC has established and manages two types of conduits: securities investment conduits ('SICs') and multi-seller conduits.

Securities investment conduits

The SICs purchase highly rated ABSs to facilitate tailored investment opportunities.

- At 31 December 2019, Solitaire, HSBC's principal SIC, held \$2.1bn of ABSs (2018: \$2.3bn). It is currently funded entirely by commercial paper ('CP') issued to HSBC. Although HSBC continues to provide a liquidity facility, Solitaire has no need to draw on it as long as HSBC purchases its issued CP, which HSBC intends to do for the foreseeable future. At 31 December 2019, HSBC held \$3.2bn of CP (2018: \$3.4bn).
- As at 31 December 2019, Barion, Malachite and Mazarin are fully redeemed vehicles with no current trading activity.

Multi-seller conduit

HSBC's multi-seller conduit was established to provide access to flexible market-based sources of finance for its clients. Currently, HSBC bears risk equal to the transaction-specific facility offered to the multi-seller conduit, amounting to \$12.4bn at 31 December 2019 (2018: \$16.1bn). First loss protection is provided by the originator of the assets, and not by HSBC, through transaction-specific credit enhancements. A layer of secondary loss protection is provided by HSBC in the form of programme-wide enhancement facilities.

Securitisations

HSBC uses structured entities to securitise customer loans and advances it originates in order to diversify its sources of funding for asset origination and capital efficiency purposes. The loans and advances are transferred by HSBC to the structured entities for cash or synthetically through credit default swaps, and the structured entities issue debt securities to investors.

HSBC managed funds

HSBC has established a number of money market and non-money market funds. Where it is deemed to be acting as principal rather than agent in its role as investment manager, HSBC controls these funds.

Other

HSBC has entered into a number of transactions in the normal course of business, which include asset and structured finance transactions where it has control of the structured entity. In addition, HSBC is deemed to control a number of third-party managed funds through its involvement as a principal in the funds.

Unconsolidated structured entities

The term 'unconsolidated structured entities' refers to all structured entities not controlled by HSBC. The Group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities.

Notes on the financial statements

Nature and risks associated with HSBC interests in unconsolidated structured entities

Total asset values of the entities (\$m)	Securitisations	HSBC managed funds	Non-HSBC managed funds	Other	Total
0-500	91	236	670	70	1,067
500-2,000	12	70	642	7	731
2,000-5,000	—	28	345	—	373
5,000-25,000	—	14	260	—	274
25,000+	—	3	39	2	44
Number of entities at 31 Dec 2019	103	351	1,956	79	2,489
	\$bn	\$bn	\$bn	\$bn	\$bn
Total assets in relation to HSBC's interests in the unconsolidated structured entities	5.3	9.1	15.1	4.2	33.7
– trading assets	—	0.2	3.5	1.3	5
– financial assets designated and otherwise mandatorily measured at fair value	—	8.4	10.7	—	19.1
– loans and advances to customers	5.3	—	0.4	2.3	8
– financial investments	—	0.5	0.5	—	1
– other assets	—	—	—	0.6	0.6
Total liabilities in relation to HSBC's interests in the unconsolidated structured entities	—	—	—	0.3	0.3
– other liabilities	—	—	—	0.3	0.3
Other off-balance sheet commitments	0.3	0.3	3.9	0.7	5.2
HSBC's maximum exposure at 31 Dec 2019	5.6	9.4	19.0	4.6	38.6

Total asset values of the entities (\$m)					
0-500	76	243	906	79	1,304
500-2,000	10	56	570	5	641
2,000-5,000	1	17	230	—	248
5,000-25,000	—	5	90	1	96
25,000+	—	2	10	—	12
Number of entities at 31 Dec 2018	87	323	1,806	85	2,301
	\$bn	\$bn	\$bn	\$bn	\$bn
Total assets in relation to HSBC's interests in the unconsolidated structured entities	3.8	8.3	8.9	4.7	25.7
– trading assets	—	0.1	0.3	1.3	1.7
– financial assets designated and otherwise mandatorily measured at fair value	—	7.3	7.9	—	15.2
– loans and advances to customers	3.8	—	0.3	2.7	6.8
– financial investments	—	0.9	0.4	0.3	1.6
– other assets	—	—	—	0.4	0.4
Total liabilities in relation to HSBC's interests in the unconsolidated structured entities	—	—	—	0.2	0.2
– other liabilities	—	—	—	0.2	0.2
Other off-balance sheet commitments	0.8	0.1	3.3	1.0	5.2
HSBC's maximum exposure at 31 Dec 2018	4.6	8.4	12.2	5.5	30.7

The maximum exposure to loss from HSBC's interests in unconsolidated structured entities represents the maximum loss it could incur as a result of its involvement with these entities regardless of the probability of the loss being incurred.

- For commitments, guarantees and written credit default swaps, the maximum exposure to loss is the notional amount of potential future losses.
- For retained and purchased investments in and loans to unconsolidated structured entities, the maximum exposure to loss is the carrying value of these interests at the balance sheet reporting date.

The maximum exposure to loss is stated gross of the effects of hedging and collateral arrangements that HSBC has entered into in order to mitigate the Group's exposure to loss.

Securitisations

HSBC has interests in unconsolidated securitisation vehicles through holding notes issued by these entities. In addition, HSBC has investments in ABSs issued by third-party structured entities.

HSBC managed funds

HSBC establishes and manages money market funds and non-money market investment funds to provide customers with investment opportunities. Further information on funds under management is provided on page 60.

HSBC, as fund manager, may be entitled to receive management and performance fees based on the assets under management. HSBC may also retain units in these funds.

Non-HSBC managed funds

HSBC purchases and holds units of third-party managed funds in order to facilitate business and meet customer needs.

Other

HSBC has established structured entities in the normal course of business, such as structured credit transactions for customers, to provide finance to public and private sector infrastructure projects, and for asset and structured finance transactions.

In addition to the interests disclosed above, HSBC enters into derivative contracts, reverse repos and stock borrowing transactions with structured entities. These interests arise in the normal course of business for the facilitation of third-party transactions and risk management solutions.

HSBC sponsored structured entities

The amount of assets transferred to and income received from such sponsored structured entities during 2019 and 2018 were not significant.

21 Goodwill and intangible assets

	Footnotes	2019 \$m	2018 \$m
Goodwill		5,590	12,986
Present value of in-force long-term insurance business		8,945	7,149
Other intangible assets	1	5,628	4,222
At 31 Dec		20,163	24,357

1 Included within other intangible assets is internally generated software with a net carrying value of \$4,829m (2018: \$3,632m). During the year, capitalisation of internally generated software was \$2,086m (2018: \$1,781m) and amortisation was \$947m (2018: \$687m).

Movement analysis of goodwill

	2019 \$m	2018 \$m
Gross amount		
At 1 Jan	22,180	22,902
Exchange differences	(154)	(617)
Other	58	(105)
At 31 Dec	22,084	22,180
Accumulated impairment losses		
At 1 Jan	(9,194)	(9,314)
Impairment losses	(7,349)	—
Exchange differences	49	120
At 31 Dec	(16,494)	(9,194)
Net carrying amount at 31 Dec	5,590	12,986

Impairment testing

The Group's impairment test in respect of goodwill allocated to each cash-generating unit ('CGU') is performed at 1 July each year. A review for indicators of impairment is undertaken at each subsequent quarter-end and at 31 December 2019.

31 December 2019 impairment test

Having considered the extent of our 2020 business update, current market conditions and their combined potential impact on HSBC's operations, an interim impairment test was performed at 31 December 2019 for all CGUs. As a result, we recognised \$7.3bn of goodwill impairment related to five CGUs: GB&M; Europe – CMB; North America – GPB; Latin America – CMB; and Middle East and North Africa – CMB.

Impairment resulted from a combination of factors, including our macroeconomic outlook, a corresponding judgement to reduce the basis of the long-term growth rate assumption used to estimate value in use ('VIU'), IFRS requirements which limit elements of management-approved forecasts that should be considered when testing goodwill for impairment (see 'Management's judgement in estimating cash flows of a CGU' on page 290) and lower forecast profitability in some businesses. Significant inputs to the VIU calculation are discussed in more detail within 'Basis of the recoverable amount' on page 290. Management considered the sensitivity of certain assumptions and the outcome of reasonably possible alternative scenarios. This resulted in full impairment of goodwill for the five CGUs.

Impairment results and key assumptions in VIU calculation – impaired CGUs

	Carrying amount \$bn	of which goodwill \$bn	Value in use \$bn	Impairment \$bn	Discount rate %	Growth rate beyond initial cash flow projections %
Cash-generating unit						
GB&M	60.7	4.0	55.8	4.0	9.5	2.0
Europe – CMB	20.0	2.5	17.5	2.5	9.5	1.8
North America – GPB	0.9	0.4	0.5	0.4	9.5	2.1
Latin America – CMB	1.3	0.3	1.0	0.3	17.0	3.6
Middle East and North Africa – CMB	2.6	0.1	1.5	0.1	13.3	2.4
2019 impairment recognised				7.3		

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Basis of the recoverable amount

The recoverable amount of all CGUs to which goodwill has been allocated was equal to its VIU at each respective testing date. The VIU is calculated by discounting management's cash flow projections for the CGU. The key assumptions used in the VIU calculation for each individually significant CGU that is not impaired are discussed below.

Key assumptions in VIU calculation – significant CGUs at 31 December 2019

	Goodwill at 31 Dec 2019	Discount rate	Growth rate beyond initial cash flow	Goodwill at 1 Jul 2019	Discount rate	Nominal growth rate beyond initial cash flow	Goodwill at 1 Jul 2018	Discount rate	Nominal growth rate beyond initial cash flow projections
	\$m	%	%	\$m	%	%	\$m	%	%
Cash-generating unit Europe – RBWM	3,464	8.3	1.7	3,496	8.3	3.2	3,565	8.1	3.8

At 31 December 2019, aggregate goodwill of \$2,126m (1 July 2019: \$2,938m; 1 July 2018: \$3,061m) had been allocated to CGUs that were not considered individually significant. The Group's CGUs do not carry on their balance sheets any significant intangible assets with indefinite useful lives, other than goodwill.

Management's judgement in estimating the cash flows of a CGU

The cash flow projections for each CGU are based on plans approved by the Board. The Board challenges and endorses planning assumptions in light of internal capital allocation decisions necessary to support our strategy, current market conditions and macroeconomic outlook. For the 31 December 2019 interim impairment test, cash flow projections until the end of Q1 2024 were considered. As required by IFRSs, estimates of future cash flows exclude estimated cash inflows or outflows that are expected to arise from restructuring initiatives before an entity has a constructive obligation to carry out the plan, and would therefore have recognised a provision for restructuring costs. Our business update includes plans to reduce operating costs by approximately \$4.5bn by 2022, incurring costs to achieve these reductions of \$6.0bn. Accordingly, we have excluded these components of the plan approved by the Board as they relate to individual CGUs when calculating VIU.

Discount rate

The rate used to discount the cash flows is based on the cost of capital assigned to each CGU, which is derived using a capital asset pricing model ('CAPM'). CAPM depends on a number of inputs reflecting financial and economic variables, including the risk-free rate and a premium to reflect the inherent risk of the business being evaluated. These variables are based on the market's assessment of the economic variables and management's judgement. The discount rates for each CGU are refined to reflect the rates of inflation for the countries within which the CGU operates. In addition, for the purposes of testing goodwill for impairment, management supplements this process by comparing the discount rates derived using the internally generated CAPM, with the cost of capital rates produced by external sources for businesses operating in similar markets.

Long-term growth rate

The long-term growth rate is used to extrapolate the cash flows in perpetuity because of the long-term perspective within the Group of business units making up the CGUs. Prior to the 31 December 2019 impairment test, these growth rates reflected GDP and inflation (nominal GDP) for the countries within which the CGU operates or from which it derives revenue. At 31 December 2019 we considered the extent to which growth rates based on nominal GDP data remained appropriate given the uncertainty in the macroeconomic environment from the impact of social unrest in Hong Kong, trade disagreements between the US and China and the UK's withdrawal from the EU. We anticipate that when global growth does stabilise it will be at a slightly lower level than recent years. As a result, we considered it appropriate to base the long-term growth rate assumption on inflation data, moving away from a higher nominal GDP basis. This judgement had a material impact on the goodwill impairment outcome.

Sensitivities of key assumptions in calculating VIU

At 31 December 2019, Europe – RBWM was sensitive to reasonably possible adverse changes in key assumptions supporting the recoverable amount. In making an estimate of reasonably possible changes to assumptions, management considers the available evidence in respect of each input to the model, such as the external range of discount rates observable, historical performance against forecast and risks attaching to the key assumptions underlying cash flow projections. A reasonable change in a single key assumption may not result in impairment. Though taken together a combination of reasonable changes in key assumptions could result in a recoverable amount that is lower than the CGU's carrying amount.

	Input	Key assumptions	Associated risks	Reasonably possible change
Cash-generating unit				
Europe – RBWM	Cash flow projections	- Level of interest rates and yield curves. - Competitors' position within the market. - Level and change in unemployment rates.	- Uncertain regulatory environment. - Customer remediation and regulatory actions.	Cash flow projections decrease by 30%. This does not result in an impairment.
	Discount rate	Discount rate used is a reasonable estimate of a suitable market rate for the profile of the business.	External evidence suggests that the rate used is not appropriate to the business.	Discount rate increases by 100 bps. This does not result in an impairment.

Sensitivity of VIU to reasonably possible changes in key assumptions and changes to current assumptions to achieve nil headroom

In \$ billions (unless otherwise stated)	Europe – RBWM \$bn
At 31 December 2019	
Carrying amount	10.1
VIU	16.7
Impact on VIU	
100 bps increase in the discount rate – single variable	(2.3)
30% decrease in cash flow projections – single variable	(5.6)
Cumulative impact of all changes	(7.1)
Changes to key assumption to reduce headroom to NIL – single variable	
Discount rate – bps	397
Cash flows – %	(39.4)

Present value of in-force long-term insurance business

When calculating the present value of in-force long-term ('PVIF') insurance business, expected cash flows are projected after adjusting for a variety of assumptions made by each insurance operation to reflect local market conditions and management's judgement of future trends and uncertainty in the underlying assumptions is reflected by applying margins (as opposed to a cost of capital methodology) including valuing the cost of policyholder options and guarantees using stochastic techniques.

Actuarial Control Committees of each key insurance entity meet on a quarterly basis to review and approve PVIF assumptions. All changes to non-economic assumptions, economic assumptions that are not observable and model methodologies must be approved by the Actuarial Control Committee.

Movements in PVIF

	2019 \$m	2018 \$m
As at 31 Dec 2017	7,149	6,610
Impact on transition to IFRS 9	NA	(78)
At 1 Jan	7,149	6,532
Change in PVIF of long-term insurance business	1,749	673
– value of new business written during the year	1,225	1,117
– expected return	(836)	(719)
– assumption changes and experience variances (see below)	1,378	292
– other adjustments	(18)	(17)
Exchange differences and other movements	47	(56)
At 31 Dec	8,945	7,149

1 'Expected return' represents the unwinding of the discount rate and reversal of expected cash flows for the period.

Assumption changes and experience variances

Included within this line item are:

- \$1,126m (2018: \$(56)m), directly offsetting interest rate-driven changes to the valuation of liabilities under insurance contracts.
- \$36m (2018: \$455m), reflecting the future expected sharing of returns with policyholders on contracts with discretionary participation features ('DPF'), to the extent this sharing is not already included in liabilities under insurance contracts.
- \$216m (2018: \$(107)m), driven by other assumptions changes and experience variances.

Key assumptions used in the computation of PVIF for main life insurance operations

Economic assumptions are set in a way that is consistent with observable market values. The valuation of PVIF is sensitive to observed market movements and the impact of such changes is included in the sensitivities presented below.

	2019		2018	
	Hong Kong	France ¹	Hong Kong	France ¹
	%	%	%	%
Weighted average risk-free rate	1.84	0.44	2.29	1.52
Weighted average risk discount rate	5.44	1.27	5.90	2.35
Expense inflation	3.00	1.70	3.00	1.70

1 For 2019, the calculation of France's PVIF assumes a risk discount rate of 1.27% (2018: 2.35%) plus a risk margin of \$130m (2018: \$109m).

Sensitivity to changes in economic assumptions

The Group sets the risk discount rate applied to the PVIF calculation by starting from a risk-free rate curve and adding explicit allowances for risks not reflected in the best-estimate cash flow modelling. Where the insurance operations provide options and guarantees to policyholders the cost of these options and guarantees is an explicit reduction to PVIF, unless it is already allowed for as an explicit addition to the technical provisions required by regulators. For further details of these guarantees and the impact of changes in economic assumptions on our insurance manufacturing subsidiaries, see page 150.

Sensitivity to changes in non-economic assumptions

Policyholder liabilities and PVIF are determined by reference to non-economic assumptions, including mortality and/or morbidity, lapse rates and expense rates. For further details on the impact of changes in non-economic assumptions on our insurance manufacturing operations, see page 151.

22 Prepayments, accrued income and other assets

	Footnotes	2019 \$m	2018 \$m
Prepayments and accrued income		9,057	8,715
Settlement accounts		14,744	13,957
Cash collateral and margin receivables		49,148	33,202
Assets held for sale		123	735
Bullion		14,830	13,753
Endorsements and acceptances		10,198	9,623
Reinsurers' share of liabilities under insurance contracts (Note 4)		3,592	2,506
Employee benefit assets (Note 5)		8,280	7,934
Right-of-use assets	1	4,222	N/A
Owned property, plant and equipment		10,480	10,060
Other accounts		12,006	10,086
At 31 Dec		136,680	110,571

1 Right-of-use assets have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.

Prepayments, accrued income and other assets include \$92,979m (2018: \$74,151m) of financial assets, the majority of which are measured at amortised cost.

23 Trading liabilities

	Footnotes	2019 \$m	2018 \$m
Deposits by banks	1	4,187	4,871
Customer accounts	1	6,999	8,614
Other debt securities in issue (Note 25)		1,404	1,400
Other liabilities – net short positions in securities		70,580	69,546
At 31 Dec		83,170	84,431

1 'Deposits by banks' and 'Customer accounts' include repos, stock lending and other amounts.

24 Financial liabilities designated at fair value

HSBC

	Footnotes	2019 \$m	2018 \$m
Deposits by banks and customer accounts	1	17,660	19,003
Liabilities to customers under investment contracts		5,893	5,458
Debt securities in issue (Note 25)		130,364	109,351
Subordinated liabilities (Note 28)		10,130	14,282
Preferred securities (Note 28)		419	411
At 31 Dec		164,466	148,505

1 Structured deposits placed at HSBC Bank USA and HSBC Trust Company (Delaware) National Association are insured by the Federal Deposit Insurance Corporation, a US government agency, up to \$250,000 per depositor.

The carrying amount of financial liabilities designated at fair value was \$6,120m more than the contractual amount at maturity (2018: \$11,496m less). The cumulative amount of change in fair value attributable to changes in credit risk was a loss of \$2,877m (2018: loss of \$209m).

HSBC Holdings

	2019 \$m	2018 \$m
Debt securities in issue (Note 25)	24,687	17,767
Subordinated liabilities (Note 28)	5,616	7,282
At 31 Dec	30,303	25,049

The carrying amount of financial liabilities designated at fair value was \$2,227m more than the contractual amount at maturity (2018: \$920m more). The cumulative amount of change in fair value attributable to changes in credit risk was a loss of \$1,386m (2018: loss of \$812m).

25 Debt securities in issue

HSBC

	2019 \$m	2018 \$m
Bonds and medium-term notes	180,969	162,277
Other debt securities in issue	55,354	33,816
Total debt securities in issue	236,323	196,093
Included within:		
– trading liabilities (Note 23)	(1,404)	(1,400)
– financial liabilities designated at fair value (Note 24)	(130,364)	(109,351)
At 31 Dec	104,555	85,342

HSBC Holdings

	2019 \$m	2018 \$m
Debt securities	81,531	68,567
Included within:		
– financial liabilities designated at fair value (Note 24)	(24,687)	(17,767)
At 31 Dec	56,844	50,800

26 Accruals, deferred income and other liabilities

	2019 \$m	2018 \$m
Accruals and deferred income	11,808	11,296
Settlement accounts	14,356	13,022
Cash collateral and margin payables	56,646	41,044
Endorsements and acceptances	10,127	9,633
Employee benefit liabilities (Note 5)	1,771	2,167
Lease liabilities ¹	4,604	N/A
Other liabilities	18,844	20,218
At 31 Dec	118,156	97,380

¹ Lease liabilities have been recognised from 1 January 2019 following the adoption of IFRS 16. Comparatives have not been restated.

Accruals, deferred income and other liabilities include \$111,395m (2018: \$87,390m) of financial liabilities, the majority of which are measured at amortised cost.

27 Provisions

	Restructuring costs \$m	Legal proceedings and regulatory matters \$m	Customer remediation \$m	Other provisions \$m	Total \$m
Provisions (excluding contractual commitments)					
At 1 Jan 2019	130	1,128	788	357	2,403
Additions	402	282	1,674	223	2,581
Amounts utilised	(203)	(660)	(837)	(81)	(1,781)
Unused amounts reversed	(34)	(158)	(49)	(108)	(349)
Exchange and other movements	61	13	70	(111)	33
At 31 Dec 2019	356	605	1,646	280	2,887
Contractual commitments¹					
At 1 Jan 2019					517
Net change in expected credit loss provision and other movements					(6)
At 31 Dec 2019					511
Total provisions					
At 31 Dec 2018					2,920
At 31 Dec 2019					3,398

Notes on the financial statements

	Restructuring costs	Legal proceedings and regulatory matters	Customer remediation	Other provisions	Total
	\$m	\$m	\$m	\$m	\$m
Provisions (excluding contractual commitments)					
At 31 Dec 2017	334	1,501	1,454	469	3,758
Additions	73	1,132	288	232	1,725
Amounts utilised	(158)	(1,255)	(838)	(143)	(2,394)
Unused amounts reversed	(107)	(279)	(90)	(131)	(607)
Exchange and other movements	(12)	29	(26)	(70)	(79)
At 31 Dec 2018	130	1,128	788	357	2,403
Contractual commitments ¹					
At 1 Jan 2018					537
Net change in expected credit loss provision and other movements					(20)
At 31 Dec 2018					517
Total provisions					
At 31 Dec 2017					4,011
At 31 Dec 2018					2,920

¹ Contractual commitments include the provision for contingent liabilities measured under IFRS 9 'Financial Instruments' in respect of financial guarantees and the expected credit loss provision on off-balance sheet guarantees and commitments.

Further details of 'Legal proceedings and regulatory matters' are set out in Note 34. Legal proceedings include civil court, arbitration or tribunal proceedings brought against HSBC companies (whether by way of claim or counterclaim) or civil disputes that may, if not settled, result in court, arbitration or tribunal proceedings. Regulatory matters refer to investigations, reviews and other actions carried out by, or in response to the actions of, regulators or law enforcement agencies in connection with alleged wrongdoing by HSBC.

Customer remediation refers to HSBC's activities to compensate customers for losses or damages associated with a failure to comply with regulations or to treat customers fairly. Customer remediation is often initiated by HSBC in response to customer complaints and/or industry developments in sales practices and is not necessarily initiated by regulatory action. Further details of customer remediation are set out in this note.

Refer to Note 32 for further information on the impact of IFRS 9 on undrawn loan commitments and financial guarantees, presented in 'Contractual commitments'. This provision results from the adoption of IFRS 9 and has no comparatives. Further analysis of the movement in the expected credit loss provision is disclosed within the 'Reconciliation of allowances for loans and advances to banks and customers including loan commitments and financial guarantees' table on page 99.

Payment protection insurance

At 31 December 2019, \$1.1bn (2018: \$555m) of the customer remediation provision relates to the estimated liability for redress in respect of the possible mis-selling of payment protection insurance ('PPI') policies in previous years.

Payments totalling \$750m were made during 2019. An increase in provisions of \$1.2bn was recognised during the year, primarily reflecting the deadline of 29 August 2019 for bringing complaints announced by the FCA, and leading to:

- a higher than expected increase in the number of inbound complaints received prior to 29 August 2019;
- the effect on the total number of inbound complaints as a result of treating customer information requests relating to PPI policies received between 29 June 2019 and 29 August 2019 as complaints;
- the additional operational expenses related to the increases in populations of potential claims;
- an industry-wide exercise by the Official Receiver to pursue redress amounts in respect of bankrupt and insolvent customers; and
- an increased volume of actual or forecast legal claims for PPI mis-selling, which is not affected by the deadline of 29 August 2019.

The estimated liability for redress for both single and regular premium policies is calculated on the basis of a refund of the total premiums paid by the customer plus simple interest of 8% per annum (or the rate inherent in the related loan product where higher).

Future estimated redress levels are based on historical redress paid to customers per policy.

At 31 December 2019, contact was made with customers who collectively held 3.0 million policies, representing 56% of total policies sold. A total of 5.4 million PPI policies have been sold since 2000, generating estimated revenue of \$3.4bn at 2019. The gross written premiums on these policies were approximately \$4.5bn. Although the deadline for bringing complaints has passed, customers can still commence litigation for PPI mis-selling. Provision has been made for the best estimate of any obligation to meet those claims. Given the limited period following the complaints time bar, the volume and quality of future claims through legal channels remains uncertain. During the second half of 2019, we received an increasing number of legal claims and Letters Before Action. Our provision estimates that approximately 45,000 claims will be settled in the future.

The following table summarises the cumulative number of information requests received between 29 June and 29 August 2019, and the number of claims expected to be assessed in the future, excluding legal claims:

Cumulative PPI complaints received to 31 December 2019

	Footnotes	Cumulative actual to 31 Dec 2019
Information requests received during autoconversion period (000s)	1	1,889
Information requests awaiting evaluation (000s)		234
Remaining autoconverted claims anticipated to be worked (000s)	1	167
Remaining reactive claims anticipated to be worked (000s)	1	44
Total remaining claims anticipated to be worked (000s)	1	211
Average uphold rate per claim	2	86
Average redress per claim (\$)	3	3,226

1 Excludes invalid claims for which no PPI policy exists.

2 Including inbound and autoconverted claims, but excludes FOS complaints.

3 Including inbound and autoconverted claims, but excludes claims from the Official Receiver.

The PPI provision is based upon assumptions and estimates taken from historical experience. The profile of cases yet to be assessed could therefore vary leading to different uphold rates or average redress levels being used to arrive at the provision.

We continued to monitor available information up until the date of the approval of the financial statements to ensure the provision estimate was appropriate.

Sensitivity to key assumptions

- A 10% increase/decrease in the uphold rate for complaints yet to be worked would increase/decrease the redress provision by approximately \$40m.
- A 10% increase/decrease in the average redress for complaints yet to be worked would increase/decrease the redress provision by approximately \$56m.
- An increase/decrease in settled legal claim volumes of 10,000 would increase/decrease the redress provision by approximately \$29m.

28 Subordinated liabilities

HSBC's subordinated liabilities

	2019 \$m	2018 \$m
At amortised cost	24,600	22,437
– subordinated liabilities	22,775	20,651
– preferred securities	1,825	1,786
Designated at fair value (Note 24)	10,549	14,693
– subordinated liabilities	10,130	14,282
– preferred securities	419	411
At 31 Dec	35,149	37,130
Issued by HSBC subsidiaries	12,363	13,168
Issued by HSBC Holdings	22,786	23,962

Subordinated liabilities rank behind senior obligations and generally count towards the capital base of HSBC. Capital securities may be called and redeemed by HSBC subject to prior notification to the PRA and, where relevant, the consent of the local banking regulator. If not redeemed at the first call date, coupons payable may step up or become floating rate based on interbank rates. On subordinated liabilities other than floating rate notes, interest is payable at fixed rates of up to 10.176%.

The balance sheet amounts disclosed in the following table are presented on an IFRS basis and do not reflect the amount that the instruments contribute to regulatory capital, principally due to regulatory amortisation and regulatory eligibility limits.

Notes on the financial statements

HSBC's subsidiaries subordinated liabilities in issue

		Footnotes	First call date	Maturity date	2019 \$m	2018 \$m
Additional tier 1 capital securities guaranteed by HSBC Holdings						
\$900m	10.176% non-cumulative step-up perpetual preferred securities, series 2	1	Jun 2030		900	892
					900	892
Additional tier 1 capital securities guaranteed by HSBC Bank plc						
£300m	5.862% non-cumulative step-up perpetual preferred securities		Apr 2020		420	411
£700m	5.844% non-cumulative step-up perpetual preferred securities		Nov 2031		925	894
					1,345	1,305
Tier 2 securities issued by HSBC Bank plc						
\$750m	Undated floating rate primary capital notes		Jun 1990		750	750
\$500m	Undated floating rate primary capital notes		Sep 1990		500	500
\$300m	Undated floating rate primary capital notes, series 3		Jun 1992		300	300
\$300m	7.65% subordinated notes		—	May 2025	300	300
					1,850	1,850
£300m	6.50% subordinated notes		—	Jul 2023	396	382
£350m	5.375% callable subordinated step-up notes	2	Nov 2025	Nov 2030	549	513
£500m	5.375% subordinated notes		—	Aug 2033	875	757
£225m	6.25% subordinated notes		—	Jan 2041	296	286
£600m	4.75% subordinated notes		—	Mar 2046	785	758
					4,751	4,546
Tier 2 securities issued by The Hongkong and Shanghai Banking Corporation Ltd						
\$400m	Primary capital undated floating rate notes (third series)		Jul 1991		400	400
					400	400
Tier 2 securities issued by HSBC Bank Malaysia Berhad						
MYR500m	5.05% subordinated bonds		Nov 2022	Nov 2027	122	121
					122	121
Tier 2 securities issued by HSBC USA Inc.						
\$750m	5.00% subordinated notes	6	—	Sep 2020	748	747
\$250m	7.20% subordinated debentures	6	—	Jul 2097	221	221
	Other subordinated liabilities each less than \$150m	3			202	269
					1,171	1,237
Tier 2 securities issued by HSBC Bank USA, N.A.						
\$1,250m	4.875% subordinated notes		—	Aug 2020	1,246	1,226
\$1,000m	5.875% subordinated notes	4	—	Nov 2034	463	1,106
\$750m	5.625% subordinated notes	4	—	Aug 2035	496	829
\$700m	7.00% subordinated notes		—	Jan 2039	700	697
					2,905	3,858
Tier 2 securities issued by HSBC Finance Corporation						
\$2,939m	6.676% senior subordinated notes	5, 6	—	Jan 2021	507	507
Tier 2 securities issued by HSBC Bank Canada						
	Other subordinated liabilities each less than \$150m		Oct 1996	Nov 2083	26	29
					26	29
Securities issued by other HSBC subsidiaries						
	Other subordinated liabilities each less than \$200m	3			236	273
Subordinated liabilities issued by HSBC subsidiaries at 31 Dec					12,363	13,168

1 See paragraph below, 'Guaranteed by HSBC Holdings or HSBC Bank plc'.

2 The interest rate payable after November 2025 is the sum of the three-month sterling Libor plus 1.5 percentage points.

3 Some securities included here are ineligible for inclusion in the capital base of HSBC.

4 HSBC tendered for these securities in November 2019. The principal balance is \$358m and \$383m respectively. The original notional of these securities are \$1,000m and \$750m respectively.

5 HSBC tendered for these securities in 2017. In January 2018, a further tender was conducted. The principal balance is \$507m. The original notional of these securities is \$2,939m.

6 These securities are ineligible for inclusion in the capital base of HSBC.

7 Approximately \$60m of these securities were held by HSBC Holdings.

HSBC Holdings' subordinated liabilities

	2019 \$m	2018 \$m
At amortised cost	18,361	17,715
Designated at fair value (Note 24)	5,616	7,282
At 31 Dec	23,977	24,997

HSBC Holdings' subordinated liabilities in issue

	Footnotes	First call date	Maturity date	2019 \$m	2018 \$m
Tier 2 securities issued by HSBC Holdings					
Amounts owed to third parties					
\$2,000m 4.25% subordinated notes	2,3	—	Mar 2024	2,076	2,001
\$1,500m 4.25% subordinated notes	2	—	Aug 2025	1,611	1,494
\$1,500m 4.375% subordinated notes	2	—	Nov 2026	1,626	1,470
\$488m 7.625% subordinated notes	1	—	May 2032	545	549
\$222m 7.35% subordinated notes	1	—	Nov 2032	245	246
\$2,000m 6.5% subordinated notes	1	—	May 2036	2,036	2,040
\$2,500m 6.5% subordinated notes	1	—	Sep 2037	2,738	2,419
\$1,500m 6.8% subordinated notes	1	—	Jun 2038	1,490	1,489
\$1,500m 5.25% subordinated notes	2,3	—	Mar 2044	1,886	1,661
£650m 5.75% subordinated notes	2	—	Dec 2027	1,059	960
£650m 6.75% subordinated notes	2	—	Sep 2028	855	826
£750m 7.0% subordinated notes	2	—	Apr 2038	1,064	992
£900m 6.0% subordinated notes	2	—	Mar 2040	1,294	1,156
€1,750m 6.0% subordinated notes	2	—	Jun 2019	—	2,125
€1,500m 3.375% subordinated notes	2,3	Jan 2019	Jan 2024	—	1,719
€1,500m 3.0% subordinated notes	2	—	Jun 2025	1,736	1,725
€1,000m 3.125% subordinated notes	2	—	Jun 2028	1,321	1,233
				21,582	24,105
Amounts owed to HSBC undertakings					
\$900m 10.176% subordinated step-up cumulative notes		Jun 2030	Jun 2040	892	892
				892	892
Other securities issued by HSBC Holdings					
Amounts owed to third parties					
\$1,500m 5.625% contingent convertible securities	4	Nov 2019	Jan 2020	1,503	—
				1,503	—
At 31 Dec				23,977	24,997

- 1 Amounts owed to third parties represent securities included in the capital base of HSBC as tier 2 securities in accordance with the grandfathering provisions under CRR II. Prior period figures are included on a CRD IV basis.
- 2 These securities are included in the capital base of HSBC as fully CRR II-compliant tier 2 securities on an end point basis.
- 3 These subordinated notes are measured at amortised cost in HSBC Holdings, where the interest rate risk is hedged using a fair value hedge, while they are measured at fair value in the Group.
- 4 This security was called by HSBC Holdings on 22 November 2019 and was redeemed and cancelled on 17 January 2020. Between the date of exercise of the call option and the redemption, this security was considered to be a subordinated liability. Refer to Note 31 for further details on additional Tier 1 securities.

Guaranteed by HSBC Holdings or HSBC Bank plc

Capital securities guaranteed by HSBC Holdings or HSBC Bank plc were issued by the Jersey limited partnerships. The proceeds of these were lent to the respective guarantors by the limited partnerships in the form of subordinated notes. They qualify as additional tier 1 capital for HSBC under CRR II by virtue of the application of grandfathering provisions. The two capital securities guaranteed by HSBC Bank plc also qualify as additional tier 1 capital for HSBC Bank plc (on a solo and a consolidated basis) under CRR II by virtue of the same grandfathering process.

These preferred securities, together with the guarantee, are intended to provide investors with rights to income and capital distributions and distributions upon liquidation of the relevant issuer that are equivalent to the rights that they would have had if they had purchased non-cumulative perpetual preference shares of the relevant issuer. There are limitations on the payment of distributions if such payments are prohibited under UK banking regulations or other requirements, if a payment would cause a breach of HSBC's capital adequacy requirements, or if HSBC Holdings or HSBC Bank plc has insufficient distributable reserves (as defined).

HSBC Holdings and HSBC Bank plc have individually covenanted that, if prevented under certain circumstances from paying distributions on the preferred securities in full, they will not pay dividends or other distributions in respect of their ordinary shares, or repurchase or redeem their ordinary shares, until the distribution on the preferred securities has been paid in full.

If the consolidated total capital ratio of HSBC Holdings falls below the regulatory minimum required or if the Directors expect it to do so in the near term, provided that proceedings have not been commenced for the liquidation, dissolution or winding up of HSBC Holdings, the holders' interests in the preferred securities guaranteed by HSBC Holdings will be exchanged for interests in preference shares issued by HSBC Holdings that have economic terms which are in all material respects equivalent to the preferred securities and their guarantee.

If any of the two issues guaranteed by HSBC Bank plc are outstanding in April 2049 or November 2048 respectively, or if the total capital ratio of HSBC Bank plc (on a solo or consolidated basis) falls below the regulatory minimum required, or if the Directors expect it to do so

in the near term, provided that proceedings have not been commenced for the liquidation, dissolution or winding up of HSBC Bank plc, the holders' interests in the preferred securities guaranteed by HSBC Bank plc will be exchanged for interests in preference shares issued by HSBC Bank plc that have economic terms which are in all material respects equivalent to the preferred securities and their guarantee.

Tier 2 securities

Tier 2 capital securities are either perpetual or dated subordinated securities on which there is an obligation to pay coupons. These capital securities are included within HSBC's regulatory capital base as tier 2 capital under CRR II, either as fully eligible capital or by virtue of the application of grandfathering provisions. In accordance with CRR II, the capital contribution of all tier 2 securities is amortised for regulatory purposes in their final five years before maturity.

29 Maturity analysis of assets, liabilities and off-balance sheet commitments

The table on page 299 provides an analysis of consolidated total assets, liabilities and off-balance sheet commitments by residual contractual maturity at the balance sheet date. These balances are included in the maturity analysis as follows:

- Trading assets and liabilities (including trading derivatives but excluding reverse repos, repos and debt securities in issue) are included in the 'Due not more than 1 month' time bucket, because trading balances are typically held for short periods of time.
- Financial assets and liabilities with no contractual maturity (such as equity securities) are included in the 'Due over 5 years' time bucket. Undated or perpetual instruments are classified based on the contractual notice period, which the counterparty of the instrument is entitled to give. Where there is no contractual notice period, undated or perpetual contracts are included in the 'Due over 5 years' time bucket.
- Non-financial assets and liabilities with no contractual maturity are included in the 'Due over 5 years' time bucket.
- Financial instruments included within assets and liabilities of disposal groups held for sale are classified on the basis of the contractual maturity of the underlying instruments and not on the basis of the disposal transaction.
- Liabilities under insurance contracts are included in the 'Due over 5 years' time bucket. Liabilities under investment contracts are classified in accordance with their contractual maturity. Undated investment contracts are included in the 'Due over 5 years' time bucket, although such contracts are subject to surrender and transfer options by the policyholders.
- Loan and other credit-related commitments are classified on the basis of the earliest date they can be drawn down.

Maturity analysis of assets, liabilities and off-balance sheet commitments

	Due not more than 1 month \$m	Due over 1 month but not more than 3 months \$m	Due over 3 months but not more than 6 months \$m	Due over 6 months but not more than 9 months \$m	Due over 9 months but not more than 1 year \$m	Due over 1 year but not more than 2 years \$m	Due over 2 years but not more than 5 years \$m	Due over 5 years \$m	Total \$m
Financial assets									
Cash and balances at central banks	154,099	—	—	—	—	—	—	—	154,099
Items in the course of collection from other banks	4,956	—	—	—	—	—	—	—	4,956
Hong Kong Government certificates of indebtedness	38,380	—	—	—	—	—	—	—	38,380
Trading assets	252,009	644	412	62	452	152	540	—	254,271
Financial assets designated or otherwise mandatorily measured at fair value	4,846	74	381	200	422	780	2,356	34,568	43,627
Derivatives	241,941	150	24	27	22	112	294	425	242,995
Loans and advances to banks	41,554	7,826	4,877	2,592	2,859	6,848	2,005	642	69,203
Loans and advances to customers	190,675	82,379	61,254	36,005	36,755	106,203	227,811	295,661	1,036,743
– personal	51,893	14,547	8,562	7,245	6,931	22,923	66,761	252,275	431,137
– corporate and commercial	118,585	61,629	45,924	25,006	25,069	71,751	147,139	39,958	535,061
– financial	20,197	6,203	6,768	3,754	4,755	11,529	13,911	3,428	70,545
Reverse repurchase agreements – non-trading	164,741	38,997	17,933	8,226	6,305	2,298	2,362	—	240,862
Financial investments	36,128	64,472	35,795	17,485	18,202	48,427	90,193	132,610	443,312
Accrued income and other financial assets	80,661	5,544	2,532	915	495	432	363	2,037	92,979
Financial assets at 31 Dec 2019	1,209,990	200,086	123,208	65,512	65,512	165,252	325,924	465,943	2,621,427
Non-financial assets	—	—	—	—	—	—	—	93,725	93,725
Total assets at 31 Dec 2019	1,209,990	200,086	123,208	65,512	65,512	165,252	325,924	559,668	2,715,152
Off-balance sheet commitments received									
Loan and other credit-related commitments	63,199	—	—	—	—	—	—	—	63,199
Financial liabilities									
Hong Kong currency notes in circulation	38,380	—	—	—	—	—	—	—	38,380
Deposits by banks	46,397	4,167	2,773	454	844	2,455	876	1,056	59,022
Customer accounts ¹	1,287,358	81,038	38,343	11,530	11,342	5,275	4,075	154	1,439,115
– personal	646,843	49,405	29,320	8,484	6,852	3,631	2,646	71	747,252
– corporate and commercial	479,763	24,214	7,162	2,621	3,009	1,119	1,388	41	519,317
– financial	160,752	7,419	1,861	425	1,481	525	41	42	172,546
Repurchase agreements – non-trading	132,042	3,402	1,579	1,882	59	354	2	1,024	140,344
Items in the course of transmission to other banks	4,817	—	—	—	—	—	—	—	4,817
Trading liabilities	82,130	209	265	148	102	287	29	—	83,170
Financial liabilities designated at fair value	12,844	4,667	4,236	4,552	5,196	26,081	43,534	63,356	164,466
– debt securities in issue: covered	—	—	—	—	1,139	—	2,663	1,159	4,961
– debt securities in issue: unsecured	8,884	2,046	2,946	3,757	3,030	22,950	34,753	47,036	125,402
– subordinated liabilities and preferred securities	23	—	—	—	—	—	2,131	8,396	10,550
– other	3,937	2,621	1,290	795	1,027	3,131	3,987	6,765	23,553
Derivatives	237,901	105	73	10	18	68	540	782	239,497
Debt securities in issue	8,183	17,374	12,799	13,152	11,382	14,572	20,048	7,045	104,555
– covered bonds	—	—	—	—	—	749	998	—	1,747
– otherwise secured	2,015	2	248	161	—	219	958	1,663	5,266
– unsecured	6,168	17,372	12,551	12,991	11,382	13,604	18,092	5,382	97,542
Accruals and other financial liabilities	87,796	9,078	3,914	1,244	2,058	1,592	2,823	2,890	111,395
Subordinated liabilities	1,502	—	22	1,993	100	755	424	19,804	24,600
Total financial liabilities at 31 Dec 2019	1,939,350	120,040	64,004	34,965	31,101	51,439	72,351	96,111	2,409,361
Non-financial liabilities	—	—	—	—	—	—	—	113,123	113,123
Total liabilities at 31 Dec 2019	1,939,350	120,040	64,004	34,965	31,101	51,439	72,351	209,234	2,522,484
Off-balance sheet commitments given									
Loan and other credit-related commitments	794,336	600	590	313	551	442	458	318	797,608
– personal	221,952	40	39	56	167	208	392	299	223,153
– corporate and commercial	460,569	117	96	52	381	218	66	19	461,518
– financial	111,815	443	455	205	3	16	—	—	112,937

Notes on the financial statements

Maturity analysis of assets, liabilities and off-balance sheet commitments (continued)

	Due not more than 1 month \$m	Due over 1 month but not more than 3 months \$m	Due over 3 months but not more than 6 months \$m	Due over 6 months but not more than 9 months \$m	Due over 9 months but not more than 1 year \$m	Due over 1 year but not more than 2 years \$m	Due over 2 years but not more than 5 years \$m	Due over 5 years \$m	Total \$m
Financial assets									
Cash and balances at central banks	162,843	—	—	—	—	—	—	—	162,843
Items in the course of collection from other banks	5,787	—	—	—	—	—	—	—	5,787
Hong Kong Government certificates	35,859	—	—	—	—	—	—	—	35,859
Trading assets	235,443	264	707	744	104	197	671	—	238,130
Financial assets designated at fair value	7,743	49	371	145	334	918	2,415	29,136	41,111
Derivatives	206,925	15	57	79	18	69	328	334	207,825
Loans and advances to banks	40,114	10,421	3,486	2,004	3,282	7,158	4,508	1,194	72,167
Loans and advances to customers	178,613	72,072	58,680	38,394	37,333	101,267	219,841	275,496	981,696
– personal	41,967	8,736	8,237	7,581	7,240	24,942	63,061	229,626	391,390
– corporate and commercial	118,294	58,623	45,918	27,001	25,597	67,093	143,959	42,540	529,025
– financial	18,352	4,713	4,525	3,812	4,496	9,232	12,821	3,330	61,281
Reverse repurchase agreements	172,795	41,084	13,308	5,763	3,574	5,253	1,027	—	242,804
Financial investments	40,421	58,731	30,464	15,707	15,357	41,866	92,846	112,041	407,433
Accrued income and other financial assets	62,067	6,893	2,403	561	307	349	731	2,237	75,548
Financial assets at 31 Dec 2018	1,148,610	189,529	109,476	63,397	60,309	157,077	322,367	420,438	2,471,203
Non-financial assets	—	—	—	—	—	—	—	86,921	86,921
Total assets at 31 Dec 2018	1,148,610	189,529	109,476	63,397	60,309	157,077	322,367	507,359	2,558,124
Off-balance sheet commitments received									
Loan and other credit-related commitments	73,464	—	—	—	1	3	98	656	74,222
Financial liabilities									
Hong Kong currency notes in circulation	35,859	—	—	—	—	—	—	—	35,859
Deposits by banks	42,406	3,457	1,043	784	542	5,558	1,655	886	56,331
Customer accounts ¹	1,225,919	66,990	31,315	17,218	13,760	4,122	3,194	125	1,362,643
– personal	612,325	38,132	21,218	11,483	8,282	2,853	2,623	53	696,969
– corporate and commercial	457,661	22,922	8,029	4,599	4,317	1,092	509	29	499,158
– financial	155,933	5,936	2,068	1,136	1,161	177	62	43	166,516
Repurchase agreements – non-trading	154,383	8,140	1,750	629	73	408	501	—	165,884
Items in the course of transmission to other banks	5,641	—	—	—	—	—	—	—	5,641
Trading liabilities	82,867	251	326	633	81	235	36	2	84,431
Financial liabilities designated at fair value	3,813	4,476	6,878	3,076	3,481	12,545	53,615	60,621	148,505
– debt securities in issue: covered bonds	—	—	205	—	—	1,190	2,721	1,137	5,253
– debt securities in issue: unsecured	981	1,562	2,659	2,290	2,353	9,143	47,443	37,633	104,064
– subordinated liabilities and preferred securities	—	—	2,125	—	—	—	—	12,568	14,693
– other	2,832	2,914	1,889	786	1,128	2,212	3,451	9,283	24,495
Derivatives	203,962	62	135	191	144	560	159	622	205,835
Debt securities in issue	6,777	11,194	12,556	8,075	3,330	10,670	19,713	13,027	85,342
– covered bonds	—	—	—	—	—	—	748	—	748
– otherwise secured	2,166	1,100	30	—	—	394	944	1,412	6,046
– unsecured	4,611	10,094	12,526	8,075	3,330	10,276	18,021	11,615	78,548
Accruals and other financial liabilities	69,958	8,986	3,296	659	1,269	885	1,027	1,300	87,380
Subordinated liabilities	6	89	3	—	—	1,996	1,384	18,959	22,437
Total financial liabilities at 31 Dec 2018	1,831,591	103,645	57,302	31,265	22,680	36,979	81,284	95,542	2,260,288
Non-financial liabilities	—	—	—	—	—	—	—	103,587	103,587
Total liabilities at 31 Dec 2018	1,831,591	103,645	57,302	31,265	22,680	36,979	81,284	199,129	2,363,875
Off-balance sheet commitments given									
Loan and other credit-related commitments	769,311	5,281	941	1,972	1,257	361	731	412	780,266
– personal	203,622	974	59	32	201	280	556	331	206,055
– corporate and commercial	441,199	2,694	799	1,895	974	34	150	73	447,818
– financial	124,490	1,613	83	45	82	47	25	8	126,393

¹ 'Customer accounts' includes \$408,090m (2018: \$364,729m) insured by guarantee schemes.

HSBC Holdings

Maturity analysis of assets, liabilities and off-balance sheet commitments (continued)

	Due not more than 1 month \$m	Due over 1 month but not more than 3 months \$m	Due over 3 months but not more than 6 months \$m	Due over 6 months but not more than 9 months \$m	Due over 9 months but not more than 1 year \$m	Due over 1 year but not more than 2 years \$m	Due over 2 years but not more than 5 years \$m	Due over 5 years \$m	Total \$m
Financial assets									
Cash at bank and in hand:									
– balances with HSBC undertakings	2,382	–	–	–	–	–	–	–	2,382
Derivatives	596	–	–	–	–	–	230	1,176	2,002
Loans and advances to HSBC undertakings	102	672	120	25	–	600	1,909	6,790	10,218
Financial assets with HSBC undertakings designated and otherwise mandatorily measured at fair value	–	–	–	–	–	458	24,845	36,661	61,964
Financial investments	2,754	3,493	1,873	2,251	2,721	3,014	–	–	16,106
Accrued income and other financial assets	93	277	97	48	16	12	–	–	543
Total financial assets at 31 Dec 2019	5,927	4,442	2,090	2,324	2,737	4,084	26,984	44,627	93,215
Non-financial assets	–	–	–	–	–	–	–	162,025	162,025
Total assets at 31 Dec 2019	5,927	4,442	2,090	2,324	2,737	4,084	26,984	206,652	255,240
Financial liabilities									
Amounts owed to HSBC undertakings	–	464	–	–	–	–	–	–	464
Financial liabilities designated at fair value	–	–	–	–	–	5,651	6,710	17,942	30,303
– debt securities in issue	–	–	–	–	–	5,651	6,710	12,326	24,687
– subordinated liabilities and preferred securities	–	–	–	–	–	–	–	5,616	5,616
Derivatives	1,838	–	–	–	–	20	85	78	2,021
Debt securities in issue	–	–	–	–	–	10,134	23,786	22,924	56,844
Accruals and other financial liabilities	900	574	303	55	10	–	–	35	1,877
Subordinated liabilities	1,503	–	–	–	–	–	2,076	14,782	18,361
31 Dec 2019	4,241	1,038	303	55	10	15,805	32,657	55,761	109,870
Non-financial liabilities	–	–	–	–	–	–	–	326	326
Total liabilities at 31 Dec 2019	4,241	1,038	303	55	10	15,805	32,657	56,087	110,196
Off-balance sheet commitments									
Undrawn formal standby facilities, credit lines and other commitments to lend	–	–	–	–	–	–	–	–	–

Notes on the financial statements

Maturity analysis of assets, liabilities and off-balance sheet commitments (continued)

	Due not more than 1 month \$m	Due over 1 month but not more than 3 months \$m	Due over 3 months but not more than 6 months \$m	Due over 6 months but not more than 9 months \$m	Due over 9 months but not more than 1 year \$m	Due over 1 year but not more than 2 years \$m	Due over 2 years but not more than 5 years \$m	Due over 5 years \$m	Total \$m
Financial assets									
Cash at bank and in hand:									
– balances with HSBC undertakings	3,509	—	—	—	—	—	—	—	3,509
Derivatives	540	—	—	—	—	—	—	167	707
Loans and advances to HSBC undertakings	3,052	11,563	158	968	1	—	14,062	26,340	56,144
Loans and advances to HSBC undertakings designated at fair value	—	—	—	—	—	—	8,116	15,397	23,513
Financial investments in HSBC undertakings	—	—	—	—	—	—	—	—	—
Accrued income and other financial assets	33	27	—	—	—	—	—	—	60
Total financial assets at 31 Dec 2018	7,134	11,590	158	968	1	—	22,178	41,904	83,933
Non-financial assets	—	—	—	—	—	—	—	161,248	161,248
Total assets at 31 Dec 2018	7,134	11,590	158	968	1	—	22,178	203,152	245,181
Financial liabilities									
Amounts owed to HSBC undertakings	—	949	—	—	—	—	—	—	949
Financial liabilities designated at fair value	—	—	2,125	—	—	—	12,306	10,618	25,049
– debt securities in issue	—	—	—	—	—	—	12,306	5,461	17,767
– subordinated liabilities and preferred securities	—	—	2,125	—	—	—	—	5,157	7,282
Derivatives	1,321	—	—	—	—	—	339	499	2,159
Debt securities in issue	—	—	—	—	—	—	23,770	27,030	50,800
Accruals and other financial liabilities	319	353	188	36	5	—	—	41	942
Subordinated liabilities	—	—	—	—	—	—	—	17,715	17,715
Total financial liabilities at 31 Dec 2018	1,640	1,302	2,313	36	5	—	36,415	55,903	97,614
Non-financial liabilities	—	—	—	—	—	—	—	214	214
Total liabilities at 31 Dec 2018	1,640	1,302	2,313	36	5	—	36,415	56,117	97,828
Off-balance sheet commitments given									
Undrawn formal standby facilities, credit lines and other commitments to lend	—	—	—	—	—	—	—	—	—

Contractual maturity of financial liabilities

The following table shows, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for trading liabilities and derivatives not treated as hedging derivatives). For this reason, balances in the following table do not agree directly with those in our consolidated balance sheet. Undiscounted cash flows payable in relation to hedging derivative liabilities are classified according to their contractual maturities. Trading liabilities and derivatives not treated as hedging derivatives are included in the 'Due not more than 1 month' time bucket and not by contractual maturity.

In addition, loans and other credit-related commitments and financial guarantees are generally not recognised on our balance sheet. The undiscounted cash flows potentially payable under loan and other credit-related commitments and financial guarantees are classified on the basis of the earliest date they can be called.

Cash flows payable by HSBC under financial liabilities by remaining contractual maturities

	Due not more than 1 month	Due over 1 month but not more than 3 months	Due over 3 months but not more than 1 year	Due over 1 year but not more than 5 years	Due over 5 years	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Deposits by banks	46,471	4,167	4,227	3,371	1,084	59,320
Customer accounts	1,288,577	81,037	62,105	9,900	191	1,441,810
Repurchase agreements – non-trading	132,156	3,403	3,565	368	1,036	140,528
Trading liabilities	83,170	—	—	—	—	83,170
Financial liabilities designated at fair value	13,447	4,666	14,747	76,155	68,045	177,060
Derivatives	237,897	105	522	1,076	1,691	241,291
Debt securities in issue	8,757	17,374	38,423	36,584	8,177	109,315
Subordinated liabilities	1,847	—	2,908	5,197	27,892	37,844
Other financial liabilities	127,898	9,079	6,792	5,637	2,992	152,398
	1,940,220	119,831	133,289	138,288	111,108	2,442,736
Loan and other credit-related commitments	795,243	601	561	886	317	797,608
Financial guarantees ¹	20,007	37	102	68	—	20,214
At 31 Dec 2019	2,755,470	120,469	133,952	139,242	111,425	3,260,558
Proportion of cash flows payable in period	85%	4%	4%	4%	3%	
Deposits by banks	42,569	3,457	2,419	7,507	556	56,508
Customer accounts	1,226,828	66,990	62,963	7,617	130	1,364,528
Repurchase agreements – non-trading	154,541	8,140	2,487	950	—	166,118
Trading liabilities	84,431	—	—	—	—	84,431
Financial liabilities designated at fair value	4,478	4,476	15,591	75,578	89,261	189,384
Derivatives	204,360	62	927	2,065	1,323	208,737
Debt securities in issue	7,295	11,194	24,902	36,599	13,656	93,646
Subordinated liabilities	349	89	793	7,600	27,670	36,501
Other financial liabilities	110,337	8,987	4,694	2,367	1,260	127,645
	1,835,188	103,395	114,776	140,283	133,856	2,327,498
Loan and other credit-related commitments	772,557	5,279	1,109	944	377	780,266
Financial guarantees ¹	22,942	113	289	160	14	23,518
At 31 Dec 2018	2,630,687	108,787	116,174	141,387	134,247	3,131,282
Proportion of cash flows payable in period	84%	3%	4%	5%	4%	

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

HSBC Holdings

HSBC Holdings' primary sources of liquidity are dividends received from subsidiaries, interest on and repayment of intra-Group loans and securities, and interest earned on its own liquid funds. HSBC Holdings also raises funds in the debt capital markets to meet the Group's minimum requirement for own funds and eligible liabilities. HSBC Holdings uses this liquidity to meet its obligations, including interest and principal repayments on external debt liabilities, operating expenses and collateral on derivative transactions.

HSBC Holdings is also subject to contingent liquidity risk by virtue of credit-related commitments and guarantees and similar contracts issued relating to its subsidiaries. Such commitments and guarantees are only issued after due consideration of HSBC Holdings' ability to finance the commitments and guarantees and the likelihood of the need arising.

HSBC Holdings actively manages the cash flows from its subsidiaries to optimise the amount of cash held at the holding company level. During 2019, consistent with the Group's capital plan, the Group's subsidiaries did not experience any significant restrictions on paying dividends or repaying loans and advances. Also, there are no foreseen restrictions envisaged with regard to planned dividends or payments. However, the ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective local regulatory capital and banking requirements, exchange controls, statutory reserves, and financial and operating performance.

HSBC Holdings currently has sufficient liquidity to meet its present requirements.

Liquidity risk in HSBC Holdings is overseen by Holdings ALCO. This risk arises because of HSBC Holdings' obligation to make payments to debt holders as they fall due and to pay its operating expenses. The liquidity risk related to these cash flows is managed by matching external debt obligations with internal loan cash flows and by maintaining an appropriate liquidity buffer that is monitored by Holdings ALCO.

The balances in the following table are not directly comparable with those on the balance sheet of HSBC Holdings as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for derivatives not treated as hedging derivatives). Undiscounted cash flows payable in relation to hedging derivative liabilities are classified according to their contractual maturities. Derivatives not treated as hedging derivatives are included in the 'On demand' time bucket.

In addition, loan commitments and financial guarantees and similar contracts are generally not recognised on our balance sheet. The undiscounted cash flows potentially payable under financial guarantees and similar contracts are classified on the basis of the earliest date on which they can be called.

Cash flows payable by HSBC Holdings under financial liabilities by remaining contractual maturities

	Due not more than 1 month	Due over 1 month but not more than 3 months	Due over 3 months but not more than 1 year	Due over 1 year but not more than 5 years	Due over 5 years	Total
Footnotes	\$m	\$m	\$m	\$m	\$m	\$m
Amounts owed to HSBC undertakings	—	464	—	—	—	464
Financial liabilities designated at fair value	88	168	784	14,776	18,184	34,000
Derivatives	1,838	—	—	105	78	2,021
Debt securities in issue	128	244	1,137	38,690	25,310	65,509
Subordinated liabilities	1,588	154	718	5,743	21,533	29,736
Other financial liabilities	956	519	365	—	—	1,840
	4,598	1,549	3,004	59,314	65,105	133,570
Loan commitments	—	—	—	—	—	—
Financial guarantees	11,061	—	—	—	—	11,061
At 31 Dec 2019	15,659	1,549	3,004	59,314	65,105	144,631
Amounts owed to HSBC undertakings	—	949	—	—	—	949
Financial liabilities designated at fair value	—	237	2,656	14,384	11,653	28,930
Derivatives	1,321	—	—	339	499	2,159
Debt securities in issue	—	379	1,159	29,178	30,801	61,517
Subordinated liabilities	—	248	757	4,019	25,311	30,335
Other financial liabilities	—	675	228	—	—	903
	1,321	2,488	4,800	47,920	68,264	124,793
Loan commitments	—	—	—	—	—	—
Financial guarantees	8,627	—	—	—	—	8,627
At 31 Dec 2018	9,948	2,488	4,800	47,920	68,264	133,420

¹ Excludes performance guarantee contracts to which the impairment requirements in IFRS 9 are not applied.

30 Offsetting of financial assets and financial liabilities

In the following table, the 'Amounts not set off in the balance sheet' include transactions where:

- the counterparty has an offsetting exposure with HSBC and a master netting or similar arrangement is in place with a right to set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and
- in the case of derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar agreements, cash and non-cash collateral has been received/pledged.

For risk management purposes, the net amounts of loans and advances to customers are subject to limits, which are monitored and the relevant customer agreements are subject to review and updated, as necessary, to ensure the legal right to set off remains appropriate.

Offsetting of financial assets and financial liabilities

		Amounts subject to enforceable netting arrangements								Total \$m
		Gross amounts \$m	Amounts offset \$m	Net amounts in the balance sheet \$m	Amounts not set off in the balance sheet			Net amount \$m	Amounts not subject to enforceable netting arrangements ⁵ \$m	
					Financial instruments \$m	Non-cash collateral \$m	Cash collateral \$m			
Footnotes										
Financial assets										
Derivatives (Note 15)	1	277,261	(41,739)	235,522	(171,371)	(13,095)	(47,404)	3,652	7,473	242,995
Reverse repos, stock borrowing and similar agreements classified as:	2									
– trading assets		21,465	(280)	21,185	(1,553)	(19,630)	–	2	165	21,350
– non-trading assets		348,561	(134,772)	213,789	(28,826)	(184,495)	(189)	279	27,549	241,338
Loans and advances to customers	3	33,039	(10,128)	22,911	(18,893)	–	–	4,018	735	23,646
At 31 Dec 2019		680,326	(186,919)	493,407	(220,643)	(217,220)	(47,593)	7,951	35,922	529,329
Derivatives (Note 15)	1	250,275	(49,711)	200,564	(145,785)	(9,986)	(38,031)	6,762	7,261	207,825
Reverse repos, stock borrowing and similar agreements classified as:	2									
– trading assets		18,217	(790)	17,427	(1,244)	(16,179)	–	4	853	18,280
– non-trading assets		372,358	(167,313)	205,045	(21,788)	(182,995)	(100)	162	37,759	242,804
Loans and advances to customers	3	40,534	(12,468)	28,066	(21,245)	–	–	6,821	536	28,602
At 31 Dec 2018		681,384	(230,282)	451,102	(190,062)	(209,160)	(38,131)	13,749	46,409	497,511
Financial liabilities										
Derivatives (Note 15)	1	275,286	(41,739)	233,547	(171,371)	(20,137)	(37,844)	4,195	5,950	239,497
Repos, stock lending and similar agreements classified as:	2									
– trading liabilities		10,494	(280)	10,214	(1,553)	(8,656)	–	5	46	10,260
– non-trading liabilities		232,675	(134,772)	97,903	(28,826)	(68,638)	(357)	82	42,441	140,344
Customer accounts	4	36,750	(10,128)	26,622	(18,893)	–	–	7,729	31	26,653
At 31 Dec 2019		555,205	(186,919)	368,286	(220,643)	(97,431)	(38,201)	12,011	48,468	416,754
Derivatives (Note 15)	1	248,123	(49,711)	198,412	(145,785)	(14,895)	(29,998)	7,734	7,423	205,835
Repos, stock lending and similar agreements classified as:	2									
– trading liabilities		13,169	(790)	12,379	(1,244)	(11,133)	–	2	114	12,493
– non-trading liabilities		274,367	(167,313)	107,054	(21,788)	(85,087)	(164)	15	58,830	165,884
Customer accounts	4	40,286	(12,468)	27,818	(21,245)	–	–	6,573	11	27,829
At 31 Dec 2018		575,945	(230,282)	345,663	(190,062)	(111,115)	(30,162)	14,324	66,378	412,041

- At 31 December 2019, the amount of cash margin received that had been offset against the gross derivatives assets was \$2,350m (2018: \$3,935m). The amount of cash margin paid that had been offset against the gross derivatives liabilities was \$8,303m (2018: \$5,888m).
- For the amount of repos, reverse repos, stock lending, stock borrowing and similar agreements recognised on the balance sheet within 'Trading assets' \$21,350m (2018: \$18,280m) and 'Trading liabilities' \$10,260m (2018: \$12,493m), see the 'Funding sources and uses' table on page 133.
- At 31 December 2019, the total amount of 'Loans and advances to customers' was \$1,036,743m (2018: \$981,696m), of which \$22,911m (2018: \$28,066m) was subject to offsetting.
- At 31 December 2019, the total amount of 'Customer accounts' was \$1,439,115m (2018: \$1,362,643m), of which \$26,622m (2018: \$27,818m) was subject to offsetting.
- These exposures continue to be secured by financial collateral, but we may not have sought or been able to obtain a legal opinion evidencing enforceability of the right of offset.

31 Called up share capital and other equity instruments

Called up share capital and share premium

HSBC Holdings ordinary shares of \$0.50 each, issued and fully paid

Footnotes	2019		2018	
	Number	\$m	Number	\$m
At 1 Jan	20,360,841,496	10,180	20,320,716,258	10,160
Shares issued under HSBC employee share plans	71,588,032	36	83,740,460	42
Shares issued in lieu of dividends	341,872,011	171	166,850,869	83
Less: Shares repurchased and cancelled	(135,776,994)	(68)	(210,466,091)	(105)
At 31 Dec ¹	20,638,524,545	10,319	20,360,841,496	10,180

HSBC Holdings 6.20% non-cumulative US dollar preference shares, Series A

	Footnotes	2019		2018	
		Number	\$m	Number	\$m
At 1 Jan and 31 Dec	2	1,450,000	—	1,450,000	—

HSBC Holdings share premium

	2019	2018
	\$m	\$m
At 31 Dec	13,959	13,609

Total called up share capital and share premium

	2019	2018
	\$m	\$m
At 31 Dec	24,278	23,789

- 1 All HSBC Holdings ordinary shares in issue, excluding 325,273,407 shares held in treasury, confer identical rights, including in respect of capital, dividends and voting.
- 2 Included in the capital base of HSBC as additional tier 1 capital in accordance with the CRR II rules, by virtue of the application of grandfathering provisions.

HSBC Holdings 6.20% non-cumulative US dollar preference shares, Series A of \$0.01

HSBC Holdings pays dividends on 6.20% non-cumulative US dollar preference shares, Series A of \$0.01 each ('dollar preference shares') quarterly, at the discretion of the Board. The Board will not declare a dividend on them if this would stop the Group from meeting the PRA's capital adequacy requirements, or if profit available for distribution as dividends is insufficient to also pay dividends on other shares that are equally entitled and scheduled on the same date.

HSBC Holdings may not declare or pay dividends on shares ranking lower in the right to dividends than dollar preference shares, or redeem or purchase any of its other shares ranking equal or lower than dollar preference shares, unless it has fully paid, or set aside an amount to fully pay, the dividends on the dollar preference shares for the then current dividend period.

The dollar preference shares carry no rights to conversion into ordinary shares. Holders of dollar preference shares are only entitled to attend and vote at shareholder meetings if dividends on these shares have not been paid in full on four consecutive dividend payment dates. In such circumstances, holders of these shares are entitled to vote at shareholder meetings until HSBC Holdings has paid a full dividend on them. These securities can be redeemed by HSBC at any time, subject to prior approval by the PRA.

HSBC Holdings non-cumulative preference share of £0.01

The one non-cumulative sterling preference share of £0.01 ('sterling preference share') has been in issue since 29 December 2010 and is held by a subsidiary of HSBC Holdings. Dividends are paid quarterly at the sole and absolute discretion of the Board. The sterling preference share carries no rights of conversion into ordinary shares of HSBC Holdings and no right to attend or vote at shareholder meetings of HSBC Holdings. These securities can be redeemed by HSBC at any time, subject to prior approval by the PRA.

Other equity instruments

HSBC Holdings includes three types of additional tier 1 capital securities in its tier 1 capital. Two are presented in this Note and they are the HSBC Holdings non-cumulative preference shares outlined above and the contingent convertible securities described below. These are accounted for as equity because HSBC does not have an obligation to transfer cash or a variable number of its own ordinary shares to holders under any circumstances outside its control. See Note 28 for additional tier 1 securities accounted for as liabilities.

Additional tier 1 capital – contingent convertible securities

HSBC Holdings continues to issue contingent convertible securities that are included in its capital base as fully CRR II-compliant additional tier 1 capital securities on an end point basis. These securities are marketed principally and subsequently allotted to corporate investors and fund managers. The net proceeds of the issuances are used for HSBC Holdings' general corporate purposes and to further strengthen its capital base to meet requirements under CRR II. These securities bear a fixed rate of interest until their initial call dates. After the initial call dates, if they are not redeemed, the securities will bear interest at rates fixed periodically in advance for five-year periods based on credit spreads, fixed at issuance, above prevailing market rates. Interest on the contingent convertible securities will be due and payable only at the sole discretion of HSBC Holdings, and HSBC Holdings has sole and absolute discretion at all times to cancel for any reason (in whole or part) any interest payment that would otherwise be payable on any payment date. Distributions will not be paid if they are prohibited under UK banking regulations or if the Group has insufficient reserves or fails to meet the solvency conditions defined in the securities' terms.

The contingent convertible securities are undated and are repayable at the option of HSBC Holdings in whole at the initial call date or on any fifth anniversary after this date. In addition, the securities are repayable at the option of HSBC in whole for certain regulatory or tax reasons. Any repayments require the prior consent of the PRA. These securities rank *pari passu* with HSBC Holdings' dollar and sterling preference shares and therefore rank ahead of ordinary shares. The contingent convertible securities will be converted into fully paid ordinary shares of HSBC Holdings at a predetermined price, should HSBC's consolidated end point CET1 ratio fall below 7.0%. Therefore, in accordance with the terms of the securities, if the end point CET1 ratio breaches the 7.0% trigger, the securities will convert into ordinary shares at fixed contractual conversion prices in the issuance currencies of the relevant securities, equivalent to £2.70 at the prevailing rate of exchange on the issuance date, subject to anti-dilution adjustments.

HSBC's additional tier 1 capital – contingent convertible securities in issue which are accounted for in equity

		Footnotes	First call date	2019 \$m	2018 \$m
\$1,500m	5.625% perpetual subordinated contingent convertible securities	1	Nov 2019	—	1,494
\$2,000m	6.875% perpetual subordinated contingent convertible securities		Jun 2021	1,995	1,998
\$2,250m	6.375% perpetual subordinated contingent convertible securities		Sep 2024	2,240	2,244
\$2,450m	6.375% perpetual subordinated contingent convertible securities		Mar 2025	2,453	2,460
\$3,000m	6.000% perpetual subordinated contingent convertible securities		May 2027	2,993	2,997
\$2,350m	6.250% perpetual subordinated contingent convertible securities		Mar 2023	2,346	2,347
\$1,800m	6.500% perpetual subordinated contingent convertible securities		Mar 2028	1,797	1,798
€1,500m	5.250% perpetual subordinated contingent convertible securities		Sep 2022	1,940	1,943
€1,000m	6.000% perpetual subordinated contingent convertible securities		Sep 2023	1,119	1,120
€1,250m	4.750% perpetual subordinated contingent convertible securities		Jul 2029	1,418	1,420
£1,000m	5.875% perpetual subordinated contingent convertible securities		Sep 2026	1,299	1,299
SGD1,000m	4.700% perpetual subordinated contingent convertible securities		Jun 2022	722	723
SGD750m	5.000% perpetual subordinated contingent convertible securities		Sep 2023	549	549
At 31 Dec				20,871	22,392

1 This security was called by HSBC Holdings on 22 November 2019 and was redeemed and cancelled on 17 January 2020. Between the date of exercise of the call option and the redemption, this security was considered to be a subordinated liability. Please refer to Note 28.

Shares under option

For details of the options outstanding to subscribe for HSBC Holdings ordinary shares under the HSBC Holdings savings-related share option plan, see Note 5.

Aggregate options outstanding under these plans

31 Dec 2019			31 Dec 2018		
Number of HSBC Holdings ordinary shares	Period of exercise	Exercise price	Number of HSBC Holdings ordinary shares	Period of exercise	Exercise price
65,060,681	2019 to 2025	£4.0472–£5.9640	57,065,513	2018 to 2024	£4.0472–£5.9640

Maximum obligation to deliver HSBC Holdings ordinary shares

At 31 December 2019, the maximum obligation to deliver HSBC Holdings ordinary shares under all of the above option arrangements and the HSBC International Employee Share Purchase Plan, together with GPSP awards, long-term incentive awards and deferred share awards granted under the HSBC Share Plan 2011, was 163,567,253 (2018: 152,667,912). The total number of shares at 31 December 2019 held by employee benefit trusts that may be used to satisfy such obligations to deliver HSBC Holdings ordinary shares was 5,397,395 (2018: 5,928,890).

32 Contingent liabilities, contractual commitments and guarantees

	Footnotes	HSBC		HSBC Holdings ¹	
		2019 \$m	2018 \$m	2019 \$m	2018 \$m
Guarantees and other contingent liabilities:					
– financial guarantees		20,214	23,518	11,061	8,627
– performance and other guarantees		75,933	71,484	—	—
– other contingent liabilities		1,576	1,408	289	215
At 31 Dec		97,723	96,410	11,350	8,842
Commitments:					
– documentary credits and short-term trade-related transactions	2	6,316	7,083	—	—
– forward asset purchases and forward deposits placed		56,326	67,265	—	—
– standby facilities, credit lines and other commitments to lend		734,966	705,918	—	—
At 31 Dec		797,608	780,266	—	—

1 Guarantees by HSBC Holdings are all in favour of other Group entities.

2 Includes \$600,029m of commitments at 31 December 2019 (31 December 2018: \$592,008m), to which the impairment requirements in IFRS 9 are applied where HSBC has become party to an irrevocable commitment.

The preceding table discloses the nominal principal amounts of off-balance sheet liabilities and commitments for the Group, which represent the maximum amounts at risk should the contracts be fully drawn upon and the clients default. As a significant portion of guarantees and commitments are expected to expire without being drawn upon, the total of the nominal principal amounts is not indicative of future liquidity requirements. The expected credit loss provision relating to guarantees and commitments under IFRS 9 is disclosed in Note 27.

The majority of the guarantees have a term of less than one year, while guarantees with terms of more than one year are subject to HSBC's annual credit review process.

Contingent liabilities arising from legal proceedings, regulatory and other matters against Group companies are disclosed in Notes 27 and 34.

Financial Services Compensation Scheme

The Financial Services Compensation Scheme ('FSCS') has provided compensation to customers of financial services firms that have failed. Following the financial crisis, the compensation paid out to customers was initially funded through loans from HM Treasury, which were fully repaid in 2018 by the FSCS. The Group could be liable to pay a proportion of any future amounts that the FSCS borrows from HM Treasury to the extent the industry levies imposed to date are not sufficient to cover the compensation due to customers in any future possible collapse. The ultimate FSCS levy to the industry as a result of a collapse cannot currently be estimated reliably. It is dependent on various uncertain factors including the potential recoveries of assets by the FSCS, changes in the level of protected products (including deposits and investments) and the population of FSCS members at the time.

Associates

HSBC's share of associates' contingent liabilities, contractual commitments and guarantees amounted to \$46.7bn at 31 December 2019 (2018: \$48.5bn). No matters arose where HSBC was severally liable.

33 Finance lease receivables

HSBC leases a variety of assets to third parties under finance leases, including transport assets (such as aircraft), property and general plant and machinery. At the end of lease terms, assets may be sold to third parties or leased for further terms. Rentals are calculated to recover the cost of assets less their residual value, and earn finance income.

	2019			2018		
	Total future minimum payments	Unearned finance income	Present value	Total future minimum payments ¹	Unearned finance income ¹	Present value ¹
	\$m	\$m	\$m	\$m	\$m	\$m
Lease receivables:						
No later than one year	1,674	(157)	1,517	2,229	(196)	2,033
One to two years	1,634	(155)	1,479	N/A	N/A	N/A
Two to three years	1,889	(151)	1,738	N/A	N/A	N/A
Three to four years	1,704	(136)	1,568	N/A	N/A	N/A
Four to five years	1,558	(132)	1,426	N/A	N/A	N/A
Later than one year and no later than five years	6,785	(574)	6,211	7,420	(628)	6,792
Later than five years	6,136	(614)	5,522	5,032	(619)	4,413
At 31 Dec	14,595	(1,345)	13,250	14,681	(1,443)	13,238

¹ The disclosure requirements of IFRS 16 were adopted from 1 January 2019. Comparatives have not been restated.

34 Legal proceedings and regulatory matters

HSBC is party to legal proceedings and regulatory matters in a number of jurisdictions arising out of its normal business operations. Apart from the matters described below, HSBC considers that none of these matters are material. The recognition of provisions is determined in accordance with the accounting policies set out in Note 1. While the outcome of legal proceedings and regulatory matters is inherently uncertain, management believes that, based on the information available to it, appropriate provisions have been made in respect of these matters as at 31 December 2019 (see Note 27). Where an individual provision is material, the fact that a provision has been made is stated and quantified, except to the extent that doing so would be seriously prejudicial. Any provision recognised does not constitute an admission of wrongdoing or legal liability. It is not practicable to provide an aggregate estimate of potential liability for our legal proceedings and regulatory matters as a class of contingent liabilities.

Bernard L. Madoff Investment Securities LLC

Bernard L. Madoff ('Madoff') was arrested in December 2008 and later pleaded guilty to running a Ponzi scheme. His firm, Bernard L. Madoff Investment Securities LLC ('Madoff Securities'), is being liquidated in the US by a trustee (the 'Trustee').

Various non-US HSBC companies provided custodial, administration and similar services to a number of funds incorporated outside the US whose assets were invested with Madoff Securities. Based on information provided by Madoff Securities as at 30 November 2008, the purported aggregate value of these funds was \$8.4bn, including fictitious profits reported by Madoff.

Based on information available to HSBC, the funds' actual transfers to Madoff Securities minus their actual withdrawals from Madoff Securities during the time HSBC serviced the funds are estimated to have totalled approximately \$4bn. Various HSBC companies have been named as defendants in lawsuits arising out of Madoff Securities' fraud.

US litigation: The Trustee has brought lawsuits against various HSBC companies and others in the US Bankruptcy Court for the Southern District of New York (the 'US Bankruptcy Court'), seeking recovery of transfers from Madoff Securities to HSBC in an amount not yet pleaded or determined. HSBC and other parties to the actions have moved to dismiss the Trustee's claims. The US Bankruptcy Court granted HSBC's motion to dismiss with respect to certain of the Trustee's claims in November 2016. In February 2019, the US Court of Appeals for the Second Circuit (the 'Second Circuit Court of Appeals') reversed that dismissal and remanded the cases to the US Bankruptcy Court. In August 2019, HSBC and other parties filed a petition for writ of certiorari to the US Supreme Court seeking review of the Second Circuit Court of Appeals decision. Further proceedings in the US Bankruptcy Court have been stayed pending the resolution of that petition.

Fairfield Sentry Limited, Fairfield Sigma Limited and Fairfield Lambda Limited (together, 'Fairfield') (in liquidation since July 2009) have brought a lawsuit in the US against fund shareholders, including HSBC companies that acted as nominees for clients, seeking restitution of redemption payments. In December 2018, the US Bankruptcy Court issued an opinion, which ruled in favour of the defendants' motion to dismiss in respect of certain claims by the liquidators for Fairfield and granted a motion by the liquidators to file amended complaints. As a result of that opinion, all claims against one of the HSBC companies have been dismissed, and certain claims against the remaining HSBC defendants have also been dismissed. In May 2019, the liquidators appealed certain issues from the US Bankruptcy Court opinion to the US District Court for the Southern District of New York (the 'New York District Court').

UK litigation: The Trustee has filed a claim against various HSBC companies in the High Court of England and Wales, seeking recovery of transfers from Madoff Securities to HSBC in an amount not yet pleaded or determined. The deadline for service of the claim has been extended to September 2020 for UK-based defendants and November 2020 for all other defendants.

Bermuda litigation: In January 2009, Kingate Global Fund Limited and Kingate Euro Fund Limited (together, 'Kingate') brought an action against HSBC Bank Bermuda Limited ('HBBM') for recovery of funds held in Kingate's accounts, fees and dividends. In June 2019, the Trustee, Kingate and HBBM entered into a global settlement agreement pursuant to which the Trustee and Kingate released HBBM from any and all claims arising out of or relating to Kingate including all pending litigation in the US, UK and Bermuda. Following court approval of the settlement in the US, Bermuda and British Virgin Islands, the Bermuda action was discontinued in October 2019, and the Trustee dismissed certain of its US claims against HBBM in November 2019.

Cayman Islands litigation: In February 2013, Primeo Fund ('Primeo') (in liquidation since April 2009) brought an action against HSBC Securities Services Luxembourg ('HSSL') and Bank of Bermuda (Cayman) Limited (now known as HSBC Cayman Limited), alleging breach of contract and breach of fiduciary duty and claiming damages and equitable compensation. The trial concluded in February 2017 and, in August 2017, the court dismissed all claims against the defendants. In September 2017, Primeo appealed to the Court of Appeal of the Cayman Islands and, in June 2019, the Court of Appeal of the Cayman Islands dismissed Primeo's claims against HSSL and HSBC Cayman Limited. In August 2019, Primeo filed a notice of appeal to the UK Privy Council and, in September 2019, HSSL and HSBC Cayman Limited indicated that they will seek to dismiss the appeal.

Luxembourg litigation: In April 2009, Herald Fund SPC ('Herald') (in liquidation since July 2013) brought an action against HSSL before the Luxembourg District Court, seeking restitution of cash and securities that Herald purportedly lost because of Madoff Securities' fraud, or money damages. The Luxembourg District Court dismissed Herald's securities restitution claim, but reserved Herald's cash restitution claim and its claim for money damages. Herald has appealed this judgment to the Luxembourg Court of Appeal, where the matter is pending. In late 2018, Herald brought additional claims against HSSL and HSBC Bank plc ('HSBC Bank') before the Luxembourg District Court, seeking further restitution and damages.

In October 2009, Alpha Prime Fund Limited ('Alpha Prime') brought an action against HSSL before the Luxembourg District Court, seeking the restitution of securities, or the cash equivalent, or money damages. In December 2018, Alpha Prime brought additional claims before the Luxembourg District Court seeking damages against various HSBC companies. A preliminary hearing is scheduled for June 2020.

In December 2014, Senator Fund SPC ('Senator') brought an action against HSSL before the Luxembourg District Court, seeking restitution of securities, or the cash equivalent, or money damages. In April 2015, Senator commenced a separate action against the Luxembourg branch of HSBC Bank asserting identical claims before the Luxembourg District Court. In December 2018, Senator brought additional claims against HSSL and HSBC Bank Luxembourg branch before the Luxembourg District Court, seeking restitution of Senator's securities or money damages. These matters are currently pending before the Luxembourg District Court.

Ireland litigation: In November 2013, Defender Limited brought an action against HSBC Institutional Trust Services (Ireland) Limited ('HTIE') and others, based on allegations of breach of contract and claiming damages and indemnification for fund losses. The trial commenced in October 2018. In December 2018, the Irish High Court issued a judgment in HTIE's favour on a preliminary issue, holding that Defender Limited had no effective claim against HTIE. This judgment concluded the trial without further issues in dispute being heard. In February 2019, Defender Limited appealed to the Irish Supreme Court, and a hearing is scheduled for March 2020.

There are many factors that may affect the range of possible outcomes, and the resulting financial impact, of the various Madoff-related proceedings described above, including but not limited to the multiple jurisdictions in which the proceedings have been brought. Based upon the information currently available, management's estimate of the possible aggregate damages that might arise as a result of all claims in the various Madoff-related proceedings is up to or exceeding \$500m, excluding costs and interest. Due to uncertainties and limitations of this estimate, the ultimate damages could differ significantly from this amount.

Anti-money laundering and sanctions-related matters

In December 2012, among other agreements, HSBC Holdings plc ('HSBC Holdings') agreed to an undertaking with the UK Financial Services Authority, which was replaced by a Direction issued by the UK Financial Conduct Authority ('FCA') in 2013, and consented to a cease-and-desist order with the US Federal Reserve Board ('FRB'), both of which contained certain forward-looking anti-money laundering ('AML') and sanctions-related obligations. HSBC also agreed to retain an independent compliance monitor (who is, for FCA purposes, a 'Skilled Person' under section 166 of the Financial Services and Markets Act and, for FRB purposes, an 'Independent Consultant') to produce periodic assessments of the Group's AML and sanctions compliance programme (the 'Skilled Person/Independent Consultant'). In December 2012, HSBC Holdings also entered into an agreement with the Office of Foreign Assets Control ('OFAC') regarding historical transactions involving parties subject to OFAC sanctions. Reflective of HSBC's significant progress in strengthening its financial crime risk management capabilities, HSBC's engagement with the current Skilled Person will be terminated and a new Skilled Person with a narrower mandate will be appointed to assess the remaining areas that require further work in order for HSBC to transition fully to business-as-usual financial crime risk management. The Independent Consultant will continue to carry out an annual OFAC compliance review at the FRB's discretion. The role of the Skilled Person/Independent Consultant is discussed on page 145.

Through the Skilled Person/Independent Consultant's prior reviews, as well as internal reviews conducted by HSBC, certain potential AML and sanctions compliance issues have been identified that HSBC is reviewing further with the FRB, FCA and/or OFAC. The Financial Crimes Enforcement Network of the US Treasury Department, as well as the Civil Division of the US Attorney's Office for the Southern District of New York, are investigating the collection and transmittal of third-party originator information in certain payments instructed over HSBC's proprietary payment systems. The FCA is also conducting an investigation into HSBC Bank's and HSBC UK's compliance with UK money laundering regulations and financial crime systems and controls requirements. HSBC is cooperating with all of these investigations.

In May 2014, a shareholder derivative action was filed by a shareholder of HSBC Holdings purportedly on behalf of HSBC Holdings, HSBC Bank USA N.A. ('HSBC Bank USA'), HSBC North America Holdings Inc. and HSBC USA Inc. (the 'Nominal Corporate Defendants') in New York state court against certain current and former directors and officers of the Nominal Corporate Defendants (the 'Individual Defendants'). The complaint alleges that the Individual Defendants breached their fiduciary duties to the Nominal Corporate Defendants and caused a waste of corporate assets by allegedly permitting and/or causing the conduct underlying the five-year deferred prosecution agreement with the US Department of Justice ('DoJ'), entered into in December 2012. In November 2015, the New York state court granted the Nominal Corporate Defendants' motion to dismiss. In November 2018, the appellate court reversed the New York state court's decision and reinstated the action; furthermore, in March 2019, the appellate court denied the Nominal Corporate Defendants'

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motion for reargument or for leave to appeal to the New York Court of Appeals. In February 2019, the Nominal Corporate Defendants and most of the Individual Defendants filed a further motion to dismiss in New York state court, where the matter is pending.

In July 2014, a claim was filed in the Ontario Superior Court of Justice against HSBC Holdings and a former employee purportedly on behalf of a class of persons who purchased HSBC common shares and American Depositary Shares between July 2006 and July 2012. The complaint, which seeks monetary damages of up to CA\$20bn, alleges that the defendants made statutory and common law misrepresentations in documents released by HSBC Holdings and its wholly-owned indirect subsidiary, HSBC Bank Canada, relating to HSBC's compliance with the Bank Secrecy Act, AML, sanctions and other laws. In September 2017, the Ontario Superior Court of Justice dismissed the statutory claims against HSBC Holdings and the former employee for lack of jurisdiction, and stayed the common law misrepresentation claim against HSBC Holdings on the basis of *forum non conveniens*. In October 2017, the plaintiff appealed to the Court of Appeal for Ontario and, in July 2018, that appeal was dismissed. In October 2018, the plaintiff applied for leave to appeal to the Supreme Court of Canada and, in March 2019, the plaintiff's application for leave to appeal was denied. In October 2019, the Ontario Superior Court of Justice dismissed the remaining common law misrepresentation claim against HSBC Holdings.

Since November 2014, a number of lawsuits have been filed in federal courts in the US against various HSBC companies and others on behalf of plaintiffs who are, or are related to, victims of terrorist attacks in the Middle East or of cartel violence in Mexico. In each case, it is alleged that the defendants aided and abetted the unlawful conduct of various sanctioned parties in violation of the US Anti-Terrorism Act. In one case, in August 2019, the Second Circuit Court of Appeals affirmed the dismissal of the plaintiffs' claims, and this matter is now concluded. Currently, 10 actions remain pending in federal courts in New York or the District of Columbia. Motions to dismiss were filed in three of those cases and the courts granted HSBC's motions in all three cases in March, September and October 2019. The plaintiffs are seeking to amend their complaint in one of the cases and have appealed the decisions in the two other cases. HSBC has filed motions to dismiss in three further cases which remain pending. The four remaining actions are at a very early stage.

In July 2018, a claim was issued against HSBC Holdings in the High Court of England and Wales alleging that HSBC Holdings made untrue and/or misleading statements and/or omissions in public statements between 2007 and 2012 regarding compliance by HSBC with AML, anti-terrorist financing and sanctions laws, regulations and requirements, and the regulatory compliance of HSBC more generally. In August 2019, HSBC Holdings concluded a settlement with the claimants to resolve this claim.

Based on the facts currently known, it is not practicable at this time for HSBC to predict the resolution of these matters, including the timing or any possible impact on HSBC, which could be significant.

Tax-related investigations

Various tax administration, regulatory and law enforcement authorities around the world have been conducting investigations and reviews of HSBC Private Bank (Suisse) SA ('HSBC Swiss Private Bank') and other HSBC companies in connection with allegations of tax evasion or tax fraud, money laundering and unlawful cross-border banking solicitation.

In October 2019, the Belgian court approved a settlement between HSBC Swiss Private Bank and Belgian authorities in which HSBC Swiss Private Bank agreed to pay €295m to resolve the Belgian authorities' investigation into historical tax-related offences. The Belgian court also dismissed proceedings against HSBC Holdings and HSBC Private Bank Holdings (Suisse) SA.

In December 2019, HSBC Swiss Private Bank entered into a three-year deferred prosecution agreement with the DoJ (the 'Swiss Tax DPA'). This concluded the DoJ's investigation into HSBC Swiss Private Bank's legacy business with US clients. Under the terms of the Swiss Tax DPA, HSBC Swiss Private Bank agreed to pay \$192m to the DoJ and the US Internal Revenue Service and has a number of ongoing cooperation obligations.

HSBC continues to cooperate with tax-related investigations by other tax administration, regulatory or law enforcement authorities. Based on the facts currently known, it is not practicable at this time for HSBC to predict the resolution of these ongoing matters, including the timing or any possible impact on HSBC.

London interbank offered rates, European interbank offered rates and other benchmark interest rate investigations and litigation

Euro interest rate derivatives: In December 2016, the European Commission (the 'EC') issued a decision finding that HSBC, among other banks, engaged in anti-competitive practices in connection with the pricing of euro interest rate derivatives in early 2007. The EC imposed a fine on HSBC based on a one-month infringement. HSBC appealed the decision and, in September 2019, the General Court of the European Union (the 'General Court') issued a decision largely upholding the EC's findings on liability but annulling the fine. HSBC and the EC have both appealed the General Court's decision to the European Court of Justice.

US dollar Libor: Beginning in 2011, HSBC and other panel banks have been named as defendants in a number of private lawsuits filed in the US with respect to the setting of US dollar Libor. The complaints assert claims under various US laws, including US antitrust and racketeering laws, the US Commodity Exchange Act ('US CEA') and state law. The lawsuits include individual and putative class actions, most of which have been transferred and/or consolidated for pre-trial purposes before the New York District Court.

In 2017 and 2018, HSBC reached agreements with plaintiffs to resolve putative class actions brought on behalf of the following five groups of plaintiffs: persons who purchased US dollar Libor-indexed bonds; persons who purchased US dollar Libor-indexed exchange-traded instruments; US-based lending institutions that made or purchased US dollar Libor-indexed loans (the 'Lender class'); persons who purchased US dollar Libor-indexed interest rate swaps and other instruments directly from the defendant banks and their affiliates (the 'OTC class'); and persons who purchased US dollar Libor-indexed interest rate swaps and other instruments from certain financial institutions that are not the defendant banks or their affiliates. During 2018, the New York District Court granted final approval of the settlements with the OTC and Lender classes. The remaining settlements are subject to final court approval. Additionally, a number of other US dollar Libor-related actions remain pending against HSBC in the New York District Court and the Second Circuit Court of Appeals.

Intercontinental Exchange ('ICE') Libor: Between January and March 2019, HSBC and other panel banks were named as defendants in three putative class actions filed in the New York District Court on behalf of persons and entities who purchased instruments paying interest indexed to US dollar ICE Libor from a panel bank. The complaints allege, among other things, misconduct related to the suppression of this benchmark rate in violation of US antitrust and state law. In July 2019, the three putative class actions were consolidated, and the plaintiffs filed a consolidated amended complaint. In August 2019, the defendants filed a motion to dismiss the complaint, which remains pending.

Singapore interbank offered rate ('Sibor'), Singapore swap offer rate ('SOR') and Australia bank bill swap rate ('BBSW'): In July and August 2016, HSBC and other panel banks were named as defendants in two putative class actions filed in the New York

District Court on behalf of persons who transacted in products related to the Sibor, SOR and BBSW benchmark rates. The complaints allege, among other things, misconduct related to these benchmark rates in violation of US antitrust, commodities and racketeering laws, and state law.

In the Sibor/SOR litigation, following a decision on the defendants' motion to dismiss in October 2018, the claims against a number of HSBC entities were dismissed, and the Hongkong and Shanghai Banking Corporation Limited ('HBAP') remained as the only HSBC defendant in this action. In October 2018, HBAP filed a motion for reconsideration of the decision based on the issue of personal jurisdiction; this motion was denied in April 2019. Also in October 2018, the plaintiffs filed a third amended complaint naming only the Sibor panel members, including HBAP, as defendants; the court dismissed the third amended complaint in its entirety in July 2019 against all defendants. In August 2019, the plaintiffs filed an appeal to the Second Circuit Court of Appeals, which remains pending.

In the BBSW litigation, in November 2018, the court dismissed all foreign defendants, including all the HSBC entities, on personal jurisdiction grounds. In April 2019, the plaintiffs filed an amended complaint, which the defendants moved to dismiss. In February 2020, the court again dismissed the plaintiffs' amended complaint against all the HSBC entities.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters, which could be significant.

Foreign exchange-related investigations and litigation

Various regulators and competition authorities around the world, including in the EU, Brazil and South Africa, are conducting investigations and reviews into trading by HSBC and others on the foreign exchange markets. HSBC is cooperating with these investigations and reviews.

In January 2018, HSBC Holdings entered into a three-year deferred prosecution agreement with the Criminal Division of the DoJ (the 'FX DPA'), regarding fraudulent conduct in connection with two particular transactions in 2010 and 2011. This concluded the DoJ's investigation into HSBC's historical foreign exchange activities. Under the terms of the FX DPA, HSBC has a number of ongoing obligations, including implementing enhancements to its internal controls and procedures in its Global Markets business, which will be the subject of annual reports to the DoJ. In addition, HSBC agreed to pay a financial penalty and restitution.

In December 2016, Brazil's Administrative Council of Economic Defense initiated an investigation into the onshore foreign exchange market and identified a number of banks, including HSBC, as subjects of its investigation.

In February 2017, the Competition Commission of South Africa (the 'Competition Commission') referred a complaint for proceedings before the South African Competition Tribunal (the 'Tribunal') against 18 financial institutions, including HSBC Bank, for alleged anti-competitive behaviour in the South African foreign exchange market. In April 2017, HSBC Bank filed an exception to the complaint based on a lack of jurisdiction and statute of limitations. In January 2018, the Tribunal approved the provisional referral of additional financial institutions, including HSBC Bank USA, to the proceedings. In June 2019, the Tribunal issued a decision requiring the Competition Commission to revise its complaint. Several financial institutions named in the complaint, including HSBC Bank USA, have appealed part of the decision to the Competition Appeal Court of South Africa, and the Competition Commission has cross-appealed.

In October 2018, HSBC Holdings and HSBC Bank received an information request from the EC concerning potential coordination in foreign exchange options trading. This matter is at an early stage.

In late 2013 and early 2014, various HSBC companies and other banks were named as defendants in various putative class actions consolidated in the New York District Court. The consolidated complaint alleged, among other things, that the defendants conspired to manipulate the WM/Reuters foreign exchange benchmark rates. In September 2015, HSBC reached an agreement with the plaintiffs to resolve the consolidated action, and the court granted final approval of the settlement in August 2018.

A putative class action complaint making similar allegations on behalf of retail customers of foreign exchange products was filed in the US District Court for the Northern District of California in 2015, and was subsequently transferred to the New York District Court where it remains pending. In 2017, putative class action complaints making similar allegations on behalf of purported indirect purchasers of foreign exchange products were filed in New York and were subsequently consolidated in the New York District Court, where they remain pending.

In September 2018, various HSBC companies and other banks were named as defendants in two motions for certification of class actions filed in Israel alleging foreign exchange-related misconduct. In July 2019, the Tel Aviv Court allowed the plaintiffs to consolidate their claims and, in September 2019, the plaintiffs filed a motion for certification of the consolidated class action. In November and December 2018, complaints alleging foreign exchange-related misconduct were filed in the New York District Court and the High Court of England and Wales against HSBC and other defendants by certain plaintiffs that opted out of the US class action settlement. These matters are at an early stage. It is possible that additional civil actions will be initiated against HSBC in relation to its historical foreign exchange activities.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters, which could be significant.

Precious metals fix-related litigation

Gold: Beginning in March 2014, numerous putative class actions were filed in the New York District Court and the US District Courts for the District of New Jersey and the Northern District of California, naming HSBC and other members of The London Gold Market Fixing Limited as defendants. The complaints allege that, from January 2004 to June 2013, the defendants conspired to manipulate the price of gold and gold derivatives for their collective benefit in violation of US antitrust laws, the US CEA and New York state law. The actions were consolidated in the New York District Court. The defendants' motion to dismiss the consolidated action was granted in part and denied in part in October 2016. In June 2017, the court granted the plaintiffs leave to file a third amended complaint, naming a new defendant. The court has denied the pre-existing defendants' request for leave to file a joint motion to dismiss, and discovery is proceeding.

Beginning in December 2015, numerous putative class actions under Canadian law were filed in the Ontario and Quebec Superior Courts of Justice against various HSBC companies and other financial institutions. The plaintiffs allege that, among other things, from January 2004 to March 2014, the defendants conspired to manipulate the price of gold and gold derivatives in violation of the Canadian Competition Act and common law. These actions are at an early stage.

Silver: Beginning in July 2014, numerous putative class actions were filed in the US District Courts for the Southern and Eastern Districts of New York, naming HSBC and other members of The London Silver Market Fixing Limited as defendants. The complaints allege that,

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from January 2007 to December 2013, the defendants conspired to manipulate the price of silver and silver derivatives for their collective benefit in violation of US antitrust laws, the US CEA and New York state law. The actions were consolidated in the New York District Court. The defendants' motion to dismiss the consolidated action was granted in part and denied in part in October 2016. In June 2017, the court granted the plaintiffs leave to file a third amended complaint, which names several new defendants. The court has denied the pre-existing defendants' request for leave to file a joint motion to dismiss, and discovery is proceeding.

In April 2016, two putative class actions under Canadian law were filed in the Ontario and Quebec Superior Courts of Justice against various HSBC companies and other financial institutions. The plaintiffs in both actions allege that, from January 1999 to August 2014, the defendants conspired to manipulate the price of silver and silver derivatives in violation of the Canadian Competition Act and common law. The Ontario action is at an early stage. The Quebec action has been temporarily stayed.

Platinum and palladium: Between late 2014 and early 2015, numerous putative class actions were filed in the New York District Court, naming HSBC and other members of The London Platinum and Palladium Fixing Company Limited as defendants. The complaints allege that, from January 2008 to November 2014, the defendants conspired to manipulate the price of platinum group metals ('PGM') and PGM-based financial products for their collective benefit in violation of US antitrust laws and the US CEA. In March 2017, the defendants' motion to dismiss the second amended consolidated complaint was granted in part and denied in part. In June 2017, the plaintiffs filed a third amended complaint. The defendants filed a joint motion to dismiss, which remains pending.

Based on the facts currently known, it is not practicable at this time for HSBC to predict the resolution of these matters, including the timing or any possible impact on HSBC, which could be significant.

Film finance litigation

In July and November 2015, two actions were brought by individuals against HSBC Private Bank (UK) Limited ('PBGB') in the High Court of England and Wales seeking damages on various alleged grounds, including breach of duty to the claimants, in connection with their participation in certain Ingenious film finance schemes. These actions are ongoing.

In December 2018, a separate action was brought against PBGB in the High Court of England and Wales by multiple claimants seeking damages for alleged unlawful means conspiracy and dishonest assistance in connection with lending provided by PBGB to third parties in respect of certain Ingenious film finance schemes in which the claimants participated. In June 2019, a similar claim was issued against PBGB in the High Court of England and Wales by additional claimants. These actions are ongoing.

In February and October 2019, PBGB received letters before claim by two largely separate groups of investors in Eclipse film finance schemes, each of which asserted various claims against PBGB in connection with its role in facilitating the design, promotion and operation of such schemes. These matters are at an early stage.

It is possible that additional actions or investigations will be initiated against PBGB as a result of its historical involvement in the provision of certain film finance-related services.

Based on the facts currently known, it is not practicable to predict the resolution of these matters, including the timing or possible aggregate impact, which could be significant.

Other regulatory investigations, reviews and litigation

HSBC Holdings and/or certain of its affiliates are subject to a number of other investigations and reviews by various regulators and competition and law enforcement authorities, as well as litigation, in connection with various matters relating to the firm's businesses and operations, including:

- an investigation by the DoJ regarding US Treasury securities trading practices;
- an investigation by the US Commodity Futures Trading Commission regarding interest rate swap transactions related to bond issuances;
- an investigation by the Swiss Competition Commission in connection with the setting of Euribor and Japanese yen Libor;
- an investigation by the FCA in connection with collections and recoveries operations in the UK;
- an information request from the UK Competition and Markets Authority concerning the financial services sector;
- putative class actions brought in the New York District Court relating to the Mexican government bond market, the US government-sponsored enterprise bond market, and the market for US dollar-denominated supranational sovereign and agency bonds;
- two group actions pending in the US courts and a claim issued in the High Court of England and Wales in connection with HSBC Bank's role as a correspondent bank to Stanford International Bank Ltd from 2003 to 2009; and
- litigation brought against various HSBC companies in the US courts relating to residential mortgage-backed securities, based primarily on (a) claims brought against HSBC Bank USA in connection with its role as trustee on behalf of various securitisation trusts; and (b) claims against several HSBC companies seeking that the defendants repurchase various mortgage loans.

There are many factors that may affect the range of outcomes, and the resulting financial impact, of these matters, which could be significant.

35 Related party transactions

Related parties of the Group and HSBC Holdings include subsidiaries, associates, joint ventures, post-employment benefit plans for HSBC employees, Key Management Personnel ('KMP') as defined by IAS 24, close family members of KMP and entities that are controlled or jointly controlled by KMP or their close family members. KMP are defined as those persons having authority and responsibility for planning, directing and controlling the activities of HSBC Holdings plc. These individuals also constitute 'senior management' for the purposes of the Hong Kong Listing Rules. Following a review of the application of IAS 24, it was determined that the roles of Chief Legal Officer, Group Head of Internal Audit, Group Chief Human Resources Officer, Group Chief Compliance Officer, Group Company Secretary and Chief Governance Officer, Head of Wholesale Market and Credit Risk and Group Chief of Staff did not meet the criteria for KMP as provided for in the standard.

Particulars of transactions with related parties are tabulated below. The disclosure of the year-end balance and the highest amounts outstanding during the year is considered to be the most meaningful information to represent the amount of the transactions and outstanding balances during the year.

Key Management Personnel

Details of Directors' remuneration and interest in shares are disclosed in the 'Directors' remuneration report' on pages 184 to 210. IAS 24 'Related party disclosures' requires the following additional information for key management compensation.

Compensation of Key Management Personnel

	2019	2018	2017
	\$m	\$m	\$m
Short-term employee benefits	64	52	43
Other long-term employee benefits	8	6	5
Share-based payments	27	34	35
Year ended 31 Dec	99	92	83

Shareholdings, options and other securities of Key Management Personnel

	2019 (000s)	2018 (000s)
Number of options held over HSBC Holdings ordinary shares under employee share plans	18	24
Number of HSBC Holdings ordinary shares held beneficially and non-beneficially	15,546	17,940
At 31 Dec	15,564	17,964

Transactions and balances during the year with Key Management Personnel

	Footnotes	2019		2018	
		Balance at 31 Dec \$m	Highest amounts outstanding during year \$m	Balance at 31 Dec \$m	Highest amounts outstanding during year \$m
Key Management Personnel	1				
Advances and credits	2	283	328	169	288
Guarantees		34	34	0.6	0.6
Deposits	3	268	659	300	802

- 1 Includes Key Management Personnel, close family members of Key Management Personnel and entities that are controlled or jointly controlled by Key Management Personnel or their close family members.
- 2 Advances and credits entered into by subsidiaries of HSBC Holdings plc during 2019 with Directors, disclosed pursuant to section 413 of the Companies Act 2006, totalled \$3m (2018: \$1m).
- 3 Comparatives have been re-presented to correct foreign currency translation errors impacting 2018 reported balances.

Some of the transactions were connected transactions as defined by the Rules Governing The Listing of Securities on The Stock Exchange of Hong Kong Limited, but were exempt from any disclosure requirements under the provisions of those rules. The above transactions were made in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with persons of a similar standing or, where applicable, with other employees. The transactions did not involve more than the normal risk of repayment or present other unfavourable features.

Associates and joint ventures

The Group provides certain banking and financial services to associates and joint ventures including loans, overdrafts, interest and non-interest bearing deposits and current accounts. Details of the interests in associates and joint ventures are given in Note 18.

Transactions and balances during the year with associates and joint ventures

	2019		2018	
	Highest balance during the year \$m	Balance at 31 Dec \$m	Highest balance during the year \$m	Balance at 31 Dec \$m
Unsubordinated amounts due from joint ventures	132	123	130	115
Unsubordinated amounts due from associates	4,554	2,054	3,887	3,000
Amounts due to associates	2,517	516	2,020	273
Amounts due to joint ventures	28	28	22	22
Guarantees and commitments	647	407	790	523

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

Post-employment benefit plans

At 31 December 2019, \$5.4bn (2018: \$4.4bn) of HSBC post-employment benefit plan assets were under management by HSBC companies, earning management fees of \$8m in 2019 (2018: \$8m). At 31 December 2019, HSBC's post-employment benefit plans had placed deposits of \$530m (2018: \$297m) with its banking subsidiaries, earning interest payable to the schemes of \$0.3m (2018: nil). The above outstanding balances arose from the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

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The combined HSBC Bank (UK) Pension Scheme enters into swap transactions with HSBC to manage inflation and interest rate sensitivity of its liabilities and selected assets. At 31 December 2019, the gross notional value of the swaps was \$9.9bn (2018: \$10.5bn); these swaps had a positive fair value to the scheme of \$1.2bn (2018: \$1.0bn); and HSBC had delivered collateral of \$1.2bn (2018: \$1.0bn) to the scheme in respect of these arrangements. All swaps were executed at prevailing market rates and within standard market bid/offer spreads.

HSBC Holdings

Details of HSBC Holdings' subsidiaries are shown in Note 37.

Transactions and balances during the year with subsidiaries

	2019		2018	
	Highest balance during the year	Balance at 31 Dec	Highest balance during the year	Balance at 31 Dec
	\$m	\$m	\$m	\$m
Assets				
Cash and balances with HSBC undertakings	5,029	2,382	16,473	3,509
Financial assets with HSBC undertakings designated and otherwise mandatorily measured at fair value	61,964	61,964	23,513	23,513
Derivatives	3,902	2,002	1,235	707
Loans and advances to HSBC undertakings	43,436	10,218	77,311	56,144
Prepayments, accrued income and other assets	655	480	—	—
Investments in subsidiaries	163,258	161,473	160,231	160,231
Total related party assets at 31 Dec	278,244	238,519	278,763	244,104
Liabilities				
Amounts owed to HSBC undertakings	1,553	464	2,040	949
Derivatives	2,183	2,021	3,639	2,159
Subordinated liabilities	892	892	892	892
Total related party liabilities at 31 Dec	4,628	3,377	6,571	4,000
Guarantees and commitments	11,541	11,061	11,629	8,627

The above outstanding balances arose in the ordinary course of business and on substantially the same terms, including interest rates and security, as for comparable transactions with third-party counterparties.

Some employees of HSBC Holdings are members of the HSBC Bank (UK) Pension Scheme, which is sponsored by a separate Group company. HSBC Holdings incurs a charge for these employees equal to the contributions paid into the scheme on their behalf. Disclosure in relation to the scheme is made in Note 5.

36 Events after the balance sheet date

A fourth interim dividend for 2019 of \$0.21 per ordinary share (a distribution of approximately \$4,266m) was declared by the Directors after 31 December 2019. These accounts were approved by the Board of Directors on 18 February 2020 and authorised for issue.

The Directors approved the 2020 business update after 31 December 2019, setting out a plan that aims to reallocate capital to areas that can deliver stronger returns, to reduce costs across the Group, and to simplify the business. One change as part of this plan is a change to the global businesses that form the Group's reportable segments as described in Note 10 of the financial statements on page 263. The existing Retail Banking and Wealth Management and Global Private Banking global businesses will be merged to create one new global business, Wealth and Personal Banking, which will become a reportable segment during 2020.

The ECL at 31 December 2019 was estimated based on a range of forecast economic conditions as at that date. Since early January 2020, the coronavirus outbreak has spread across mainland China and beyond, causing disruption to business and economic activity. The impact on GDP and other key indicators will be considered when determining the severity and likelihood of downside economic scenarios that will be used to estimate ECL under IFRS 9 in 2020.

37 HSBC Holdings' subsidiaries, joint ventures and associates

In accordance with section 409 of the Companies Act 2006 a list of HSBC Holdings plc subsidiaries, joint ventures and associates, the registered office addresses and the effective percentages of equity owned at 31 December 2019 are disclosed below.

Unless otherwise stated, the share capital comprises ordinary or common shares that are held by Group subsidiaries. The ownership percentage is provided for each undertaking. The undertakings below are consolidated by HSBC unless otherwise indicated.

Subsidiaries

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
Almacenadora Banpacífico S.A. (In Liquidation)	99.99	15
Assetfinance December (F) Limited	100.00	16
Assetfinance December (H) Limited	100.00	17
Assetfinance December (M) Limited (In Liquidation)	100.00	32
Assetfinance December (P) Limited	100.00	17
Assetfinance December (R) Limited	100.00	17
Assetfinance June (A) Limited	100.00	17
Assetfinance June (D) Limited	100.00	16
Assetfinance Limited	100.00	17
Assetfinance March (B) Limited	100.00	18
Assetfinance March (D) Limited	100.00	16
Assetfinance March (F) Limited	100.00	17
Assetfinance September (F) Limited	100.00	17
Assetfinance September (G) Limited	100.00	16
B&Q Financial Services Limited	100.00	19
Banco Nominees (Guernsey) Limited	100.00	20
Banco Nominees 2 (Guernsey) Limited	100.00	20
Banco Nominees Limited	100.00	21
Beau Soleil Limited Partnership	n/a	0, 22
Beijing Miyun HSBC Rural Bank Company Limited	100.00	12, 23
Billingsgate Nominees Limited	100.00	17
Canada Crescent Nominees (UK) Limited	100.00	17
Canada Square Nominees (UK) Limited	100.00	17
Capco/Cove, Inc.	100.00	24
Card-Flo #1, Inc.	100.00	25
Card-Flo #3, Inc.	100.00	26
CC&H Holdings LLC	n/a	0, 27
CCF & Partners Asset Management Limited	100.00 (99.99)	17
CCF Holding (LIBAN) S.A.L. (In Liquidation)	74.99	28
Charterhouse Administrators (D.T.) Limited	100.00 (99.99)	17
Charterhouse Management Services Limited	100.00 (99.99)	17
Charterhouse Pensions Limited	100.00	17
Chongqing Dazu HSBC Rural Bank Company Limited	100.00	12, 29
Chongqing Fengdu HSBC Rural Bank Company Limited	100.00	12, 30
Chongqing Rongchang HSBC Rural Bank Company Limited	100.00	12, 31
CL Residential Limited (In Liquidation)	100.00	32
COIF Nominees Limited	n/a	0, 17
Cordico Management AG (In Liquidation)	100.00	33
Dalian Pulandian HSBC Rural Bank Company Limited	100.00	12, 34
Decision One Mortgage Company, LLC	n/a	0, 35
Dem 9	100.00 (99.99)	4, 36
Dempar 1	100.00 (99.99)	37
Desarrollo Turístico, S.A. de C.V. (In Liquidation)	100.00 (99.79)	15
Electronic Data Process México, S.A. de C.V.	100.00	15
Elysées Immo Invest	100.00 (99.99)	38
Equator Holdings Limited (In Liquidation)	100.00	32
Eton Corporate Services Limited	100.00	20
Far East Leasing SA (In Dissolution)	100.00	39
Finanpar 7	100.00 (99.99)	38
Flandres Contentieux S.A.	100.00 (99.99)	40
Foncière Elysées	100.00 (99.99)	37
Fujian Yong'an HSBC Rural Bank Company Limited	100.00	12, 41
Fulcher Enterprises Company Limited	100.00 (62.14)	42
Fundacion HSBC, A.C.	100.00 (99.99)	11, 15
Giller Ltd.	100.00	24
GPIF Co-Investment, LLC	n/a	0, 26

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
Griffin International Limited	100.00	17
Grundstuecksgesellschaft Trinkausstrasse Kommanditgesellschaft	n/a	0, 43
Grupo Financiero HSBC, S. A. de C. V.	99.99	15
Guangdong Enping HSBC Rural Bank Company Limited	100.00	12, 44
Hang Seng (Nominee) Limited	100.00 (62.14)	42
Hang Seng Bank (China) Limited	100.00 (62.14)	45
Hang Seng Bank (Trustee) Limited	100.00 (62.14)	42
Hang Seng Bank Limited	62.14	42
Hang Seng Bullion Company Limited	100.00 (62.14)	42
Hang Seng Credit Limited	100.00 (62.14)	42
Hang Seng Data Services Limited	100.00 (62.14)	42
Hang Seng Finance Limited	100.00 (62.14)	42
Hang Seng Financial Information Limited	100.00 (62.14)	42
Hang Seng Indexes Company Limited	100.00 (62.14)	42
Hang Seng Insurance Company Limited	100.00 (62.14)	42
Hang Seng Investment Management Limited	100.00 (62.14)	42
Hang Seng Investment Services Limited	100.00 (62.14)	42
Hang Seng Life Limited	100.00 (62.14)	42
Hang Seng Real Estate Management Limited	100.00 (62.14)	42
Hang Seng Securities Limited	100.00 (62.14)	42
Hang Seng Security Management Limited	100.00 (62.14)	42
Haseba Investment Company Limited	100.00 (62.14)	42
HFC Bank Limited (In Liquidation)	100.00	32
High Time Investments Limited	100.00 (62.14)	42
Honey Green Enterprises Ltd.	100.00	46
Household International Europe Limited (In Liquidation)	100.00	32
Household Pooling Corporation	100.00	47
HRMG Nominees Limited	100.00	20
HSBC (BGF) Investments Limited	100.00	17
HSBC (General Partner) Limited	100.00	2, 48
HSBC (Guernsey) GP PCC Limited	100.00	20
HSBC (Kuala Lumpur) Nominees Sdn Bhd	100.00	49
HSBC (Malaysia) Trustee Berhad	100.00	50
HSBC (Singapore) Nominees Pte Ltd	100.00	51
HSBC Agency (India) Private Limited	100.00	52
HSBC Alternative Investments Limited	100.00	17
HSBC Amanah Malaysia Berhad	100.00	49
HSBC Americas Corporation (Delaware)	100.00	26
HSBC Argentina Holdings S.A.	100.00	53
HSBC Asia Holdings B.V.	100.00	17
HSBC Asia Holdings Limited	100.00	2, 54
HSBC Asia Pacific Holdings (UK) Limited	100.00	17
HSBC Asset Finance (UK) Limited	100.00	17
HSBC Asset Finance Holdings Limited (In Liquidation)	100.00	32
HSBC Asset Finance M.O.G. Holdings (UK) Limited	100.00	17
HSBC Asset Management (India) Private Limited	100.00	55
HSBC Assurances Vie (France)	100.00 (99.99)	40
HSBC Australia Holdings Pty Limited	100.00	56
HSBC Bank (Chile)	100.00	57
HSBC Bank (China) Company Limited	100.00	12, 58
HSBC Bank (General Partner) Limited	100.00	48
HSBC Bank (Mauritius) Limited	100.00	59
HSBC Bank (RR) (Limited Liability Company)	n/a	0, 13, 60
HSBC Bank (Singapore) Limited	100.00	51
HSBC Bank (Taiwan) Limited	100.00	61
HSBC Bank (Uruguay) S.A.	100.00	62
HSBC Bank (Vietnam) Ltd.	100.00	63
HSBC Bank A.S.	100.00 (99.99)	64

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Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
HSBC Bank Argentina S.A.	99.00	53
HSBC Bank Armenia cjsc	70.00	65
HSBC Bank Australia Limited	100.00	56
HSBC Bank Bermuda Limited	100.00	21
HSBC Bank Canada	100.00	66
HSBC Bank Capital Funding (Sterling 1) LP	n/a	0, 48
HSBC Bank Capital Funding (Sterling 2) LP	n/a	0, 48
HSBC Bank Egypt S.A.E	94.54	67
HSBC Bank Malaysia Berhad	100.00	49
HSBC Bank Malta p.l.c.	70.03	68
HSBC Bank Middle East Limited	100.00	5, 69
HSBC Bank Middle East Limited Representative Office Morocco SARL (In Liquidation)	100.00	70
HSBC Bank Oman S.A.O.G.	51.00	71
HSBC Bank Pension Trust (UK) Limited	100.00	17
HSBC Bank plc	100.00	17
HSBC Bank USA, National Association	100.00	72
HSBC Branch Nominee (UK) Limited	100.00	16
HSBC Brasil Holding S.A.	100.00 (99.99)	73
HSBC Brasil S.A. Banco de Investimento	100.00 (99.99)	73
HSBC Broking Forex (Asia) Limited	100.00	54
HSBC Broking Futures (Asia) Limited	100.00	54
HSBC Broking Futures (Hong Kong) Limited	100.00	54
HSBC Broking Securities (Asia) Limited	100.00	54
HSBC Broking Securities (Hong Kong) Limited	100.00	54
HSBC Broking Services (Asia) Limited	100.00	54
HSBC Canadian Covered Bond (Legislative) GP Inc.	100.00	74
HSBC Canadian Covered Bond (Legislative) Guarantor Limited Partnership	n/a	0, 74
HSBC Capital (USA), Inc.	100.00	26
HSBC Capital Funding (Dollar 1) L.P.	n/a	0, 48
HSBC Capital Limited	100.00	54
HSBC Card Services Inc.	100.00	26
HSBC Casa de Bolsa, S.A. de C.V., Grupo Financiero HSBC	100.00 (99.99)	15
HSBC Cayman Limited	100.00	75
HSBC Cayman Services Limited	100.00	76
HSBC City Funding Holdings	100.00	17
HSBC Client Holdings Nominee (UK) Limited	100.00	17
HSBC Client Nominee (Jersey) Limited	100.00	77
HSBC Client Share Offer Nominee (UK) Limited (In Liquidation)	100.00	32
HSBC Columbia Funding, LLC	n/a	0, 26
HSBC Corporate Advisory (Malaysia) Sdn Bhd	100.00	49
HSBC Corporate Finance (Hong Kong) Limited	100.00	54
HSBC Corporate Trustee Company (UK) Limited	100.00	17
HSBC Custody Nominees (Australia) Limited	100.00	56
HSBC Custody Services (Guernsey) Limited	100.00 (99.99)	20
HSBC Daisy Investments (Mauritius) Limited	100.00	78
HSBC Diversified Loan Fund General Partner Sarl	n/a	0, 79
HSBC Electronic Data Processing (Guangdong) Limited	100.00	12, 80
HSBC Electronic Data Processing (Malaysia) Sdn Bhd	100.00	81
HSBC Electronic Data Processing (Philippines), Inc.	99.00	82
HSBC Electronic Data Processing India Private Limited	100.00 (99.99)	83
HSBC Electronic Data Processing Lanka (Private) Limited	100.00 (99.99)	84
HSBC Electronic Data Service Delivery (Egypt) S.A.E.	100.00 (99.99)	85
HSBC Enterprise Investment Company (UK) Limited (In Liquidation)	100.00	32
HSBC Epargne Entreprise (France)	100.00 (99.99)	40

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
HSBC Equator (UK) Limited (In Liquidation)	100.00	32
HSBC Equipment Finance (UK) Limited	100.00	16
HSBC Equity (UK) Limited	100.00	17
HSBC Europe B.V.	100.00 (99.99)	17
HSBC Executor & Trustee Company (UK) Limited	100.00	16
HSBC Factoring (France)	100.00 (99.99)	37
HSBC Finance (Netherlands)	100.00	2, 17
HSBC Finance Corporation	100.00	26
HSBC Finance Limited	100.00	17
HSBC Finance Mortgages Inc.	100.00	86
HSBC Finance Transformation (UK) Limited	100.00	17
HSBC Financial Services (Lebanon) s.a.l.	99.60	87
HSBC Financial Services (Middle East) Limited	100.00	88
HSBC Financial Services (Uruguay) S.A. (In Liquidation)	100.00	89
HSBC France	99.00	37
HSBC Fund Services (Korea) Limited	92.96	90
HSBC Germany Holdings GmbH	100.00	43
HSBC Global Asset Management (Bermuda) Limited	100.00	21
HSBC Global Asset Management (Canada) Limited	100.00	66
HSBC Global Asset Management (Deutschland) GmbH	100.00 (80.67)	43
HSBC Global Asset Management (France)	100.00 (99.99)	91
HSBC Global Asset Management (Hong Kong) Limited	100.00	22
HSBC Global Asset Management (International) Limited (In Liquidation)	100.00	92
HSBC Global Asset Management (Japan) K. K.	100.00	93
HSBC Global Asset Management (Malta) Limited	100.00 (70.00)	94
HSBC Global Asset Management (México), S.A. de C.V., Sociedad Operadora de Fondos de Inversión, Grupo Financiero HSBC	100.00 (99.99)	15
HSBC Global Asset Management (Oesterreich) GmbH	100.00 (80.67)	6, 95
HSBC Global Asset Management (Singapore) Limited	100.00	51
HSBC Global Asset Management (Switzerland) AG	100.00 (90.33)	4, 96
HSBC Global Asset Management (Taiwan) Limited	100.00	97
HSBC Global Asset Management (UK) Limited	100.00	17
HSBC Global Asset Management (USA) Inc.	100.00	98
HSBC Global Asset Management Argentina S.A. Sociedad Gerente de Fondos Comunes de Inversión	100.00 (99.99)	99
HSBC Global Asset Management Holdings (Bahamas) Limited	100.00	100
HSBC Global Asset Management Limited	100.00	2, 17
HSBC Global Custody Nominee (UK) Limited	100.00	17
HSBC Global Custody Proprietary Nominee (UK) Limited	100.00	1, 17
HSBC Global Services (Canada) Limited	100.00	101
HSBC Global Services (China) Holdings Limited	100.00	17
HSBC Global Services (Hong Kong) Limited	100.00	54
HSBC Global Services (UK) Limited	100.00	17
HSBC Global Services Limited	100.00	2, 17
HSBC Global Shared Services (India) Private Limited (In Liquidation)	100.00	1, 52
HSBC Group Management Services Limited	100.00	17
HSBC Group Nominees UK Limited	100.00	2, 17
HSBC Holdings B.V.	100.00	17
HSBC IM Pension Trust Limited	100.00	17
HSBC Infrastructure Limited	100.00	17
HSBC INKA Investment-AG TGV	100.00 (80.67)	14, 102
HSBC Inmobiliaria (Mexico), S.A. de C.V.	100.00 (99.99)	15
HSBC Institutional Trust Services (Asia) Limited	100.00	54

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
HSBC Institutional Trust Services (Bermuda) Limited	100.00	21
HSBC Institutional Trust Services (Mauritius) Limited	100.00	103
HSBC Institutional Trust Services (Singapore) Limited	100.00	51
HSBC Insurance (Asia) Limited	100.00	104
HSBC Insurance (Asia-Pacific) Holdings Limited	100.00	105
HSBC Insurance (Bermuda) Limited	100.00	21
HSBC Insurance (Singapore) Pte. Limited	100.00	51
HSBC Insurance Agency (USA) Inc.	100.00	98
HSBC Insurance Brokers (Philippines) Inc.	100.00	106
HSBC Insurance Holdings Limited	100.00	2, 17
HSBC Insurance SAC 1 (Bermuda) Limited	100.00	21
HSBC Insurance SAC 2 (Bermuda) Limited	100.00	21
HSBC Insurance Services (Lebanon) S.A.L. (In Liquidation)	100.00	107
HSBC Insurance Services Holdings Limited	100.00	17
HSBC International Finance Corporation (Delaware)	100.00	108
HSBC International Holdings (Jersey) Limited (In Liquidation)	100.00 (99.99)	77
HSBC International Trustee (BVI) Limited	100.00	109
HSBC International Trustee (Holdings) Pte. Limited	100.00	51
HSBC International Trustee Limited	100.00	110
HSBC Inversiones S.A.	99.99	57
HSBC InvestDirect (India) Limited	99.54	111
HSBC InvestDirect Financial Services (India) Limited	99.99 (99.54)	111
HSBC InvestDirect Sales & Marketing (India) Limited	98.99 (98.54)	52
HSBC InvestDirect Securities (India) Private Limited	99.99 (99.78)	111
HSBC Investment Bank Holdings B.V.	100.00	17
HSBC Investment Bank Holdings Limited	100.00	17
HSBC Investment Company (Egypt) S.A.E (In Liquidation)	94.54	112
HSBC Investment Company Limited	100.00	2, 17
HSBC Investment Funds (Canada) Inc.	100.00	113
HSBC Investment Funds (Hong Kong) Limited	100.00	22
HSBC Investment Funds (Luxembourg) SA	100.00 (99.99)	114
HSBC Invoice Finance (UK) Limited	100.00	115
HSBC Issuer Services Common Depositary Nominee (UK) Limited	100.00	17
HSBC Issuer Services Depositary Nominee (UK) Limited	100.00	17
HSBC Latin America B.V.	100.00	17
HSBC Latin America Holdings (UK) Limited	100.00	2, 17
HSBC Leasing (Asia) Limited	100.00	54
HSBC Leasing (France)	100.00 (99.99)	36
HSBC Life (International) Limited	100.00	21
HSBC Life (Property) Limited	100.00	104
HSBC Life (UK) Limited	100.00	17
HSBC Life Assurance (Malta) Limited	100.00 (70.03)	94
HSBC Life Insurance Company Limited	50.00	116
HSBC LU Nominees Limited	100.00	17
HSBC Management (Guernsey) Limited	100.00	20
HSBC Markets (USA) Inc.	100.00	26
HSBC Marking Name Nominee (UK) Limited	100.00	17
HSBC Master Trust Trustee Limited	100.00	17
HSBC Mexico, S.A., Institucion de Banca Multiple, Grupo Financiero HSBC	99.99	15
HSBC Middle East Finance Company Limited	80.00	117
HSBC Middle East Holdings B.V.	100.00	2, 69
HSBC Middle East Leasing Partnership	n/a	0, 118
HSBC Middle East Securities L.L.C	n/a	0, 119
HSBC Mortgage Corporation (Canada)	100.00	120

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
HSBC Mortgage Corporation (USA)	100.00	26
HSBC Nominees (Asing) Sdn Bhd	100.00	49
HSBC Nominees (Hong Kong) Limited	100.00	54
HSBC Nominees (New Zealand) Limited	100.00	121
HSBC Nominees (Tempatan) Sdn Bhd	100.00	49
HSBC North America Holdings Inc.	100.00	3, 26
HSBC Operational Services GmbH	90.10 (72.68)	122
HSBC Overseas Holdings (UK) Limited	100.00	2, 17
HSBC Overseas Investments Corporation (New York)	100.00	123
HSBC Overseas Nominee (UK) Limited	100.00	17
HSBC Participaciones (Argentina) S.A.	100.00 (99.99)	124
HSBC PB Corporate Services 1 Limited	100.00	125
HSBC PB Services (Suisse) SA	100.00	126
HSBC Pension Trust (Ireland) DAC	100.00	127
HSBC Pensiones, S.A.	100.00	15
HSBC PI Holdings (Mauritius) Limited	100.00	103
HSBC Portfoy Yonetimi A.S.	100.00 (99.99)	128
HSBC Preferential LP (UK)	100.00	17
HSBC Private Bank (C.I.) Limited	100.00	20
HSBC Private Bank (Luxembourg) S.A.	100.00	114
HSBC Private Bank (Suisse) SA	100.00	126
HSBC Private Bank (UK) Limited	100.00	17
HSBC Private Bank International	100.00	129
HSBC Private Banking Holdings (Suisse) SA	100.00	126
HSBC Private Banking Nominee 3 (Jersey) Limited	100.00	125
HSBC Private Equity Advisors LLC	n/a	0, 26
HSBC Private Equity Investments (UK) Limited	100.00	17
HSBC Private Trustee (Hong Kong) Limited	100.00	54
HSBC Private Wealth Services (Canada) Inc.	100.00	130
HSBC Professional Services (India) Private Limited	100.00	52
HSBC Property (UK) Limited	100.00	17
HSBC Property Funds (Holding) Limited	100.00	17
HSBC Provident Fund Trustee (Hong Kong) Limited	100.00	54
HSBC Qianhai Securities Limited	100.00 (51.00)	12, 131
HSBC Real Estate Leasing (France)	100.00 (99.99)	40
HSBC Realty Credit Corporation (USA)	100.00	26
HSBC REGIO Fund General Partner S.à r.l.	100.00 (99.99)	114
HSBC REIM (France)	100.00 (99.99)	40
HSBC Representative Office (Nigeria) Limited (In Liquidation)	100.00	132
HSBC Retirement Benefits Trustee (UK) Limited	100.00	1, 2, 17
HSBC Retirement Services Limited	100.00	1, 17
HSBC Saudi Arabia	51.00 (61.60)	133
HSBC Savings Bank (Philippines) Inc.	99.99	134
HSBC Securities (Asia) Limited	100.00	54
HSBC Securities (Canada) Inc.	100.00	101
HSBC Securities (Egypt) S.A.E.	100.00 (94.54)	67
HSBC Securities (Japan) Limited	100.00	17
HSBC Securities (Philippines) Inc.	99.99	9, 135
HSBC Securities (Singapore) Pte Limited	100.00	51
HSBC Securities (South Africa) (Pty) Limited	100.00	136
HSBC Securities (Taiwan) Corporation Limited	100.00	137
HSBC Securities (USA) Inc.	100.00	26
HSBC Securities and Capital Markets (India) Private Limited	99.99	52
HSBC Securities Asia International Nominees Limited (In Liquidation)	100.00	138
HSBC Securities Asia Nominees Limited	100.00	54
HSBC Securities Brokers (Asia) Limited	100.00	54
HSBC Securities Investments (Asia) Limited	100.00	54
HSBC Securities Services (Bermuda) Limited	100.00	21
HSBC Securities Services (Guernsey) Limited	100.00	20
HSBC Securities Services (Ireland) DAC	100.00	127
HSBC Securities Services (Luxembourg) S.A.	100.00	114

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Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
HSBC Securities Services Holdings (Ireland) DAC	100.00	127
HSBC Securities Services Nominees Limited	100.00	54
HSBC Seguros de Retiro (Argentina) S.A.	100.00 (99.99)	53
HSBC Seguros de Vida (Argentina) S.A.	100.00 (99.99)	53
HSBC Seguros, S.A de C.V., Grupo Financiero HSBC	99.99	15
HSBC Service Delivery (Polska) Sp. z o.o.	100.00	139
HSBC Services (France)	100.00 (99.99)	37
HSBC Services Japan Limited	100.00	140
HSBC Services USA Inc.	100.00	141
HSBC Servicios Financieros, S.A. de C.V	100.00 (99.99)	15
HSBC Servicios, S.A. DE C.V., Grupo Financiero HSBC	100.00 (99.99)	15
HSBC SFH (France)	100.00 (99.99)	4, 40
HSBC Software Development (Guangdong) Limited	100.00	142
HSBC Software Development (India) Private Limited	100.00	143
HSBC Software Development (Malaysia) Sdn Bhd	100.00	81
HSBC Specialist Investments Limited	100.00	17
HSBC Stockbrokers Nominee (UK) Limited (In Liquidation)	100.00	32
HSBC Technology & Services (China) Limited	100.00	144
HSBC Technology & Services (USA) Inc.	100.00	26
HSBC Transaction Services GmbH	100.00 (80.67)	6, 145
HSBC Trinkaus & Burkhardt (International) S.A.	100.00 (80.67)	114
HSBC Trinkaus & Burkhardt AG	80.67	43
HSBC Trinkaus & Burkhardt Gesellschaft für Bankbeteiligungen mbH	100.00 (80.67)	43
HSBC Trinkaus Europa Immobilien-Fonds Nr. 5 GmbH	100.00 (80.67)	43
HSBC Trinkaus Family Office GmbH	100.00 (80.67)	6, 43
HSBC Trinkaus Immobilien Beteiligungs KG	100.00 (80.67)	43
HSBC Trinkaus Real Estate GmbH	100.00 (80.67)	6, 43
HSBC Trust Company (Canada)	100.00	120
HSBC Trust Company (Delaware), National Association	100.00	108
HSBC Trust Company (UK) Limited	100.00	17
HSBC Trust Company AG (In Liquidation)	100.00	33
HSBC Trustee (C.I.) Limited	100.00	125
HSBC Trustee (Cayman) Limited	100.00	146
HSBC Trustee (Guernsey) Limited	100.00	20
HSBC Trustee (Hong Kong) Limited	100.00	54
HSBC Trustee (Singapore) Limited	100.00	51
HSBC UK Bank plc	100.00	16
HSBC UK Client Nominee Limited	100.00	16
HSBC UK Holdings Limited	100.00	2, 17
HSBC USA Inc.	100.00	123
HSBC Ventures USA Inc.	100.00	26
HSBC Violet Investments (Mauritius) Limited	100.00	78
HSBC Wealth Client Nominee Limited	100.00	1, 16
HSBC Yatirim Menkul Degerler A.S.	100.00	128
HSI Asset Securitization Corporation	100.00	26
HSI International Limited	100.00 (62.14)	42
HSIL Investments Limited	100.00	17
Hubei Macheng HSBC Rural Bank Company Limited	100.00	147
Hubei Suizhou Cengdu HSBC Rural Bank Company Limited	100.00	12, 148
Hubei Tianmen HSBC Rural Bank Company Limited	100.00	149
Hunan Pingjiang HSBC Rural Bank Company Limited	100.00	12, 150
Imenson Limited	100.00 (62.14)	42
INKA Internationale Kapitalanlagegesellschaft mbH	100.00 (80.67)	145
Inmobiliaria Banci, S.A. de C.V.	100.00 (99.68)	15

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
Inmobiliaria Bisa, S.A. de C.V.	99.98	15
Inmobiliaria Grufin, S.A. de C.V.	100.00 (99.99)	15
Inmobiliaria Guatusi, S.A. de C.V.	100.00 (99.99)	15
IRERE Property Investments (French Offices) Sarl (In Liquidation)	100.00	151
James Capel & Co. Limited	100.00	17
James Capel (Nominees) Limited	100.00	17
James Capel (Taiwan) Nominees Limited	100.00	17
John Lewis Financial Services Limited	100.00	17
Keyser Ullmann Limited	100.00 (99.99)	17
Lion Corporate Services Limited	100.00	54
Lion International Corporate Services Limited	100.00	1, 110
Lion International Management Limited	100.00	110
Lion Management (Hong Kong) Limited	100.00	1, 54
Lyndholme Limited	100.00	54
Marks and Spencer Financial Services plc	100.00	152
Marks and Spencer Unit Trust Management Limited	100.00	152
Maxima S.A. AFJP (In Liquidation)	99.98	124
Mexicana de Fomento, S.A. de C.V.	100.00 (99.90)	15
Midcorp Limited	100.00	17
Midland Bank (Branch Nominees) Limited	100.00	16
Midland Nominees Limited	100.00	16
MIL (Cayman) Limited	100.00	153
MW Gestion SA	100.00	53
Promocion en Bienes Raices, S.A. de C.V.	100.00 (99.99)	15
Prudential Client HSBC GIS Nominee (UK) Limited	100.00	17
PT Bank HSBC Indonesia	98.93	154
PT HSBC Sekuritas Indonesia	100.00 (85.00)	155
R/CLIP Corp.	100.00	26
Real Estate Collateral Management Company	100.00	26
Republic Nominees Limited	100.00	20
Republic Overseas Capital Corporation	100.00	98
RLUKREF Nominees (UK) One Limited	100.00	1, 17
RLUKREF Nominees (UK) Two Limited	100.00	1, 17
S.A.P.C. - Ufipro Recouvrement	99.99	36
Saf Baiyun	100.00 (99.99)	4, 38
Saf Guangzhou	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Ba	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Er	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Jiu	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Liu	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Qi	100.00 (99.99)	4, 38
Saf Zhu Jiang Shi Wu	100.00 (99.99)	4, 38
SAS Cyatheas Pasteur	94.93	4, 36
SCI HSBC Assurances Immo	100.00 (99.99)	40
Serai Limited	100.00	1, 54
SFM	100.00 (99.99)	37
SFSS Nominees (Pty) Limited	100.00	156
Shandong Rongcheng HSBC Rural Bank Company Limited	100.00	12, 157
Sico Limited	100.00	158
SNC Dorique	99.99	1, 11, 159
SNC Kerouan	99.99	11, 38
SNC Les Mercuriales	100.00 (99.99)	1, 11, 38
SNC Les Oliviers D'Antibes	60.00	40
SNC Makala	100.00 (99.99)	1, 11, 38
SNCB/M6 - 2008 A	100.00 (99.99)	38
SNCB/M6-2007 A	100.00 (99.99)	4, 38
SNCB/M6-2007 B	100.00 (99.99)	4, 38
Société Française et Suisse	100.00 (99.99)	38
Societe Immobiliere Atlas S.A. (In Liquidation)	100.00	126
Somers Dublin DAC	100.00 (99.99)	127
Somers Nominees (Far East) Limited	100.00	21
Sopingest	100.00 (99.99)	38
South Yorkshire Light Rail Limited	100.00	17

Subsidiaries	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
St Cross Trustees Limited	100.00	16
Sun Hung Kai Development (Lujiazui III) Limited	100.00	12, 160
Swan National Leasing (Commercials) Limited (In Liquidation)	100.00	32
Swan National Limited	100.00	17
HSBC Odeme Sistemleri Bilgisayar Teknolojileri Basın Yayın Ve Musteri Hizmetleri (In Liquidation)	100.00 (99.99)	161
Thasosfin	100.00 (99.99)	40
The Hongkong and Shanghai Banking Corporation Limited	100.00	5, 54
The Venture Catalysts Limited	100.00	17
Tooley Street View Limited	100.00	2, 17
Tower Investment Management	100.00	162
Trinkaus Australien Immobilien Fonds Nr. 1 Brisbane GmbH & Co. KG	100.00 (80.67)	43
Trinkaus Australien Immobilien-Fonds Nr. 1 Treuhand-GmbH	100.00 (80.67)	6, 43
Trinkaus Europa Immobilien-Fonds Nr.3 Objekt Utrecht Verwaltungs-GmbH	100.00 (80.67)	43
Trinkaus Immobilien-Fonds Geschäftsführungs-GmbH	100.00 (80.67)	6, 43
Trinkaus Immobilien-Fonds Verwaltungs-GmbH	100.00 (80.67)	6, 43
Trinkaus Private Equity Management GmbH	100.00 (80.67)	43
Trinkaus Private Equity Verwaltungs GmbH	100.00 (80.67)	6, 43
Tropical Nominees Limited	100.00	153
Turnsonic (Nominees) Limited	100.00	16
Valeurs Mobilières Elysées	100.00 (99.99)	163
Wardley Limited	100.00	54
Wayfoong Nominees Limited	100.00	54
Wayhong (Bahamas) Limited	100.00	100
Westminster House, LLC	n/a	0, 26
Woodex Limited	100.00	21
Yan Nin Development Company Limited	100.00 (62.14)	42

Joint ventures

The undertakings below are joint ventures and equity accounted.

Joint ventures	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
Global Payments Technology Mexico S.A. De C.V.	50.00	15
HCM Holdings Limited (In Liquidation)	50.99	32
House Network Sdn Bhd	25.00	164
HSBC Jintrust Fund Management Company	49.00	181
ProServe Bermuda Limited	50.00	165
The London Silver Market Fixing Limited	n/a	0, 1, 166
Vaultex UK Limited	50.00	167

Associates

The undertakings below are associates and equity accounted.

Associates	% of share class held by immediate parent company (or by the Group where this varies)	Footnotes
Bank of Communications Co., Ltd.	19.03	168
Barrowgate Limited	15.31	169
BGF Group PLC	24.54	170
Bud Financial Limited	8.20	1, 171
Canara HSBC Oriental Bank of Commerce Life Insurance Company Limited	26.00	172
CFAC Payment Scheme Limited	33.33	173
Chemi & Cotex (Rwanda) Limited	33.99	1, 174
Chemi & Cotex Kenya Limited	33.99	1, 175
Chemi and Cotex Industries Limited	33.99	176
EPS Company (Hong Kong) Limited	38.66	54
Euro Secured Notes Issuer	16.66	177
GIE GNIFI	n/a	0, 178
GZHS Research Co Ltd	33.00 (20.50)	179
Hang Seng Qianhai Fund Management Company Limited	70.00 (43.49)	1, 12, 180
Icon Brickell LLC(In Liquidation)	n/a	0, 182
Jeppe Star Limited	100.00 (33.99)	183
MENA Infrastructure Fund (GP) Ltd	33.33	184
Northstar Trade Finance Inc.	20.08	185
Novo Star Limited	33.99	186
Quantexa Ltd	10.51	187
Services Epargne Entreprise	14.34	188
sino AG	24.94 (20.11)	189
The London Gold Market Fixing Limited	n/a	0, 166
The Saudi British Bank	29.20	190
Trinkaus Europa Immobilien-Fonds Nr. 7 Frankfurt Mertonviertel KG	n/a	0, 43
Vizolution Limited	17.95	1, 191
We Trade Innovation Designated Activity Company	8.52	1, 192

Footnotes for Note 37

Description of Shares

0	Where an entity is governed by voting rights, HSBC consolidates when it holds – directly or indirectly – the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power to direct relevant activities, and whether power is held as an agent or principal. HSBC's consolidation policy is described in Note 1.2(a).
1	Management has determined that these undertakings are excluded from consolidation in the Group accounts as these entities do not meet the definition of subsidiaries in accordance with IFRS. HSBC's consolidation policy is described in Note 1.2(a).
2	Directly held by HSBC Holdings plc
3	Preference Shares
4	Actions
5	Redeemable Preference Shares
6	GmbH Anteil
7	Limited and Unlimited Liability Shares
8	Liquidating Share Class
9	Nominal Shares
10	Non-Participating Voting Shares
11	Parts
12	Registered Capital Shares
13	Russian Limited Liability Company Shares
14	Stückaktien

Registered offices

15	Paseo de la Reforma 347, Col. Cuauhtemoc , Mexico, 06500
16	1 Centenary Square, Birmingham, United Kingdom, B1 1HQ
17	8 Canada Square , London, United Kingdom, E14 5HQ
18	5 Donegal Square South , Belfast, Northern Ireland, BT1 5JP
19	Camden House West The Parade, Birmingham, United Kingdom, B1 3PY
20	Arnold House St Julians Avenue, St Peter Port, Guernsey, GY1 3NF
21	37 Front Street, Hamilton, Bermuda, HM 11
22	HSBC Main Building 1 Queen's Road Central, Hong Kong
23	First Floor, Xinhua Bookstore Xindong Road (SE of roundabout), Miyun District, Beijing, China
24	95 Washington Street , Buffalo, New York, United States Of America, 14203
25	1209 Orange Street , Wilmington, Delaware, United States Of America, 19801
26	c/o The Corporation Trust Company 1209 Orange Street, Wilmington, Delaware, United States Of America, 19801
27	Corporation Service Company 251 Little Falls Drive, Wilmington, Delaware, United States Of America, 19808
28	Solidere - Rue Saad Zaghloul Immeuble - 170 Marfaa, PO Box 17 5476 Mar Michael 11042040, Beyrouth, Lebanon
29	No 1, Bei Huan East Road Dazu County, Chongqing, China
30	No 107, Ping Du Avenue (E), Sanhe Town, Fengdu County , Chongqing, China
31	No. 3, 5, 7, Haitang Erzhi Road Changyuan, Rongchang, Chongqing, China, 402460
32	Hill House 1 Little New Street, London, United Kingdom, EC4A 3TR
33	Bederstrasse 49 , Zurich, Switzerland, CH-8002
34	First & Second Floor, No.3 Nanshan Road, Pulandian , Dalian, Liaoning, China
35	CT Corporation System 225 Hillsborough Street, Raleigh, North Carolina, United States Of America, 27603
36	39, rue de Bassano, Paris, France, 75008
37	103, avenue des Champs-Élysées, Paris, France, 75008
38	64, rue Galilée, Paris, France, 75008

Registered offices

39	MMG Tower, 23 floor Ave. Paseo del Mar Urbanizacion Costa del Este, Panama
40	15, rue Vernet , Paris, France, 75008
41	No. 1 1211 Yanjiang Zhong Road, Yonggan, Fujian, China
42	83 Des Voeux Road Central , Hong Kong
43	Königsallee 21/23 , Düsseldorf, Germany, 40212
44	No. 44, Xin Ping Road Central, Encheng, Enping , Guangdong, China, 529400
45	34/F and 36/F, Hang Seng Bank Tower, 1000 Lujiazui Ring Road,, China (Shanghai) Pilot Free Trade Zone,, Shanghai , China, 200120
46	Commerce House, Wickhams Cay 1, P.O. Box 3140, Road Town, Tortola, VG1110, British Virgin Islands
47	The Corporation Trust Company of Nevada 311 S. Division Street, Carson City, Nevada, United States Of America, 89703
48	HSBC House Esplanade, St. Helier, Jersey, JE4 8UB
49	10th Floor, North Tower 2 Leboh Ampang, Kuala Lumpur, Malaysia, 50100
50	13th Floor, South Tower 2 Leboh Ampang, Kuala Lumpur, Malaysia, 50100
51	21 Collyer Quay #10-02 HSBC Building , Singapore, 049320
52	52/60 M G Road, Fort, Mumbai, India, 400 001
53	557 Bouchard, Level 20 , Ciudad de Buenos Aires, Capital federal, Argentina, C1106ABG
54	1 Queen's Road Central , Hong Kong
55	3rd Floor, Merchantile Bank Chamber 16, Veer Nariman Road, Fort, Mumbai, India, 400001
56	Level 36 Tower 1 International Towers Sydney, 100 Barangaroo Avenue, Sydney, New South Wales, Australia, 2000
57	Isidora Goyenechea 2800, 23rd floor, Las Condes , Santiago, Chile, 7550647
58	HSBC Building Shanghai ifc, 8 Century Avenue, Pudong, Shanghai, China, 200120
59	6th floor, HSBC Centre, 18, Cybercity, Ebene , Mauritius
60	2 Paveletskaya square, building 2 , Moscow, Russian Federation, 115054
61	13F-14F, 333 Keelung Road, Sec.1 , Taipei, 110
62	25 de Mayo 471 , Montevideo, Uruguay, 11000
63	The Metropolitan 235 Dong Khoi Street , District 1, Ho Chi Minh City , Vietnam
64	Esentepe mah. Büyükdere Caddesi No.128 Istanbul 34394 , Turkey
65	66 Teryan street , Yerevan, Armenia, 0009
66	885 West Georgia Street, 3rd Floor, Vancouver, British Columbia, Canada, V6C 3E9
67	306 Corniche El Nil , Maadi, Egypt, 11728
68	116 Archbishop Street, Valletta, Malta
69	Level 1, Building No. 8, Gate Village Dubai International Financial Centre, PO Box 30444, United Arab Emirates
70	Majer Consulting, Office 54/44, Building A1, Residence Ryad Anfa,, Boulevard Omar El Khayam, Casa Finance City (CFC), Casablanca, Morocco
71	Al Khuwair Office PO Box 1727 PC111 CPO Seeb, Muscat, Oman
72	1800 Tysons Boulevard Suite 50, Tysons, Virginia, United States Of America, 22102
73	Rua Funchal, n° 160, SP Corporate Towers, Torre Norte, 19° andar, cj 191A - Parte, São Paulo, Brazil, 04551-060
74	66 Wellington Street West, Suite 5300, Toronto, Ontario, Canada, M5K 1E6
75	P.O. Box 1109, Strathvale House, Ground floor, 90 North Church Street , George Town, Grand Cayman, Cayman Islands, KY1-1102
76	90 North Church Street, Strathvale House - Ground Floor, PO Box 1109, George Town, Grand Cayman, Grand Cayman, Cayman Islands, KY1-1102
77	HSBC House Esplanade, St. Helier, Jersey, JE1 1HS
78	c/o Rogers Capital St. Louis Business Centre, Cnr Desroches & St Louis Streets, Port Louis, Mauritius
79	49 avenue J.F. Kennedy , Luxembourg, Luxembourg, 1855

Registered offices

80	4-17/F, Office Tower 2 TaiKoo Hui, No. 381 Tian He Road, Tian He District, Guangzhou, Guangdong, China
81	Suite 1005, 10th Floor, Wisma Hamzah Kwong Hing No. 1, Leboh Ampang, Kuala Lumpur, Malaysia, 50100
82	HSBC, Filinvest One Bldg Northgate Cyberzone, Filinvest Corporate City, Alabang, Muntinlupa City, Philippines, 1781
83	HSBC House Plot No.8, Survey No.64 (Part), Hightec City Layout Madhapur, Hyderabad, India, 500081
84	439, Sri Jayawardenapura Mawatha Welikada, Rajagiriya, Colombo, Sri Lanka
85	Smart Village 28th Km Cairo- Alexandria Desert Road Building , Cairo, Egypt
86	Suite 300, 3381 Steeles Avenue East , Toronto, Ontario, Canada, M2H 3S7
87	Centre Ville 1341 Building - 4th Floor Patriarche Howayek Street (facing Beirut Souks), PO Box Riad El Solh, Lebanon, 9597
88	First Floor Building No. 5, Emaar Square,, Dubai, Dubai, United Arab Emirates
89	World Trade Center Montevideo Avenida Luis Alberto de Herrera 1248, Torre 1, Piso 15, Oficina 1502, Montevideo, Uruguay, CP 11300
90	Level 12, HSBC Building 37, Chilpae-ro, Jung-gu, Seoul, Korea, Republic Of (South)
91	Immeuble Coeur Défense 110, Esplanade du Général de Gaulle-La défense 4, Courbevoie, France, 92400
92	HSBC House Esplanade, St. Helier, Jersey, JE4 8WP
93	HSBC Building 11-1, Nihonbashi 3-chome, Chuo-ku, Tokyo, Japan, 103-0027
94	80 Mill Street, Qormi, Malta, QRM 3101
95	Herrengasse 1-3 , Wien, Austria, 1010
96	Gartenstrasse 26 , Zurich, Switzerland
97	24th Fl., 97-99, Sec.2, Tunhwa S. Rd., Taipei, Taiwan, R.O.C. , Taiwan
98	452 Fifth Avenue, New York NY10018, United States Of America
99	Bouchard 557, Piso 18°, Cdad. Autónoma de Buenos Aires, Argentina, 1106
100	Mareva House 4 George Street, Nassau, Bahamas
101	70 York Street, Toronto, Ontario, Canada, M5J 1S9
102	Breite Str. 29/31 , Düsseldorf, Germany, 40213
103	18 HSBC Centre, 6th Floor, Cybercity, Ebene, Mauritius, 72201
104	18th Floor, Tower 1, HSBC Centre, 1 Sham Mong Road, Kowloon, Hong Kong
105	Level 32, HSBC Main Building 1 Queen's Road Central, Hong Kong SAR, Hong Kong
106	7/F HSBC Centre 3058 Fifth Ave West, Bonifacio Global City, Taguig City, Philippines
107	HSBC Building Minet El Hosn, Riad el Solh, Beirut 1107-2080, PO Box 11-1380, Lebanon
108	300 Delaware Avenue Suite 1401, Wilmington, Delaware, United States Of America, 19801
109	Woodbourne Hall, Road Town PO Box 916, Tortola, British Virgin Islands
110	Craigmuir Chambers, PO Box 71, Road Town, Tortola, British Virgin Islands
111	9-11 Floors, NESCO IT Park Building No. 3 Western Express Highway, Goregaon (East), Mumbai, India, 400063
112	3, Aboul Feda Street, Zamalek, Cairo , Egypt
113	300 - 885 West Georgia Street, Vancouver, British Columbia, Canada, V6C 3E9
114	16 Boulevard d'Avranches, Luxembourg, Luxembourg, 1160
115	21 Farncombe Road , Worthing, United Kingdom, BN11 2BW
116	18/F, Unit 2101, 2113, 2113A, 2115 and 2116 of 21/F, HSBC Building, 8 Century Avenue, China (Shanghai) Pilot Free Trade Zone, Shanghai, China, 200120
117	Plot No.312-878 Mezzanine Floor,, Bldg. of Sheikh Hamdan Bin Rashid, Dubai Creek, Dubai, United Arab Emirates
118	Unit 101 Level 1, Gate Village Building No. 8 Dubai International Financial Centre, Dubai, United Arab Emirates, PO BOX 506553
119	Level 16 HSBC Tower, Downtown Dubai, Dubai, United Arab Emirates

Registered offices

120	885 West Georgia Street Suite 300, Vancouver, British Columbia, Canada, V6C 3E9
121	HSBC House Level 9, One Queen Street, Auckland, New Zealand, 1010
122	21-23 Yorckstraße, Düsseldorf, Nordrhein-Westfalen, Germany, 40476
123	The Corporation Trust Incorporated, 2405 York Road, Suite 201, Lutherville Timonium, Maryland, United States Of America, 21093
124	557 Bouchard, Level 22 , Ciudad de Buenos Aires, Capital federal, Argentina, C1106ABG
125	HSBC House Esplanade, St. Helier, Jersey, JE1 1GT
126	Quai des Bergues 9-17 , Geneva, Switzerland, 1201
127	1 Grand Canal Square Grand Canal Harbour, Dublin 2, D02 P820, Ireland
128	Büyükdere Cad. No.128 D Blok Esentepe Sisli Istanbul, Turkey
129	1441 Brickell Avenue , Miami, Florida, United States Of America, 33131
130	300-885 West Georgia Street, Vancouver, British Columbia, Canada, V6C 3E9
131	Block 27 A&B, Qianhai Enterprise Dream Park No. 63 Qianwan Yi Road, Shenzhen-Hong Kong Cooperation Zone, Shenzhen, China, 518052
132	St Nicholas House, 10th Floor Catholic Mission St Lagos, Nigeria
133	HSBC Building 7267 Olaya - Al Murrooj, Riyadh, Saudi Arabia, 12283 - 2255
134	Unit 1 GF The Commerical Complex Madrigal Avenue, Ayala
135	6/F HSBC Centre, 3058 Fifth Avenue West, Bonifacio Global City, Taguig City, Philippines
136	1 Mutual Place 107 Rivonia Road , Sandton , Sandton, Gauteng, South Africa, 2196
137	13F 333 Keelung Road, Sec.1, Taipei, Taiwan, 110
138	Palm Grove House PO Box 438, Road Town, Tortola, British Virgin Islands
139	Kapelanka 42A , Krakow, Poland, 30-347
140	MB&H Corporate Services Ltd Mareva House, 4 George Street, Nassau, Bahamas
141	The Corporation Trust Company 820 Bear Tavern Road, West Trenton, New Jersey, United States Of America, 08628
142	L22, Office Tower 2, Taikoo Hui, 381 Tianhe Road, Tianhe District, Guangzhou, Guangdong, Guangdong, China
143	HSBC Centre River Side, West Avenue, 25B Raheja woods, Kalyaninagar, Pune, India, 411006
144	Level 19, HSBC Building, Shanghai ifc 8 Century Avenue Pudong, Shanghai, China
145	Yorckstraße 21 - 23 40476, Duesseldorf, Germany
146	P.O. Box 309 Ugland House , Grand Cayman, Cayman Islands, KY1-1104
147	No. 56, Yu Rong Street , Macheng, China, 438300
148	No. 205, Lie Shan Road Suizhou, Hubei, China
149	Building 3, Yin Zuo Di Jing Wan Tianmen New City?Tianmen, Hubei Province, China
150	RM101, 102 & 106 Sunshine Fairview, Sunshine Garden, Pedestrian Walkway, Pingjiang, China
151	6, rue Adolphe , Luxembourg, L-1116
152	Kings Meadow Chester Business Park, Chester, United Kingdom, CH99 9FB
153	PO Box 1109 Strathvale House, 90 North Church Street, George Town, Grand Cayman, Cayman Islands
154	World Trade Center 1, Floor 8-9 Jalan Jenderal Sudirman Kavling 29 - 31, Jakarta, Indonesia, 12920
155	5th Floor, World Trade Center 1, Jl. Jend. Sudirman Kav. 29-31, Jakarta, Indonesia, 12920
156	No 1 Mutual Place 107 Rivonia Road , Sandton , Sandton , Gauteng, South Africa, 2196
157	No.198-2, Chengshan Avenue (E) , Rongcheng, China, 264300
158	Woodbourne Hall, Road Town PO Box 3162, Tortola, British Virgin Islands
159	43 rue de Paris , Saint Denis, France, 97400

Notes on the financial statements

Registered offices

160	RM 2112, HSBC Building, Shanghai ifc No. 8 Century Road, Pudong, Shanghai, China, 200120
161	Büyükdere Cad. No.122 D Blok Esentepe Sisli Istanbul , Turkey
162	11 Dr. Roy's Drive PO Box 694GT, Grand Cayman, Cayman Islands, KY1-1107
163	109 avenue des Champs-Elysees, Paris, France, 75008
164	Lot 6.05, Level 6, KPMG Tower 8 First Avenue, Bandar Utama, Petaling Jaya, Selangor Darul Ehsan, Malaysia, 47800
165	c/o MUFG Fund Services (Bermuda) Limited The Belvedere Building, 69 Pitts Bay Road, Pembroke, Bermuda, HM08
166	c/o Hackwood Secretaries Limited One Silk Street, London, United Kingdom, EC2Y 8HQ
167	All Saints Triangle, Caledonian Road, London, United Kingdom, N19UT
168	No. 188, Yin Cheng Zhong Road China (Shanghai) Pilot Free Trade Zone, Shanghai, China
169	49/F, The Lee Gardens, 33 Hysan Avenue , Hong Kong
170	13 - 15 York Buildings , London, United Kingdom, WC2N 6JU
171	First Floor The Bower, 207 Old Street, England, United Kingdom, EC1V 9NR
172	Unit No. 208, 2nd Floor, Kanchenjunga Building 18 Barakhamba Road, New Delhi - 110001, India
173	65 Gresham Street, 6th Floor, London , United Kingdom, EC2V 7NQ
174	Kacyiru BP 3094, Kigali, Rwanda
175	LR No. 1758/13 Grevella Grove Road, Kalamu House PO Box 47323-00100, Nairobi, Kenya
176	Plot No. 89-90 Mbezi Industrial Area Box 347, Dar es Salaam City
177	3 avenue de l'Opera , PARIS, France, 75001
178	37 avenue Henri Lafleur , Nouméa, New Caledonia, BP K3 98849
179	Room 1303, 106 Feng Ze Dong Road, Nansha District, Guangzhou, Guangdong, China
180	Flat 209 Hedge Fund Centre of Qianhai Shenzhen-Hong Kong Fund Town, No. 128 Guiwan Five Road, Qianhai Shenzhen-Hong Kong Cooperation Zone, Shenzhen, China
181	17F, HSBC Building, Shanghai ifc 8 Century Avenue, Pudong, Shanghai, China
182	C T Corporation System 1200 South Pine Island Road, Plantation, Florida, United States Of America, 33324
183	c/o Trident Trust Company Trident Chambers, PO Box 146, Tortola, British Virgin Islands
184	Precinct Building 4, Level 3 Dubai International Financial Centre, Dubai, United Arab Emirates, PO BOX 506553
185	833 Three Bentall Centre 595 Burrard Street, Vancouver, British Columbia, Canada, V7X 1C4
186	Jayla Place Wickhams Cay I, PO Box 3190, Road Town, British Virgin Islands
187	75 Park Lane, Croydon, Surrey, United Kingdom, CR9 1XS
188	32, rue du Champ de Tir , NANTES, France, 44300
189	Ernst-Schneider-Platz 1 , Duesseldorf, Germany, 40212
190	Al Amir Abdulaziz Ibn Mossaad Ibn Jalawi Street, Riyadh, Saudi Arabia
191	Office Block A, Bay Studios Business Park, Fabian Way, Swansea, SA1 8QB, Wales, United Kingdom
192	10 Earlsfort Terrace, Dublin, Ireland, D02 T380

APPENDIX II

REPRODUCTION OF THE ISSUER'S CONDENSED INTERIM FINANCIAL STATEMENTS AS AT AND FOR THE SIX-MONTH PERIOD ENDED 30 JUNE 2019

The information set out below is a reproduction of the Issuer's condensed interim financial statements as at and for the six-month period ended 30 June 2019.

SG Issuer

Société Anonyme

**Condensed interim financial statements,
Report of the Executive Board and Corporate Governance Statement and
Report of the Réviseur d'entreprises agréé on review of the condensed interim financial statements**

As at and for the six-month period ended 30 June 2019

**16, boulevard Royal
L-2449 Luxembourg
R.C.S. Luxembourg: B121.363**

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SG Issuer
Société Anonyme

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SG Issuer
Société Anonyme

Executive Board Members

For the six-month period ended 30 June 2019

Chairman:

Mr Yves CACCLIN (until 29 April 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mrs Aude de ROQUANCOURT (Member since 1 February 2019 - Chairman since 29 April 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Members:

Mr Noël ALISON (until 20 September 2019)

Employee of Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris - La Défense 7, France

Mr Thierry BODSON

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mr Amaury de BELER (until 1 February 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mr Alexandre GALLICHE

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mr Pascal JACOB (since 29 April 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mrs Estelle STEPHAN JASPARD

Employee of Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris-La Défense 7, France

Mr Laurent WEIL

Employee of Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris-La Défense 7, France

SG Issuer
Société Anonyme

Supervisory Board Members

For the six-month period ended 30 June 2019

Chairman:

Mr Yves CACCLIN (since 29 April 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mr Arnaud JACQUEMIN (until 29 April 2019)

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Members:

Mr Didier LALLEMAND

Employee of Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris - La Défense 7, France

Mr Vincent ROBILLARD

Employee of Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris - La Défense 7, France

Mr Olivier FREITAS

Employee of Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Mr Gregory CLAUDY

Independent Director
225A, rue du Burgknapp, B-6717 Heinstert, Belgium

SG Issuer
Société Anonyme

Audit Committee Members

For the six-month period ended 30 June 2019

Chairman:

Mr Gregory CLAUDY

Independent Director

225A, rue du Burgknapp, B-6717 Heinstert, Belgium

Members:

Mr Olivier FREITAS

Employee of Société Générale Bank & Trust

11, avenue Emile Reuter, L-2420 Luxembourg

Mr Didier LALLEMAND

Employee of Société Générale

Tour Société Générale, 17, cours Valmy, F-92987 Paris - La Défense 7, France

SG Issuer
Société Anonyme

Management and administration
For the six-month period ended 30 June 2019

Issuer

SG Issuer
16, boulevard Royal, L-2449 Luxembourg

Guarantor (if applicable, as specified in the Final Terms)

Société Générale
29, boulevard Haussmann, F-75009 Paris, France

Arranger and Dealer

Société Générale
Tour Société Générale, 17, cours Valmy, F-92987 Paris - La Défense 7, France

Security Trustee and Security Agent Trustee

The Bank of New York MELLON Corporate Trustee Services Limited
One Canada Square, London E14 5AL

Collateral Custodian

The Bank of New York MELLON (Luxembourg) S.A.
2-4, rue Eugène Ruppert, L-2453 Luxembourg

Collateral Monitoring Agent

The Bank of New York MELLON London Branch
One Canada Square London E14 5AL

Custodian Agent, Issuing and Paying Agent, Registrar, Exchange Agent and Transfer Agent

Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

Paying Agents

Société Générale
29, boulevard Haussmann, F-75009 Paris, France
&
Société Générale, New York Branch
1221, avenue of the Americas, New York NY 10020, United States of America

Warrant Agent

Société Générale Bank & Trust
11, avenue Emile Reuter, L-2420 Luxembourg

SG Issuer
Société Anonyme

Legal advisers and Réviseur d'entreprises agréé
For the six-month period ended 30 June 2019

Legal advisers

To the Arranger as to English, French and U.S. laws

Allen & Overy LLP

Edouard VII

26, boulevard des Capucines, F-75009 Paris, France

To the Trustee as to English Law

Allen & Overy LLP

1 Bishops Square, London E1 6AD, United Kingdom

To the Arranger as to Luxembourg Law

Allen & Overy Luxembourg

33, avenue John F. Kennedy, L-1855 Luxembourg

Independent Auditor (Réviseur d'entreprises agréé)

Ernst & Young S.A.

35E, avenue John F. Kennedy, L-1855 Luxembourg

Report of the Executive Board and Corporate Governance Statement

For the six-month period ended 30 June 2019

The Directors of SG Issuer (the "Company" or "SGIS") (each a « Director », collectively the « Executive Board ») present the condensed interim financial statements and the Report of the Executive Board and Corporate Governance Statement of the Company for the period from 1 January 2019 to 30 June 2019.

1. ACTIVITIES AND REVIEW OF THE DEVELOPMENT OF THE BUSINESS

The purpose of SG Issuer is to issue Notes and Warrants with all types of underlyings including, without restriction, shares, index, interest rate, dividend, credit risk, foreign exchange, commodities, funds, Warrants, etc... allowing investors to access to the full pricing capabilities of Société Générale, which proposes an extensive range of investment strategies linked to these various asset classes.

Notes and Warrants issued by the Company can be sold in either Private Placements or Public Offerings.

Notes are mainly debt securities, bonds, certificates. Issuing proceeds raised by the sale of the Notes will be transferred to Société Générale Paris through a Fully Funded Swap, which will perfectly hedge SGIS for the full issue size.

Warrants are financial products like turbos, inline Warrants, daily leverage certificates, etc..., which aim to replicate the same financial exposure as buying (call) or selling (put) an asset such as a share or an index, at a predetermined price (strike price) on a predetermined date (expiry) and to offer different pay-off or exposures to investors.

Warrants are sold by SG Issuer mainly to clients in France, Belgium, Luxembourg, UK, Sweden, Finland, Norway, Spain, Hong-Kong, the Netherlands, Italy and Singapore.

Payments in respect of the Notes and Warrants issued by the Company are unconditionally and irrevocably guaranteed by Société Générale.

On request of investors, the Company can issue collateralised Notes or Warrants ("secured Notes" or "secured Warrants") in order to propose an additional layer of protection to investors in case of default of Société Générale.

Notes and Warrants issuances are governed by the Base Prospectus prepared by Société Générale. The main programmes for Notes are the two Debt Instruments Issuance Programmes, for which the last updates have been approved by the CSSF on 14 June 2019 and the "Programme d'Emission de Titres de Créance" approved by the CSSF on 20 June 2019. Similarly, the main programmes for Warrants are the Warrants Issuance Programme for which the last updates have been approved by the CSSF on 1 July 2019, and the Warrants and Turbo Warrants Issuance Programme for which the last updates have been approved by the CSSF on 16 July 2019. Two programmes are hosted by Société Générale Frankfurt, Dual Language DIIP dated 12 July 2019 and Dual Language Leveraged and Tracking Products dated 17 July 2019. The Hong Kong Warrants programme was last updated on 3 April 2019 and the Singapore Warrants programme was last updated on 21 June 2019.

The state of business of the Company at the closing of the six-month period ended 30 June 2019 is adequately presented in the interim statement of financial position and interim statement of profit and loss and other comprehensive income.

The increase in total assets and liabilities (before impact of the off-setting – see Note 2.3.3.4) is due to the development of the activity of issuing financial instruments.

SG Issuer
Société Anonyme

During the six-month period ended 30 June 2019, 13 461 new Notes were issued (among which 79 new secured Notes) and 16 760 new Warrants were issued¹. The net profit for the period from 1 January 2019 to 30 June 2019 amounts to KEUR 263.

The Company did not exercise any research and development activity, does not have any branch, and did not acquire any own shares.

2. RISKS AND UNCERTAINTIES

The risks associated with the investment in the Notes or Warrants depend on several factors. Such factors will vary depending on the characteristics of the Notes or Warrants issued, in particular depending on the underlying type, the maturity, the secured / unsecured status of the Notes or Warrants, the interest rates incurred, the volatility of the underlying.

For each Note, the Company systematically hedges its position by contracting a swap with Société Générale, with strictly identical characteristics. Also, for each Warrant, the Company systematically hedges its position by contracting an option with Société Générale, with strictly identical characteristics.

The legal documentation and the derivative instruments have been put in place in order to make sure that the assets match the liabilities at any time. Therefore, no market risk is supported by the Company. The risk management in relation to the Notes and Warrants is also described in Note 9 hereafter.

3. FUTURE DEVELOPMENTS

For this second semester, the Executive Board expects a further increase in the Notes and Warrants issued. From next year, while the issuance of Notes is expected to remain sustained, the Warrants activity is expected to decrease, the Société Générale Group planning to use another issuer for the bulk of its Warrant issuances.

4. SUBSEQUENT EVENTS

There were no subsequent events which could have a significant impact on the condensed interim financial statements of the Company as at and for the six-month period ended 30 June 2019.

5. CORPORATE GOVERNANCE STATEMENT

The Executive Board of the Company is committed to maintaining the standards of corporate governance enforced at the level of the European Union and at level of the Société Générale Group. This statement describes the Company's governance principles and practices.

In compliance with its status, the Company is governed by an Executive Board and supervised by a dedicated Supervisory Board.

5.1. Executive Board

The Executive Board supervises and controls the management and operations of the Company and is responsible for the Company system of risk management and internal control.

¹ The number of issued Notes and Warrants does not take into account the issuances which have been issued and cancelled during the same financial period.

SG Issuer
Société Anonyme

The Executive Board meetings are held several times during the year when necessary.

The Board has quorum when more than half of its members are present. An opinion supported by more than half of the members present becomes a decision.

Key tasks of the Executive Board:

- Ensures that the supervision of accounting is organized and monitored appropriately;
- Reviews and approves the Company's financial statements and condensed interim financial statements;
- Supervises and controls operative management.

5.2. Supervisory Board

The Supervisory Board ensures permanently and by all means suited the control of the management of the Company carried out by the Executive Board. However, this supervision has to be translated in no way by an intervention in the management of the Company. The Supervisory Board can mandate advisory committees comprised of members of the Supervisory Board and/or of other non-members to lead different missions. The Supervisory Board can confer these advisory committees of the power or mandates permanently or temporary. These advisory committees cannot have the effect of restricting the powers of the Executive Board.

5.3. Audit Committee

The mission of the Audit Committee is to monitor the issues related to the preparation and control of accounting and financial information, to monitor the independence of the statutory auditors, as well as to monitor the efficiency of the internal control, measurement, supervision and risk control systems related to the accounting and financial processes. If needed, it gives recommendations and its opinion to the Supervisory Board.

An Audit Committee took place on 29 April 2019, during which the financial statements for the year ended 31 December 2018 and the external audit results were presented. At least one member of the committee must be independent, which is the case of the Chairman of the Company's Audit Committee.

5.4. Internal Audit

The Internal Audit of both Société Générale Bank & Trust S.A. ("SGBT") and Société Générale Group support the Company's Executive Board in overseeing the Company's activities and securing its operations by carrying out internal audits and providing consultative assistance. The objective of Internal Audit is to add value by making recommendations designed to improve the Company's functioning. Internal Audit is an independent function and its activities are based on international professional internal audit standards and rules of ethics.

The central task of Internal Audit is to audit the functioning of SG Issuer on a regular basis and evaluate its internal controls, risk management, and administrative function. The areas to be audited are determined by the projected financial and operational risks concerned. Internal Audit can also carry out special assignments at the request of management.

Internal Audit does not have any direct authority over the activities it reviews.

5.5. Controls framework

First level of controls is related to the execution of the procedures, guidelines and instructions established to ensure the proper and efficient functioning of the Company. They are executed by the involved teams in charge of the production.

The Chief Financial Officer of the Company ensures the completeness of the procedural framework.

5.6. New Products Committee

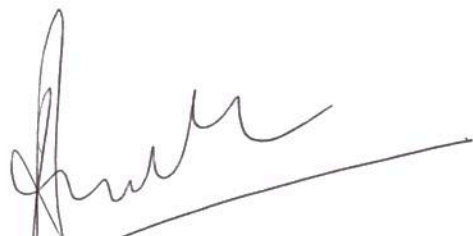
All the new activities and business of the Company are analyzed and authorized by a dedicated New Products Committee (NPC). All involved departments within Société Générale are represented (operations, finance, risk, accounting standards, etc...) to assess the impact for the Company.

5.7. Service level agreements

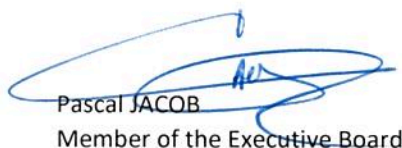
The Company and several of its service providers are subsidiaries of the Société Générale Group and therefore benefit from the Group's internal control systems.

Service Level Agreements ("SLAs") were signed by the Company with SGBT and with Société Générale. The SLAs govern the relations between the entities as well as their respective obligations. The services supplied by SGBT and Société Générale are listed in the appendices of the agreements (mainly General services, legal services, business continuity management services and financial services from SGBT and operational services – Middle Office and Back Office – from Société Générale).

Luxembourg, 25 September 2019
For the Executive Board



Aude de ROQUANCOURT
Chairman of the Executive Board



Pascal JACOB
Member of the Executive Board



Thierry BODSON
Member of the Executive Board

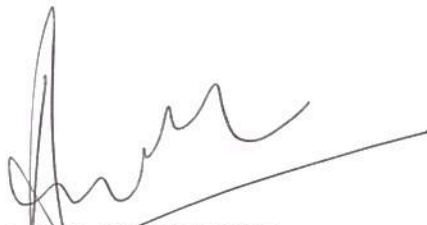
Global Statement for the condensed interim financial statements

For the six-month period ended 30 June 2019

To the best of our knowledge, the condensed interim financial statements are prepared in accordance with International Accounting Standard 34 “Interim Financial Reporting” as adopted by the European Union and gives a true and fair view of the financial position and performance of SG Issuer as at and for the six-month period ended 30 June 2019. The condensed interim financial statements comprise the interim statement of financial position as at 30 June 2019, the interim statement of profit and loss and other comprehensive income, the interim statement of changes in equity and the interim statement of cash flows for the six-month period then ended, and a summary of significant accounting policies and other explanatory notes.

To the best of our knowledge, the management report includes a fair review of the development and performance of the Company, and a description of the principal risks and uncertainties that the Company faces.

Luxembourg, 25 September 2019



Aude de ROQUANCOURT
Chairman of the Executive Board



Pascal JACOB
Member of the Executive Board



Thierry BODSON
Member of the Executive Board

To the sole Shareholder of
SG Issuer S.A.
16, boulevard Royal
L-2449 Luxembourg

Report of the Réviseur d'entreprises agréé on review of the condensed interim financial statements

Introduction

We have reviewed the accompanying condensed interim financial statements of SG Issuer S.A. as at and for the six-month period ended 30 June 2019, which comprise the interim statement of financial position as at 30 June 2019 and the related interim statement of profit and loss and other comprehensive income, the interim statement of changes in equity, the interim statement of cash flows for the six-month period then ended and explanatory notes. The Executive Board is responsible for the preparation and fair presentation of the condensed interim financial statements in accordance with International Accounting Standard 34 *Interim Financial Reporting* as adopted by the European Union ("IAS 34"). Our responsibility is to express a conclusion on the condensed interim financial statements based on our review.

Scope of Review

We conducted our review in accordance with International Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity." A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying condensed interim financial statements are not prepared, in all material respects, in accordance with IAS 34.

Ernst & Young
Société anonyme
Cabinet de révision agréé



Charles Dequaire

Luxembourg, 25 September 2019

Interim statement of profit and loss and other comprehensive income

For the six-month period ended 30 June

	Note	('000 EUR) 2019	('000 EUR) 2018
Interest income		546	609
Commission income	8	32 882	-
Net gains from financial instruments at fair value through profit or loss	8	129	29 151
Impairments		-	-
Total revenues		33 557	29 760
Interest expenses		(18 672)	(11 521)
Personnel expenses		(103)	(104)
Other operating expenses		(14 432)	(17 987)
Total expenses		(33 207)	(29 612)
Profit before tax		350	148
Income tax	6	(87)	(22)
Profit for the financial period		263	126
Total comprehensive income for the period		263	126

Interim statement of financial position

As at

		('000 EUR)	('000 EUR)
	Note	30.06.2019	31.12.2018
Cash and cash equivalents	3	92 164	79 584
Financial assets at fair value through profit or loss			
- <i>Mandatorily measured at fair value through profit or loss</i>	4.1	51 712 386	45 062 134
- <i>Trading derivatives</i>	4.1	3 598 402	4 168 362
Loans and receivables	5	50 049	52 570
Other assets		12 072	-
Total assets		55 465 073	49 362 650
 Financial liabilities at amortised cost	4.3	67 950	96 284
Financial liabilities at fair value through profit or loss			
- <i>Designated at fair value through profit or loss</i>	4.2	51 704 692	45 053 728
- <i>Trading derivatives</i>	4.2, 8	3 622 675	4 170 486
Other liabilities		10 601	13 039
Tax liabilities	6	87	64
Total liabilities		55 406 005	49 333 601
 Share capital	7.1	2 000	2 000
Share premium	7.1	56 605	25 000
Legal reserve	7.2.1	200	200
Other reserves	7.2.2	-	1 662
Profit for the financial period/year		263	187
Total equity		59 068	29 049
 Total equity and liabilities		55 465 073	49 362 650

SG Issuer
Société Anonyme

Interim statement of changes in equity

	('000 EUR)	('000 EUR)	('000 EUR)	('000 EUR)	('000 EUR)	('000 EUR)	('000 EUR)	('000 EUR)
	Share capital	Share premium	Legal reserve	Other reserves (unavailable)	Other reserves (available)	Total reserves	Profit for the financial year/period	Total equity
As at 31 December 2017	2 000	-	200	1 664	1 716	3 580	78	5 658
Allocation of the result of the previous year before dividend distribution	-	-	-	-	78	78	(78)	-
IFRS 9 FTA impact (Note 2.3.3.1)	-	-	-	-	(2)	(2)	-	(2)
Transfer to available reserves	-	-	-	(2)	2	-	-	-
Capital increase / Allocation to the share premium account	-	62 725	-	-	-	-	-	62 725
Dividend to the sole shareholder	-	-	-	-	(1 794)	(1 794)	-	(1 794)
Profit and other comprehensive income for the period from 1 January 2018 to 30 June 2018	-	-	-	-	-	-	126	126
As at 30 June 2018	2 000	62 725	200	1 662	-	1 862	126	66 713
Reimbursement of the share premium (Note 7.1)	-	(37 725)	-	-	-	-	-	(37 725)
Transfer to available reserves	-	-	-	(1 662)	1 662	-	-	-
Profit and other comprehensive income for the period from 1 July 2018 to 31 December 2018	-	-	-	-	-	-	61	61
As at 31 December 2018	2 000	25 000	200	-	1 662	1 862	187	29 049
Allocation of the result of the previous year before dividend distribution	-	-	-	-	187	187	(187)	-
Capital increase / Allocation to the share premium account (Note 7.1)	-	31 605	-	-	-	-	-	31 605
Dividend to the sole shareholder (Note 7.1)	-	-	-	-	(1 849)	(1 849)	-	(1 849)
Profit and other comprehensive income for the period from 1 January 2019 to 30 June 2019	-	-	-	-	-	-	263	263
As at 30 June 2019	2 000	56 605	200	-	-	200	263	59 068

Interim statement of cash flows

For the six-month period ended 30 June

	Note	('000 EUR) 2019	('000 EUR) 2018
OPERATING ACTIVITIES			
Profit for the financial period		263	126
<i>Adjustment for:</i>			
Net (Increase)/decrease in financial assets	4.1	(6 077 771)	(1 168 619)
Net Increase/(decrease) in financial liabilities	4.2	6 106 425*	1 148 341
(Increase)/decrease in other assets		(12 072)	-
Increase/(decrease) in tax liabilities and other liabilities		(2 416)	(23 720)
Other (IFRS 9 impact)		-	(2)
NET CASH FLOWS FROM OPERATING ACTIVITIES		14 429	(43 874)
FINANCING ACTIVITIES			
Payment of capital surplus		-	-
Dividend paid	7.1	(1 849)	(1 794)
NET CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES		(1 849)	(1 794)
Cash and cash equivalents at the beginning of the period	3	79 584	114 889
Net increase/(decrease) in cash and cash equivalents		12 580	(45 668)
Cash and cash equivalents at the end of the period		92 164	69 221
Cash flows from interest and dividends			
Interest paid		353	415
Interest received		546	609
Dividend received			-

* The amount of KEUR 6 106 425 excludes the 2018 activity related interests amounting to KEUR 31 605, which are payable to SGBT and which have been allocated to the Share premium (see Note 5 and Note 7.1).

Notes to the condensed interim financial statements
as at 30 June 2019

NOTE 1 – CORPORATE INFORMATION

SG Issuer (hereafter the "Company" or "SGIS") is a Luxembourg company incorporated on 16 November 2006 as a public limited liability company (S.A.) for an unlimited period.

Since April 2013, the Company's corporate objects are to issue debt securities, bonds, certificates, Warrants and any other debt securities or acknowledgements of debts or financial securities, whether or not accompanied by guarantees, with any type of underlying security, including, without limitation, company stock, any other capital security or security other than capital, index, currency, exchange rate, interest rate, dividend, credit risk, fund unit, investment company stock, term deposit, life assurance contract, loan, merchandise, term contract, option, Warrant or option coupons, allocated or unallocated precious metals, unit of account, basket or any other factor or any other type of underlying securities and any combination of the latter.

To that effect, the Company may purchase, hold, dispose of, lend, loan or resell, by any means, including in particular the use of trusts, in trust or repurchase, any type of assets whatever their names and forms and whether or not accompanied by guarantees, in particular financial instruments (financial securities - stocks, fund units, bonds, certificates, Warrants - or financial contracts - swaps, options or other) or any other debt securities, acknowledgements of debts or capital securities, receive or issue monetary loans (including loans convertible into shares of the Company) - within the group of companies to which the Company belongs - and to supply guarantees in any form (actual guarantees such as pledges, securities, mortgages or other - personal guarantees or any other form of guarantee) for their own account, for the account of the group of companies to which the Company belongs or on behalf of third parties.

The Company's financial year begins on 1 January and ends on 31 December each year.

The Company's capital is fully owned by Société Générale Bank & Trust S.A. (hereafter "SGBT"), a bank incorporated under Luxembourg law.

The accounts of the Company are included in the consolidated accounts of SGBT, which is the smallest body of undertakings of which the Company forms a part as a subsidiary undertaking, and whose head-office is located at 11, avenue Emile Reuter, L-2420 Luxembourg.

The accounts of the Company are included in the consolidated accounts of Société Générale S.A. (hereafter "Société Générale" or the "ultimate parent company"), which is the largest body of undertakings of which the Company forms a part as a subsidiary undertaking, and whose head-office is located at 29, boulevard Haussmann, 75009 Paris, France.

Notes to the condensed interim financial statements
as at 30 June 2019
- continued –

NOTE 2 – SIGNIFICANT ACCOUNTING POLICIES

2.1. Basis of preparation

2.1.1. Statement of compliance

The financial statements of the Company as at 31 December 2018 have been prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union and interpretations adopted by the International Accounting Standards Board ("IASB"). The financial statements as at and for the year ended 31 December 2018 were authorised for issue by the Supervisory Board on 29 April 2019.

The condensed interim financial statements as at and for the six-month period ended 30 June 2019 have been prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting" as adopted by the European Union and interpretations adopted by the International Accounting Standards Board ("IASB"). The condensed interim financial statements as at and for the six-month period ended 30 June 2019 were approved by the Executive Board on 25 September 2019.

The interim condensed financial statements do not include all the information and disclosures required in the annual financial statements, and should be read in conjunction with the annual financial statements as at 31 December 2018.

2.1.2. Basis of measurement of financial assets and financial liabilities

Financial assets and financial liabilities linked to the activity of the Company are measured at fair value through profit or loss. All other financial assets and financial liabilities are measured at amortised cost.

2.1.3. Functional and presentation currency

These condensed interim financial statements are prepared in Euro ("EUR"), which is the Company's functional currency and the currency of its share capital.

2.1.4. Use of estimates and judgements

The preparation of the Company's interim condensed financial statements requires management to make judgments, estimates and assumptions that affect the reported amount of figures recorded in the interim statement of profit and loss, on the unrealised or deferred gains and losses, on the valuation of assets and liabilities in the interim statement of financial position, and on information disclosed in the notes to the interim condensed financial statements.

In order to make these assumptions and estimates, the management uses information available at the date of preparation of the condensed interim financial statements and can exercise its judgment. By nature, valuations based on estimates include risks and uncertainties relating to their occurrence in the future. Consequently, actual future results may differ from these estimates and may then have a significant impact on the interim condensed financial statements.

Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods. In the process of applying the Company's accounting policies, management has made the following judgments and assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year. Existing circumstances and assumptions about future developments may change due to circumstances beyond Company's control and are reflected in the assumptions if and when they occur. Items with the most significant effect on the amounts recognized in the financial statements with substantial management judgment and/or estimates are listed below

Notes to the condensed interim financial statements
as at 30 June 2019
- continued -

with respect to judgments/estimates involved.

The use of estimates and judgment mainly concerns the following topics:

- Fair value in the interim statement of financial position of financial instruments not quoted on an active market which are classified as Financial assets and liabilities at fair value through profit or loss (see Notes 4.1. and 4.2.);
- the amount of impairment and provisions for credit risk related to financial assets measured at amortised cost (see Note 5);
- The analysis of the contractual cash flow characteristics of financial assets.

2.1.5. Segmental information

No dedicated management reporting information is presented for SGIS to a chief decision maker; only the annual financial statements and condensed interim financial statements are presented to the Executive Board of SGIS in analysing the performance of the Company. The Company has only one geographical area related to its revenue, which is France (Société Générale).

The business of the Company is not seasonal. Therefore, the additional disclosure of financial information for the twelve months up to the end of the interim period and comparative information for the prior twelve-month period, encouraged in IAS 34.21, are not necessary and not provided.

2.2. Changes in accounting policies

The accounting policies adopted in the preparation of the interim condensed financial statements are consistent with those followed in the preparation of the annual financial statements for the year ended 31 December 2018, except for the adoption of the new standards effective as of 1 January 2019. The Company has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

2.2.1. New accounting standards applied by the Company as at 1 January 2019

IFRS 15 "Revenue for contracts with customers" (see Notes 2.2.1.1).

IFRS 16 "Leases" (see Notes 2.2.1.2.).

IFRIC 23 "Uncertainty over Income Tax Treatments"(Note 2.2.1.3.).

Amendments to IAS 28 "Long-Term Interests in associates and joint ventures"(Note 2.2.1.4).

Annual improvements (2015-2017) (Note 2.2.1.5).

Amendments to IAS 19 "Plan Amendments, Curtailment or Settlement"(Note 2.2.1.6).

2.2.1.1. IFRS 15 "Revenue from contracts with customers"

Adopted by the European Union on 1 January 2018

This standard supersedes IAS 18 "Revenue" and sets out the new requirements for recognising revenues earned from all types of contracts entered into with customers.

The recognition of revenues in the income statement shall depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Notes to the condensed interim financial statements
as at 30 June 2019
- continued -

To apply this core principle, IFRS 15 provides a five-step model from the identification of the contract with the customer until the recognition of the related revenue when the performance obligation is fulfilled.

Income related to the issuance of Notes and Warrants were presented under the caption “net gains from financial instruments at fair value through profit or loss” until 31 December 2018 in accordance with IAS 39/IFRS 9. In 2019, the Company has reassessed the accounting treatment of such income and concluded that such income was in scope of IFRS 15. This new accounting policy has been applied since 1 January 2019. Comparative amounts for the year 2018 were not restated for materiality reasons (but presented in Note 8).

The remuneration of SGIS is composed by 2 distinct services:

- The issuing upfront fee for the initiation of the operation (thereafter issuing upfront fee). 85% of the total fee is recorded at the issue date;
- The account and security servicing during the lifecycle of the security (thereafter security servicing fee). 15% of the total fee is accrued on a monthly basis, as the recognition of continuous services from the security servicing services of SGIS (according to the costs and resources engaged by SGIS).

2.2.1.2. IFRS 16 “Leases”

Adopted by the European Union on 31 October 2017

This new standard supersedes the existing standard IAS 17 and modifies accounting requirements for leases, and more specifically in relation to the lessees’ financial statements, with very few impacts for the lessors.

For all lease agreements in the scope of IFRS 16, lessee are required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. In its statement of profit and loss, the lessee separately recognises the depreciation of the right-of-use assets and the interest expense on lease liabilities.

SGIS has only one lease agreement related to the building. Since the term of this agreement is 2 years and the annual rental fees amount to KEUR 23, leases are considered non material.

2.2.1.3. IFRIC 23 “Uncertainty over Income Tax Treatments”

Adopted by the European Union on 23 October 2018

This interpretation provides clarifications about the measurement and accounting treatment of income tax when there is uncertainty over income tax treatments. The approach to be used should be the one that provides the best predictions of the resolution of the uncertainty.

The process for identifying, analyzing and monitoring tax uncertainties has been reviewed both at Group level and at the Company’s level. There is no tax treatment at the level of the Company which would raise uncertainty requiring assessment of potential other tax treatment. Consequently, no effect of this interpretation has been booked on equity.

Notes to the condensed interim financial statements
as at 30 June 2019
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2.2.1.4. Amendments to IAS 28 “Long-Term Interests in associates and joint ventures”

Issued by IASB on 12 October 2017

The amendments clarify that IFRS 9 “Financial Instruments” shall be applied to financial instruments that form part of the net investment in an associate or a joint venture but to which the equity method is not applied.

The Company did not identify any impact from these amendments as the Company does not have any long-term interest in neither associate nor joint venture.

2.2.1.5. Annual improvements (2015-2017)

Issued by IASB on 12 December 2017

As part of the annual Improvements to International Financial Reporting Standards, the IASB has issued amendments to IFRS 3 “Business Combinations”, IFRS 11 “Joint Arrangements”, IAS 12 “Income Taxes” and IAS 23 “Borrowing Costs”.

These improvements had no effect on the Company’s condensed interim financial statements as the Company has neither business combinations, nor joint arrangements. Minor changes in IAS 12 and IAS 23 have no impact on the Company as they are related respectively to financial instruments classified as equity and to borrowing costs eligible for capitalisation, which are not applicable to the Company.

2.2.1.6. Amendments to IAS 19 “Plan Amendments, Curtailment or Settlement”

Published by IASB on 7 February 2018

These amendments clarify how pension expenses are determined in the event of amendment, curtailment or settlement of defined benefit pension plans. In these cases, IAS 19 currently calls for the net cost of the defined benefit asset or liability to be remeasured.

The amendments require the entity to use the updated actuarial assumptions from this remeasurement to determine past service cost and net interest.

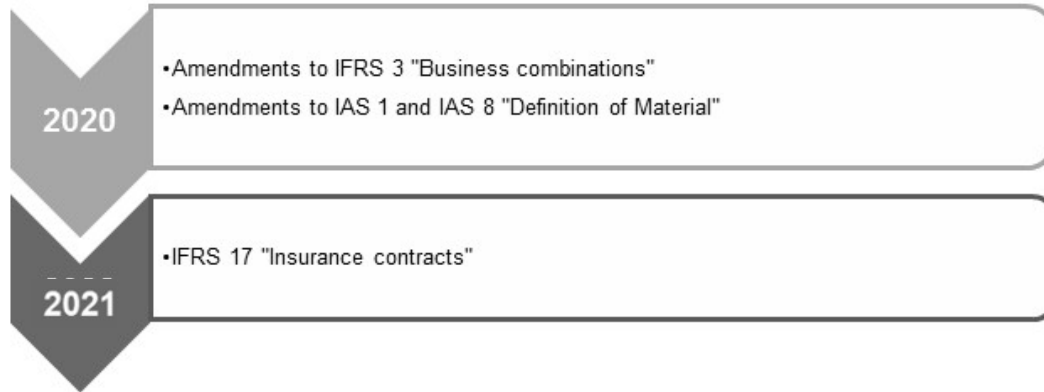
The Company is not impacted by this standard as there is no pension plan at its level.

2.2.2. Accounting standards, amendments or interpretations to be applied by the Company in the future

IASB publishes accounting standards, amendments and interpretations, some of which have not been adopted by the European Union as at 30 June 2019. They are required to be applied from annual periods beginning on 1 January 2020 at the earliest or on the date of their adoption by the European Union. They were therefore not applied by the Company as at 30 June 2019.

Notes to the condensed interim financial statements
as at 30 June 2019
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These standards are expected to be applied according to the following schedule:



2.2.2.1. Amendments to IFRS 3 "Business Combinations"

Published by the IASB on 22 October 2018

The amendments are intended to provide clearer guidance to facilitate the differentiation between the acquisition of a business and the acquisition of a group of assets, for which the accounting treatment is different.

The Company expects no effect from these amendments as it has no business combinations.

2.2.2.2. Amendments to IAS 1 and IAS 8 "Definition of Material"

Published by the IASB on 31 October 2018

These amendments are intended to clarify the definition of 'materiality' in order to facilitate the judgement in the context of the preparation of financial statements and condensed interim financial statements, particularly when selecting the information to be presented in the Notes.

At this stage, the Company does not expect any significant impact from these amendments.

2.2.2.3. IFRS 17 "Insurance Contracts"

Issued by IASB on 18 May 2017

This new standard replaces IFRS 4 "Insurance Contracts" that was issued in 2004 and which currently allows entities to use national requirements for the accounting of insurance contracts.

IFRS 17 provides new rules for the recognition, measurement, presentation and disclosure of insurance contracts that belong to its application scope (insurance contracts issued, reinsurance contracts held and investment contracts issued with discretionary participation features). The underwriting reserves currently recognised among liabilities in the interim statement of financial position is replaced by a current value measurement of insurance contracts. The Company expects no effect from this standard as it has no insurance contracts.

2.3. Summary of significant accounting policies

2.3.1. Foreign currency transactions

Transactions in foreign currencies are initially recorded in EUR at the exchange rate ruling at the date of the transaction.

Notes to the condensed interim financial statements
as at 30 June 2019
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Assets and liabilities denominated in foreign currencies are translated into EUR at the exchange rates ruling at the interim reporting date. Foreign exchange differences arising on translation and realized exchange gains and losses are recognised in the interim statement of profit and loss and other comprehensive income in the caption Net gains on financial instruments at fair value through profit or loss and Interest Expenses.

The most important foreign currency positions for the Company are USD, JPY, GBP, HKD and CHF. The following foreign exchange rates were used:

	USD	JPY	GBP	HKD	CHF
30.06.2019	1.1380	122.6000	0.89655	8.8866	1.1105
31.12.2018	1.1450	125.8500	0.8945	8.9675	1.1269

2.3.2. Cash and Cash equivalents

Cash and cash equivalents comprise only cash repayable on demand.

2.3.3. Financial instruments

The accounting principles related to financial instruments remain the same as of 31 December 2018.

2.3.3.1. Classification and measurement of financial assets

The portfolios of financial assets were reviewed to determine, based on the characteristics of their contractual cash flows and on how they are managed (business models), their accounting treatment under IFRS 9. Another objective of this review was to identify the most significant impacts on the information systems.

For the debt instruments held, SGIS has defined its business model as “held to collect” for the Fully Funded Swaps, for Cash and cash equivalents and for Loans and receivables. These assets are acquired in order to collect the contractual cash-flows attached to the assets. No sale has been made in the past years and no sale is anticipated in the future.

The Fully Funded Swaps (hereafter “FFS”) are economically assimilated to loans with embedded derivatives (the swap embedded in the FFS). This type of financial assets comply with the IFRS definition of debt instruments (fixed maturity, coupon calculated as a rate, no right nor interest/control in an entity). As these financial assets of SGIS contain embedded derivatives that modify the cash flows of the entire contract, the contract does not pass the SPPI test and these financial assets are mandatorily measured at Fair Value through Profit and Loss (“FVTPL”).

Cash and cash equivalents and Loans and receivables are SPPI compliant and are thus measured at amortised cost. Cash and cash equivalents and Loans and receivables are subject to impairment under IFRS 9 and are presented net of impairment.

The Options held, covering the Warrants issued, are Trading derivatives and thus measured at FVTPL.

Classification and measurement of financial liabilities

Financial liabilities are classified into one of the following two categories:

- Financial liabilities at fair value through profit or loss:

These are financial liabilities held for trading purposes, which by default include derivative financial liabilities not qualifying as hedging instruments and non-derivative financial liabilities designated by the Company upon initial recognition to be carried at fair value through profit or loss in accordance with the fair value option.

Notes to the condensed interim financial statements
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The Company has designated at fair value through profit or loss the notes issued because mirror transactions (Fully Funded Swaps or “FFS”) that are used to hedge those notes are measured mandatorily at fair value through profit and loss and thus reduce the accounting mismatch;

- Financial liabilities at amortised cost:

These include the other non-derivative financial liabilities and are measured at amortized cost.

2.3.3.2. Valuation of financial instruments as financial assets and financial liabilities at fair value through profit or loss

The fair values of financial instruments include accrued interest as applicable.

- For unsecured Notes and Fully Funded Swaps

The fair value for both the unsecured Notes (liabilities) and the Fully Funded Swap (FFS) (assets) are calculated by discounting the expected future cash flows with the risk free curve. To take the credit adjustment into account, the risk free curve is adjusted with Société Générale Group’s credit spread curve. A dedicated process has been implemented using Société Générale Group and SGIS operational teams’ input. This process is fully functional, constantly monitored as of today.

- For secured and Repack Notes

Secured Notes are Notes which are collateralized with assets deposited on segregated or pooled accounts with external custodian (The Bank of New York MELLON (Luxembourg) S.A. hereafter “BNY Mellon”) and pledged in favor of the Note holders.

Repack Notes are Notes which allow investors to calibrate the funding yield of their structure by selecting a bond (the “Reference Bond”) issued by a third-party issuer (the “Reference Bond Issuer”).

- The collateral assets are composed of eligible securities.

Should Société Générale defaults, the pledge on the assets is to be enforced; the Notes holders are exposed to credit risk of the collateral (external securities). Therefore, as Société Générale and SGIS are mere risk pass-through, the credit risk premium (external bonds issuers) shall not be adjusted with Société Générale credit spread. Thus, no additional credit adjustment is needed for the secured Notes.

The fair value of the secured Notes and the Repack Notes and the associated FFS is computed, for each accounting period, by discounting the expected future cash flows by a composite Repo rate curve.

- For Warrants and Options

For financial instruments recognised at fair value in the interim statement of financial position, fair value is determined primarily on the basis of the prices quoted in an active market. These prices can be adjusted if none are available on the interim statement of financial position date or if the clearing value does not reflect transaction prices.

However, due especially to the varied characteristics of financial instruments traded over-the-counter on the financial markets, a large number of financial products traded by the Company does not have quoted prices in the markets.

Deferred margin related to main unobservable inputs

The Company does not apply deferred margin related to its main unobservable inputs as margin on Notes and Warrants issued are offset by a similar margin on Fully Funded Swaps and Options purchased.

Notes to the condensed interim financial statements
as at 30 June 2019
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2.3.3.3. Offsetting financial assets and financial liabilities

A financial asset and a financial liability are offset and the net amount presented on the interim statement of financial position when the Company has a legally enforceable right to set off the recognised amounts and intends either to settle the asset and liability on a net basis, or to realise the asset and settle the liability simultaneously. The legal right to set off the recognised amounts must be enforceable in all circumstances, in both the normal course of business and in the event of default of one of the counterparties.

The financial instruments issued by the Company are subscribed by the investors through Société Générale as a lead manager during the issuance period and as a market maker for a secondary market. The instruments which are unsold are held by SG.

The treatment is applied based on IAS 32 paragraph 42: "A financial asset and a financial liability shall be offset and the net amount presented in the interim statement of financial position when, and only when, an entity:

- (a) currently has a legally enforceable right to set off the recognized amounts; and
- (b) intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously."

In December 2014, a cash netting clause was added in the legal framework with Société Générale Personne Morale and the Company consequently acquired a legally enforceable right to offset the recognized amount with the same counterparty (Société Générale). The assets (the Fully Funded Swaps) and the liabilities (the Notes) are settled (and intended to be settled) simultaneously.

In June 2017, the Company added a new cash netting clause in the legal framework with Société Générale Personne Morale and the Company consequently acquired a legally enforceable right to offset the recognized amount with the same counterparty (Société Générale). The assets (OTC Options) and the liabilities (the Warrants) are settled (and intended to be settled) simultaneously.

In application of IAS 32 - Offsetting a financial asset and a financial liability, the Company proceeds to the accounting netting of the non-sold amounts. The impact of the off-setting for the non-sold Notes and the corresponding Fully Funded Swaps and impact of the off-setting for the non-sold Warrants and the corresponding options are described in note 4.1 and note 4.2.

Notes to the condensed interim financial statements
as at 30 June 2019
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NOTE 3 – CASH AND CASH EQUIVALENTS

Cash and cash equivalents amount to KEUR 92 164 as at 30 June 2019 (31 December 2018: KEUR 79 584) and are mainly composed of cash held with SGBT and Société Générale.

As at 30 June 2019 and 31 December 2018, this caption only contains cash that is repayable on demand.

Notes to the condensed interim financial statements
as at 30 June 2019
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NOTE 4 – FINANCIAL INSTRUMENTS

4.1. Financial assets measured at fair value through profit or loss

	30.06.2019	31.12.2018
	(‘000 EUR)	(‘000 EUR)
Financial assets at fair value through profit or loss		
- Mandatorily at fair value through profit or loss (Fully Funded Swaps)	51 712 386	45 062 134
- Trading derivatives (Options)	3 598 402	4 168 362
Total	55 310 788	49 230 496

As at 30 June 2019, financial assets mandatorily at fair value through profit or loss (Fully Funded Swaps) amount to KEUR 51 712 386 (31 December 2018: KEUR 45 062 134) and replicate all the Notes issued by the Company (see Note 4.2). Differences between Fully Funded Swaps and Notes arise due to late settlements.

As at 30 June 2019, Trading derivatives (Options) amount to KEUR 3 598 402 (31 December 2018: KEUR 4 168 362) and replicate all the Warrants issued by the Company (see Note 4.2). Differences between Options and Warrants arise due to late settlements.

As at 30 June 2019, the impact of the offsetting of financial assets and financial liabilities (decrease in the balance sheet) is KEUR 59 866 543 for the non-sold Notes and the corresponding Fully Funded Swaps (31 December 2018: KEUR 40 786 626) and KEUR 7 779 040 for the non-sold Warrants and the corresponding Options (31 December 2018: KEUR 5 281 042) (see Note 4.2).

Notes to the condensed interim financial statements
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The movements in financial assets at fair value through profit or loss were as follows:

	('000 EUR)	('000 EUR)	('000 EUR)
	Mandatorily at fair value through profit or loss	Trading derivatives	Total
As at 1 January 2018	44 051 537	3 806 822	47 858 359
<i>Acquisition</i>	31 615 388	34 831 815	66 447 203
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(15 594 453)	(32 877 694)	(48 472 147)
<i>Change in fair value</i>	(2 247 871)	(2 054 287)	(4 302 158)
<i>Exchange difference</i>	1 144 519	63 069	1 207 588
<i>Offsetting of Assets and Liabilities (Change)</i>	(13 668 588)	(43 617)	(13 712 205)
As at 30 June 2018	45 300 532	3 726 108	49 026 640
<i>Acquisition</i>	30 120 091	(920 418)	29 199 673
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(17 894 969)	169 074	(17 725 895)
<i>Change in fair value</i>	(9 819 706)	(632 465)	(10 452 171)
<i>Exchange difference</i>	842 729	118 021	960 750
<i>Offsetting of Assets and Liabilities (Change)</i>	(3 486 543)	1 708 042	(1 778 501)
As at 31 December 2018	45 062 134	4 168 362	49 230 496
<i>Acquisition</i>	33 277 613	20 820 233	54 097 846
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(17 375 767)	(17 574 915)	(34 950 682)
<i>Change in fair value</i>	9 520 579	(1 350 072)	8 170 507
<i>Exchange difference</i>	307 744	32 792	340 536
<i>Offsetting of Assets and Liabilities (Change)</i>	(19 079 917)	(2 497 998)	(21 577 915)
As at 30 June 2019	51 712 386	3 598 402	55 310 788

4.2. Financial liabilities measured at fair value through profit or loss

	30.06.2019 ('000 EUR)	31.12.2018 ('000 EUR)
Financial liabilities at fair value through profit or loss		
- Designated at fair value through profit or loss (Notes)	51 704 692	45 053 728
- Trading derivatives (Warrants)	3 622 675	4 170 486
Total	55 327 367	49 224 214

As at 30 June 2019, the Company has issued secured and unsecured Notes for a total amount of KEUR 51 704 692 (31 December 2018: KEUR 45 053 728):

- 33 037 unsecured Notes were issued (stock) for a total amount of KEUR 47 571 960 (31 December 2018: 29 736 unsecured Notes were issued (stock) for a total amount of KEUR 41 584 165);
- 888 secured Notes were issued (stock) for a total amount of KEUR 4 132 732 (31 December 2018: 871 secured Notes were issued (stock) for a total amount of KEUR 3 469 563).

Notes to the condensed interim financial statements
as at 30 June 2019
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In addition to the guarantee on first demand granted by Société Générale on unsecured and secured Notes, subscribers of the secured Notes issued by the Company benefit from additional collateral assets securing the payment due under the Notes terms, structured in form of a pledge governed by Luxembourg Law. This pledge may only be enforced following a default of the Company or Société Générale in its role of Guarantor.

Pledged collateral assets are deposited on an account held in the name of the Company with an authorised custodian not belonging to the Société Générale Group and are pledged in favour of the Notes holders.

As at 30 June 2019, securities deposited at BNY Mellon as collateral for secured issuances amount to KEUR 4 243 480 (31 December 2018: KEUR 3 609 288).

As at 30 June 2019, the Company also issued Warrants for a total amount of KEUR 3 622 675 (31 December 2018: KEUR 4 170 486). Refer to Note 9 for further details on Off-balance sheet items related to the Warrants activity.

As at 30 June 2019, the impact of the offsetting (decrease in the balance sheet) is KEUR 59 866 543 for the non-sold Notes and the corresponding Fully Funded Swaps (31 December 2018: KEUR 40 786 626) and KEUR 7 779 040 for the non-sold Warrants and the corresponding Options (31 December 2018: KEUR 5 281 042) (see Note 4.1).

Notes to the condensed interim financial statements
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The movements in financial liabilities at fair value through profit or loss were as follows:

	('000 EUR)	('000 EUR)	('000 EUR)
	Designated at fair value through profit or loss	Trading derivatives	Total
As at 1 January 2018	44 048 143	3 818 679	47 866 822
<i>Issuance</i>	31 615 388	34 831 815	66 447 203
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(15 616 360)	(32 886 766)	(48 503 126)
<i>Change in fair value</i>	(2 247 871)	(2 054 287)	(4 302 158)
<i>Exchange difference</i>	1 144 519	63 069	1 207 588
<i>Offsetting of Assets and Liabilities (Change)</i>	(13 668 588)	(43 617)	(13 712 205)
As at 30 June 2018	45 275 231	3 728 893	49 004 124
<i>Issuance</i>	30 759 451	(896 908)	29 862 543
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(18 372 899)	(462 165)	(18 835 064)
<i>Change in fair value</i>	(9 984 059)	(256 637)	(10 240 696)
<i>Exchange difference</i>	862 547	349 261	1 211 808
<i>Offsetting of Assets and Liabilities (Change)</i>	(3 486 543)	1 708 042	(1 778 501)
As at 31 December 2018	45 053 728	4 170 486	49 224 214
<i>Issuance</i>	33 743 010	20 821 781	54 564 791
<i>Maturity/Disposal/Liquidation/Cancellation</i>	(17 794 541)	(17 350 616)	(35 145 157)
<i>Change in fair value</i>	9 473 510	(1 574 971)	7 898 539
<i>Exchange difference</i>	308 902	53 993	362 895
<i>Offsetting of Assets and Liabilities (Change)</i>	(19 079 917)	(2 497 998)	(21 577 915)
As at 30 June 2019	51 704 692	3 622 675	55 327 367

4.3. Financial instruments measured at amortised cost

As at 30 June 2019 and 31 December 2018, financial liabilities at amortised cost are mainly composed of a convertible bond of KEUR 48 000, issued by the Company and fully subscribed by SGBT, with maturity in 2022. Conversion may occur each year.

On this convertible bond, the Company pays to SGBT both variable interests calculated on Euribor 3M plus a margin of 2.05% (total rate of 1.705% as at 30 June 2019) and activity related interests. Activity related interests mean an amount equal to 100% of the activity related profit generated by the Company.

The convertible bond maturity shall be automatically extended by successive periods of one year, unless either the Issuer or the Holder has exercised its right to terminate the bond on the scheduled maturity date. The conversion option belongs to the Holder.

As at 30 June 2019 and 31 December 2018, the value of the equity component is estimated to be nil.

As at 30 June 2019, the Company also has amounts due to banks related to the Company's bank current accounts for KEUR 2 031 (31 December 2018: KEUR 16 673).

Notes to the condensed interim financial statements
as at 30 June 2019
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NOTE 5 – LOANS AND RECEIVABLES

As at 30 June 2019 and 31 December 2018, loans and receivables only consist in term deposits with SGBT, which represent the reinvestment of the Company's share capital, reserves and other available funds.

The amount of expected credit loss calculated on loans and receivables in accordance with IFRS 9 is KEUR 2 as at 30 June 2019 (31 December 2018: KEUR 2).

Notes to the condensed interim financial statements
as at 30 June 2019
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NOTE 6 – TAXATION

The Company is liable for all taxes applicable to Luxembourg commercial companies.

Since 2007, the Company has been part of a tax integration group led by SGBT, as authorised by the article 164 bis LIR and has concluded a Tax Sharing Agreement (the “Agreement”) with SGBT. Under the Agreement, the Company pays to SGBT, with respect to each financial year, an amount equal to the tax which would be levied on the profits of the Company in the absence of any tax consolidation with the Parent.

Income tax includes current taxes and deferred taxes:

- current taxes correspond to the amount of taxes due (or refundable) as calculated according to the taxable profit base for the reporting period;
- deferred taxes correspond to the amount of taxes resulting from past transactions and that will be payable (or refundable) in a future reporting period.

6.1. Current tax

Current tax is based on the taxable profit and determined in accordance with the rules established by the local taxation authorities, upon which income taxes are payable. This tax expense also includes net allowances for tax adjustments pertaining to income tax.

Tax credits arising in respect of interest from loans and income from securities are recorded in the relevant interest account as they are applied in settlement of income taxes for the period. The related tax charge is included under Income tax in the interim statement of profit and loss and other comprehensive income.

Current tax was adjusted further to the fiscal law reform on December 2016. The rate of current tax applied as of 30 June 2019 is 24.94% (31 December 2018: 26.01%). The current tax rate includes the corporate tax and the municipal tax.

6.2. Deferred tax

Deferred taxes are recognized whenever the Company identifies a temporary difference between the accounting base and tax base for assets and liabilities that will affect future tax payments. Deferred tax assets and liabilities are measured considering rules established by Luxembourg tax authority.

There is no need to recognize deferred tax asset (or liability) considering mirror transactions are concluded to hedge the financial liabilities and net result consists only in the net banking income from investing activities (equity investment).

Notes to the condensed interim financial statements
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NOTE 7 – SHAREHOLDERS' EQUITY

7.1. Share capital and Share premium

As at 31 December 2018, the subscribed and fully paid share capital, 100% held by SGBT, was EUR 2 000 200, divided into 50 005 shares with nominal value of EUR 40 each.

By resolution adopted on 15 January 2019, the Executive Board decided to increase the capital of the Company from EUR 2 000 200 to EUR 2 000 240 by the issue of a new share with a nominal value of EUR 40, subscribed by the sole shareholder. In the context of the capital increase, the 2018 activity related interests amounting to EUR 31 604 629 have been allocated to the Share premium.

As at 30 June 2019, the subscribed and fully paid share capital, 100% held by SGBT, is EUR 2 000 240, divided into 50 006 shares with nominal value of EUR 40 each.

The Company manages its capital to ensure it will be able to continue as a going concern. The capital amount may be increased, subject to the approval of the Sole Shareholder, if the Company's activity evolves, incurring specific additional risks.

7.2. Reserves

7.2.1. Legal reserve

In accordance with the Luxembourg law, the Company is required to allocate a minimum of 5% of its annual net profit to a Legal reserve until this reserve equals 10% of the subscribed share capital. This reserve may not be distributed.

As at 30 June 2019, the legal reserve amounts to KEUR 200 (31 December 2018: KEUR 200).

7.2.2. Other reserves

Since 2013, the Company is fiscally integrated in its parent company SGBT. SGBT constitutes the Net Wealth Tax reserve for the Company. As a consequence, no additional Net Wealth Tax reserve has been constituted by the Company since 2013.

As at 30 June 2019, other reserves are nil (31 December 2018: KEUR 1 662 corresponding to the remaining Net Wealth Tax reserve that was constituted by the Company before 2013 and released since).

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as at 30 June 2019
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NOTE 8 – COMMISSION INCOME/NET GAINS FROM FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Principles of the revenue recognition are set out in the paragraph 2.2.1.1.

Commission income/net gains from financial instruments at fair value through profit or loss can be breakdown as follows:

	30.06.2019	30.06.2018
	(‘000 EUR)	(‘000 EUR)
Issuing upfront fees on Notes	30 041	21 789*
Servicing fees on Notes	925	3 845*
Commission on Warrants	1 916	3 584*
Total	32 882	29 218*

As at 30 June 2019, KEUR 4 377 are retained as differed income under the caption “other liabilities”.

* The above amounts as at 30 June 2018 are presented in the interim statement of profit and loss and other comprehensive income under the caption “net gains from financial instruments at fair value through profit or loss” (Please see note 2.2.1.1.). The remaining amount of KEUR (67) corresponds to the fair value adjustment recorded during the six-month period ended 30 June 2018.

Notes to the condensed interim financial statements
as at 30 June 2019
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NOTE 9 – OFF-BALANCE SHEET

As at 30 June 2019, financial instruments to be issued (engagement taken before 30 June 2019 with value date after 30 June 2019) amount to KEUR 3 345 921 (31 December 2018: KEUR 2 790 111).

All the Warrants issued are fully hedged by concluding identically equipped OTC options with Société Générale.

SG Issuer
Société Anonyme

Notes to the condensed interim financial statements
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Warrants issuance summary

The Warrants issued as at 30 June 2019 and 31 December 2018 break down as follows:

				30 June 2019			31 December 2018		
Warrant Type	Category of Underlying	Type of Underlying	Option Type	Quantity	Notional ('000 EUR)	Fair Value ('000 EUR)	Quantity	Notional ('000 EUR)	Fair Value ('000 EUR)
Basket Warrant	Basket	Index	Call	2	15 648	17 520	2	15 581	14 584
		Equity	Call	1	3 163	776	4	3 144	4 350
Commodity Future Warrant	Future	Mutual Fund	Put	8	27 049	1 859	4	7 138	6
		Commodity Future	Call	98	391 245	31 045	76	381 303	11 361
			Put	100	279 409	44 157	148	439 664	119 532
Commodity Warrant	Commodity	Index	Call	9	48 075	27 613	-	-	-
		Mutual Fund	Call	124	880 993	101 871	63	161 967	40 489
			Put	73	264 484	15 213	80	240 430	27 319
		Precious metals	Call	12	26 036	5 498	12	24 767	3 657
			Put	10	24 789	543	14	34 545	2 235
Currency Warrant	Currency	Currency	Call	207	128 595	20 939	201	159 308	36 455
			Put	269	195 201	68 372	253	176 373	65 947
Equity Warrant	Equity	American Depositary Receipt	Call	61	229 687	13 562	21	25 218	1
			Put	38	72 567	4 973	18	17 817	0
		Mutual fund	Call	11	342 336	520	-	-	-
			Put	5	92 926	13	-	-	-
		Ordinary Share	Call	5 686	31 072 830	733 683	4 654	26 923 067	596 199
			Put	3 808	12 879 399	366 951	3 487	11 659 558	790 924
		Other Certificate	Call	1	303	3	1	300	0
			Put	7	4 454	-	8	4 894	459
		Other Receipt	Call	1	422	-	2	2 442	0
			Put	2	1 173	-	2	1 252	0
		Own Share	Call	119	212 410	5 973	92	193 993	3 526
			Put	72	66 562	15 235	82	112 290	28 196

SG Issuer
Société Anonyme

Notes to the condensed interim financial statements

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- continued -

		Preference	Call	33	66 183	1 543	23	35 672	331
			Put	29	54 332	868	29	41 791	888
REIT	REIT	REIT	Call	55	202 223	2 167	42	148 254	908
			Put	47	115 286	1 155	35	35 074	3 453
Index Warrant	Index	Index	Call	2 306	49 082 682	1 633 634	1 354	51 887 633	1 066 292
			Put	1 518	34 064 753	482 248	1 451	30 468 115	1 333 566
Fund Warrant	Fund	Mutual Fund	Call	221	1 232 301	23 892	196	1 171 799	19 733
			Put	12	210 272	849	10	137 095	75
Total Call			Call	8 947	83 935 132	2 620 239	6 743	81 134 448	1 797 886
Total Put			Put	5 998	48 352 656	1 002 436	5 621	43 376 036	2 372 600
Total Warrants				14 945	132 287 788	3 622 675	12 364	124 510 484	4 170 486

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NOTE 10 – RISK MANAGEMENT

The Company and several of its service providers are subsidiaries of the Société Générale Group and therefore benefit from Société Générale's internal control systems.

For any further information on the risks relating to the Group, investors and/or Noteholders should refer to the "Risk and Capital Adequacy" section of the Registration Document (<https://www.societegenerale.com>).

10.1. Market risk

Market risk is the risk that changes in market prices, such as interest rates, securities prices, and foreign exchange rates will affect the Company's income or the value of its holding of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters.

The Company issues Notes and Warrants. The Notes are systematically hedged with Fully Funded Swaps concluded with Société Générale, with strictly identical characteristics. In the same way, the Warrants issued are hedged with Options concluded with Société Générale, with strictly identical characteristics.

The risks associated with the investment in the Notes and Warrants depend on several factors. Such factors vary depending on the characteristics of the Notes and Warrants issued, in particular depending on the underlying, the maturity of the Notes, the secured / unsecured status of the Notes, the interest rates incurred, the volatility of the underlying, etc.

The main risks in relation to investments in Notes and Warrants issued by the Company are described in the Base Prospectus under the section "Risk Factor".

Because of its structure (perfect match between the assets and the liabilities), the impact of an immediate change of a market parameter would have no consequence on the net profit of the Company.

The Company is also exposed to structural interest rate risk, namely through the following transactions: reinvestment of available equity by participating interests or loans to the Company's treasury (SGBT) with hedged interest rate risk. The structural interest rate risk is monitored via the sensitivity of the economic value of the positions measured through modified duration.

Modified duration is calculated based on the change in the net present value of positions subsequent to a 1% change in the rate curve. Exposure monitoring is based on the determination of modified duration over the short (up to one year), medium (one to five years) and long (more than five years) term.

10.2. Credit risk

Credit risk is the risk that a third party will not be able to meet its contractual obligation.

The Company only contracts financial instruments with its parent companies, SGBT and Société Générale. Therefore, the credit risk of the Company is limited to the credit risk on SGBT and Société Générale. Should this situation evolve, specific limits would be proposed to limit the credit risk incurred.

As at 30 June 2019 and 31 December 2018, no financial assets were past due or impaired.

All the Notes and Warrants issued by the Company benefit from a guarantee provided by Société Générale, meaning that payments in respect of the instruments issued by the Company are unconditionally and irrevocably guaranteed by Société Générale (the Guarantor).

Notes to the condensed interim financial statements
as at 30 June 2019
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As at 30 June 2019, the rating of Société Générale is A from Standard & Poor's and A1 from Moody's.

10.3. Interest rate risk

Interest rate risk is the risk that changes in market interest rates may adversely affect the value of the assets and liabilities of the Company. Due to the financial instruments contracted by the Company with Société Générale to hedge the financial instruments issued, the Company is not significantly exposed to interest rate risk.

10.4. Liquidity risk

Liquidity risk is the risk that the Company may be unable to meet the payment obligations associated with its financial liabilities when they fall due.

The Company does not face any liquidity risk thanks to the perfect replication between the contractual obligations of i) the financial instruments issued by the Company and ii) the financial assets held for hedging by the Company.

10.5. Fair Value measurement

According to the fair value hierarchy established by IFRS 13, Level 3 (L3) comprises products valued using inputs that are not based on observable market data (referred to as unobservable inputs).

For these products, fair value is determined using models based on valuation techniques commonly used by market participants to measure financial instruments, such as discounted future cash flows for Notes or the Black & Scholes formula for certain options, and using valuation parameters that reflect current market conditions as at the interim statement of financial position date. These valuation models are validated independently by the experts from the Market Risk Department of the Group's Risk Division.

Furthermore, the parameters used in the valuation models, whether derived from observable market data or not, are checked by the Finance Division of GBIS (Global Banking and Investor Solutions), in accordance with the methodologies defined by the Market Risk Department.

The Notes and the related Fully Funded Swaps are classified as Level 3 when the valuation of the associated embedded derivatives (underlyings of the Notes) is also based on unobservable market data.

On each element of an identified list of unobservable parameters, it comes to determining the uncertainty of marking, and cross sensitivities with this uncertainty for a confidence interval of the value of the positions.

In parallel, marking the levels of each of these parameters is collected and reported in the Note.

The methods for determining the level of uncertainty, as well as calculating the confidence interval from sensibilities depend on each parameter.

Transfers from Level 2 to Level 3 are determined at the end of each month and occur in case of a modification within a parameter (e.g. no longer linked to the deal, modification of the observability rule of the parameter).

Notes to the condensed interim financial statements
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10.5.1. Estimate of Level 3 instruments and other most significant unobservable inputs as at 30 June 2019
(by type of underlyings):

Type of underlyings	Assets In million EUR	Liabilities In million EUR	Main products	Valuation techniques used	Significant unobservable inputs	Range of unobservable inputs Min & Max
Equity / funds	19 606	19 606	Derivatives on funds, equities or baskets of stocks derivatives on funds, equities or baskets of stocks	Various option models on funds, equities or baskets on stocks	Equity volatilities	[4.4% ; 67.6%]
					Equity dividends	[0.0% ; 13.2%]
					Correlations	[-89.5% ; 98.5%]
					Hedge funds volatilities	[8.5% ; 20.0%]
					Mutual funds volatilities	[1.5% ; 42.3%]
Rates and Forex	3 942	3 942	Hybrid forex / interest rate or credit / interest rate derivatives	Hybrid forex interest rate or credit interest rate option pricing models	Correlations	[-46.5% ; 90%]
			Forex derivatives	Forex option pricing models	Forex volatilities	[1.0% ; 32.8%]
			Interest rate derivatives whose notional is indexed on the prepayment behaviour on European collateral pools	Prepayment modeling	Constant prepayment rates	[0.0% ; 20.0%]
			Inflation instruments and derivatives	Inflation pricing models	Correlations	[50.5% ; 88.9%]
Credit	4 925	4 925	Collateralized Debt Obligations and index tranches	Recovery and base correlation projection models	Time to default correlations	[0% ; 100%]
					Recovery rate variance for single name underlyings	[0% ; 100%]
			Other credit derivatives	Credit default models	Time to default correlations	[0% ; 100%]
					Quanto correlations	[-50% ; 40%]
					Credit spreads	[0 bps ; 1 000 bps]
Commodity	15	15	Derivatives on commodities baskets	Option models on commodities	Commodities correlations	[14% ; 96%]

Unobservable inputs add a degree of uncertainty in the valuation of Level 3 instruments. However, by its very nature, and considering mirror transactions are concluded with Société Générale to hedge the financial liabilities issued by the Company, the Company has no market risk exposure. The impact of an immediate change in an unobservable parameter would have no consequence on the net profit or net equity of the Company.

Notes to the condensed interim financial statements
as at 30 June 2019
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10.5.2. Analysis per remaining maturities:

As at 30 June 2019, analysis per remaining maturities is as follows:

30.06.2019 - EUR' 000	< 3 months	From 3 months to 1 year	From 1 to 5 years	> 5 years	Without fixed maturity	Total
Cash and cash equivalents	92 164	-	-	-	-	92 164
Financial assets at fair value through profit or loss						
- <i>Mandatorily at fair value through profit or loss</i>	2 108 644	10 811 451	21 699 122	17 093 169	-	51 712 386
- <i>Trading derivatives</i>	577 557	799 943	814 702	1 406 200	-	3 598 402
Loans and receivables	-	200	48 849	1 000	-	50 049
Other assets	12 072	-	-	-	-	12 072
Total assets	2 790 437	11 611 594	22 562 673	18 500 369	-	55 465 073
Financial liabilities at amortised cost	2 031	17 919	48 000	-	-	67 950
Financial liabilities at fair value through profit or loss						
- <i>Designated at fair value through profit or loss</i>	2 175 838	10 786 526	21 691 968	17 050 360	-	51 704 692
- <i>Trading derivatives</i>	623 140	780 120	814 144	1 405 271	-	3 622 675
Other liabilities	10 601	-	-	-	-	10 601
Tax liabilities	87	-	-	-	-	87
Total liabilities	2 811 697	11 584 565	22 554 112	18 455 631	-	55 406 005

As at 31 December 2018, analysis per remaining maturities is as follows:

31.12.2018 - EUR' 000	< 3 months	From 3 months to 1 year	From 1 to 5 years	> 5 years	Without fixed maturity	Total
Cash and cash equivalents	79 584	-	-	-	-	79 584
Financial assets at fair value through profit or loss						
- <i>Mandatorily at fair value through profit or loss</i>	2 659 566	7 215 881	20 045 169	15 141 518	-	45 062 134
- <i>Trading derivatives</i>	682 685	1 033 560	508 253	1 943 864	-	4 168 362
Loans and receivables	189	828	50 553	1 000	-	52 570
Total assets	3 422 024	8 250 269	20 603 975	17 086 382	-	49 362 650
Financial liabilities at amortised cost	16 673	31 611	48 000	-	-	96 284
Financial liabilities at fair value through profit or loss						
- <i>Designated at fair value through profit or loss</i>	2 648 107	7 216 548	20 037 056	15 152 017	-	45 053 728
- <i>Trading derivatives</i>	684 009	1 029 500	514 100	1 942 877	-	4 170 486
Other liabilities	13 039	-	-	-	-	13 039
Tax liabilities	64	-	-	-	-	64
Total liabilities	3 361 892	8 277 659	20 599 156	17 094 894	-	49 333 601

Notes to the condensed interim financial statements
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10.5.3. The fair values together with the carrying amounts shown in the interim statement of financial position are as follows:

	Carrying amount	Fair value
30.06.2019 - EUR' 000		
Cash and cash equivalents	92 164	92 164
Financial assets at fair value through profit or loss		
- <i>Mandatorily at fair value through profit or loss</i>	51 712 386	51 712 386
- <i>Trading derivatives</i>	3 598 402	3 598 402
Loans and receivables *	50 049	52 324
Other assets	12 072	12 072
Total	55 465 073	55 467 348
Financial liabilities at amortised cost *	67 950	70 225
Financial liabilities at fair value through profit or loss		
- <i>Designated at fair value through profit or loss</i>	51 704 692	51 704 692
- <i>Trading derivatives</i>	3 622 675	3 622 675
Other liabilities	10 601	10 601
Tax liabilities	87	87
Total	55 406 005	55 408 280
31.12.2018 - EUR' 000		
Cash and cash equivalents	79 584	79 584
Financial assets at fair value through profit or loss		
- <i>Mandatorily at fair value through profit or loss</i>	45 062 134	45 062 134
- <i>Trading derivatives</i>	4 168 362	4 168 362
Loans and receivables *	52 570	54 993
Total	49 362 650	49 365 073
Financial liabilities at amortised cost *	96 284	98 451
Financial liabilities at fair value through profit or loss		
- <i>Designated at fair value through profit or loss</i>	45 053 728	45 053 728
- <i>Trading derivatives</i>	4 170 486	4 170 486
Other liabilities	13 039	13 039
Tax liabilities	64	64
Total	49 333 601	49 335 768

* For Loans and receivables and Financial liabilities at amortised cost, the fair values are calculated by discounting the expected future cash flows under a EUR risk free curve adjusted with Société Générale Group credit spread curve (EUR swap curve from Bloomberg and Société Générale credit spread curve provided by Risk department Paris).
Determining fair value is dependent on many factors and can be an estimate of what value may be obtained in the open market at any point in time.

Notes to the condensed interim financial statements
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10.5.4. The fair value hierarchy of IFRS 13

As at 30 June 2019, the Company determined the fair values of its financial instruments on the basis of the following hierarchy:

30.06.2019 - EUR' 000	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss				
- Mandatorily at fair value through profit or loss	-	23 376 690	28 335 696	51 712 386
<i>Commodities instruments</i>	-	1 053 248	15 403	1 068 651
<i>Credit derivatives/securities</i>	-	1 238 585	4 926 440	6 165 025
<i>Equity and index securities</i>	-	16 943 347	18 036 519	34 979 866
<i>Foreign exchange instruments/securities</i>	-	1 694 892	819 926	2 514 818
<i>Interest rate instruments/securities</i>	-	2 332 615	3 122 212	5 454 827
<i>Other financial instruments</i>	-	114 003	1 415 196	1 529 199
- Trading derivatives	-	3 339 841	198 561	3 598 402
<i>Equity and Index instruments</i>	-	3 081 133	162 233	3 243 366
<i>Other financial instruments</i>	-	318 708	36 328	355 036
Financial liabilities at fair value through profit or loss				
- Designated at fair value through profit or loss	-	23 373 363	28 331 329	51 704 692
<i>Commodities instruments</i>	-	1 053 248	15 403	1 068 651
<i>Credit derivatives/securities</i>	-	1 238 180	4 925 442	6 163 622
<i>Equity and index securities</i>	-	16 940 816	18 033 305	34 974 121
<i>Foreign exchange instruments/securities</i>	-	1 694 440	819 850	2 514 290
<i>Interest rate instruments/securities</i>	-	2 332 611	3 122 170	5 454 781
<i>Other financial instruments</i>	-	114 068	1 415 159	1 529 227
- Trading derivatives	-	3 420 668	202 007	3 622 675
<i>Equity and Index instruments</i>	-	3 099 613	164 928	3 264 541
<i>Other financial instruments</i>	-	321 055	37 079	358 134

Notes to the condensed interim financial statements
as at 30 June 2019
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As at 31 December 2018, the Company determined the fair values of its financial instruments on the basis of the following hierarchy:

31.12.2018 - EUR' 000	Level 1	Level 2	Level 3	Total
<i>Financial assets at fair value through profit or loss</i>				
- <i>Mandatorily at fair value through profit or loss</i>	-	20 606 194	24 455 940	45 062 134
<i>Commodities instruments</i>	-	1 160 486	40 872	1 201 358
<i>Credit derivatives/securities</i>	-	1 509 044	4 490 176	5 999 220
<i>Equity and index securities</i>	-	15 226 349	15 031 332	30 257 681
<i>Foreign exchange instruments/securities</i>	-	793 456	779 644	1 573 100
<i>Interest rate instruments/securities</i>	-	1 626 581	2 624 148	4 250 729
<i>Other financial instruments</i>	-	290 278	1 489 768	1 780 046
- <i>Trading derivatives</i>	-	4 050 694	117 668	4 168 362
<i>Equity and Index instruments</i>	-	3 573 416	94 142	3 667 557
<i>Other financial instruments</i>	-	477 278	23 526	500 805
<i>Financial liabilities at fair value through profit or loss</i>				
- <i>Designated at fair value through profit or loss</i>	-	20 599 491	24 454 237	45 053 728
<i>Commodities instruments</i>	-	1 160 486	40 872	1 201 358
<i>Credit derivatives/securities</i>	-	1 508 480	4 488 869	5 997 349
<i>Equity and index securities</i>	-	15 221 303	15 031 014	30 252 317
<i>Foreign exchange instruments/securities</i>	-	792 379	779 568	1 571 947
<i>Interest rate instruments/securities</i>	-	1 626 565	2 624 147	4 250 712
<i>Other financial instruments</i>	-	290 278	1 489 767	1 780 045
- <i>Trading derivatives</i>	-	4 052 818	117 668	4 170 486
<i>Equity and Index instruments</i>	-	3 574 563	94 142	3 668 705
<i>Other financial instruments</i>	-	478 255	23 526	501 781

SG Issuer
Société Anonyme

Notes to the condensed interim financial statements
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The following table describes the variation in Level 3 by financial instruments

Financial liabilities at fair value through profit or loss	Balance at 01.01.2019	Acquisitions	Change in fair value	Reimbursements/ Other	Transfers from Level 2 to Level 3	Transfers from Level 3 to Level 2	Offsetting of the assets and liabilities	Balance 30.06.2019
<i>Designated at fair value through profit or loss</i>	24 454 237	21 693 529	4 258 082	(6 982 740)	401 684	(2 297 952)	(13 195 511)	28 331 329
Equity and index instrument	15 031 014	18 559 296	3 293 959	(5 629 676)	269 139	(1 855 195)	(11 635 232)	18 033 305
Commodity instruments	40 872	93	1 366	(29 379)	-	-	2 451	15 403
Credit derivatives	4 488 869	1 338 946	429 010	(416 004)	37 917	(311 154)	(642 142)	4 925 442
Foreign exchange instruments	779 568	117 881	16 389	(71 615)	-	(10 259)	(12 114)	819 850
Interest rate instruments	2 624 147	1 449 474	421 111	(390 001)	75 488	(116 628)	(941 421)	3 122 170
Other financial instruments	1 489 767	227 839	96 247	(446 065)	19 140	(4 716)	32 947	1 415 159
<i>Trading derivatives</i>	117 668	87 209	10 448	(22 461)	15 930	(1 479)	(4 768)	202 007
Equity and index instruments	94 142	79 264	1 265	(18 901)	15 930	(1 479)	(4 753)	164 928
Other financial instruments	23 526	7 945	9 183	(3 560)	-	-	(15)	37 079

Transfers from Level 3 to Level 2

The consensus data provided by external counterparties are considered observable if the underlying market is liquid and if the prices provided are confirmed by actual transactions. For high maturities, these consensus data are not observable. This is the case for the implied volatility used for the valuation of options with maturities of more than five years. However, when the residual maturity of the instrument falls below five years, its fair value becomes sensitive to observable parameters.

Transfers from Level 2 to Level 3

Transfers from Level 2 to Level 3 can occur in case of a modification within a parameter (no longer linked to the deal, modification of the observability rule of the parameter, etc...).

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as at 30 June 2019
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10.6. Operational risk

Operational risk is the risk of loss or fraud caused by defects or failures in internal procedures or systems, human error or external events, including IT risk and management risk. Particular attention is paid to compliance risk, which receives enhanced monitoring.

The Company participates in the effort to strengthen the management and monitoring of operational risk led by the Société Générale Group. This effort is guided by the Operational Risk Department, which reports to the Société Générale Group Risk Department, and is relayed by different Group operational risk monitoring units responsible for implementing the policies and directives issued by the Société Générale Group and monitoring and controlling operational risks.

The monitoring arrangement mainly relies on four processes supervised by the operational risk departments: periodic risk and control self-assessment (RCSA), collecting internal data on losses due to operational errors with exhaustive real-time reporting of incidents, pattern analyses, and permanent control system.

These procedures are supplemented by a crisis management unit and a business continuity plan.

Notes to the condensed interim financial statements
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NOTE 11 – SUBSEQUENT EVENTS

There were no subsequent events which could have a significant impact on the condensed interim financial statements as at 30 June 2019.

APPENDIX III

REPRODUCTION OF THE GUARANTOR'S AUDITED CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2019

The information set out below is a reproduction of the Guarantor's audited consolidated financial statements for the year ended 31 December 2019.

6.1 CONSOLIDATED FINANCIAL STATEMENTS

6.1.1 CONSOLIDATED BALANCE SHEET - ASSETS

(In EURm)		31.12.2019	31.12.2018
Cash, due from central banks		102,311	96,585
Financial assets at fair value through profit or loss	Notes 3.1, 3.2 and 3.4	385,739	365,550
Hedging derivatives	Notes 3.2 and 3.4	16,837	11,899
Financial assets at fair value through other comprehensive income	Notes 3.3 and 3.4	53,256	50,026
Securities at amortised cost	Notes 3.5, 3.8 and 3.9	12,489	12,026
Due from banks at amortised cost	Notes 3.5, 3.8 and 3.9	56,366	60,588
Customer loans at amortised cost	Notes 3.5, 3.8 and 3.9	450,244	447,229
Revaluation differences on portfolios hedged against interest rate risk		401	338
Investments of insurance companies	Note 4.3	164,938	146,768
Tax assets	Note 6	5,779	5,819
Other assets	Note 4.4	68,045	67,446
Non-current assets held for sale	Note 2.5	4,507	13,502
Investments accounted for using the equity method		112	249
Tangible and intangible fixed assets ⁽¹⁾	Note 8.4	30,652	26,751
Goodwill	Note 2.2	4,627	4,652
TOTAL		1,356,303	1,309,428

(1) As a result of the application of IFRS 16 "Leases" as from 1 January 2019, the Group has recorded a right-of-use asset under "Tangible and intangible fixed assets" that represents its rights to use the underlying leased assets (see Note 1).

6.1.2 CONSOLIDATED BALANCE SHEET - LIABILITIES

(In EURm)		31.12.2019	31.12.2018
Due to central banks		4,097	5,721
Financial liabilities at fair value through profit or loss	Notes 3.1, 3.2 and 3.4	364,129	363,083
Hedging derivatives	Notes 3.2 and 3.4	10,212	5,993
Debt securities issued	Notes 3.6 and 3.9	125,168	116,339
Due to banks	Notes 3.6 and 3.9	107,929	94,706
Customer deposits	Notes 3.6 and 3.9	418,612	416,818
Revaluation differences on portfolios hedged against interest rate risk		6,671	5,257
Tax liabilities ⁽¹⁾	Note 6	1,409	1,157
Other liabilities ⁽²⁾	Note 4.4	85,062	76,629
Non-current liabilities held for sale	Note 2.5	1,333	10,454
Insurance contracts related liabilities	Note 4.3	144,259	129,543
Provisions	Note 8.3	4,387	4,605
Subordinated debts	Note 3.9	14,465	13,314
TOTAL LIABILITIES		1,287,733	1,243,619
SHAREHOLDERS' EQUITY			
Shareholders' equity, Group share			
Issued common stocks and capital reserves		21,969	20,746
Other equity instruments		9,133	9,110
Retained earnings*		29,558	28,085
Net income*		3,248	4,121
SUB-TOTAL		63,908	62,062
Unrealised or deferred gains and losses	Note 7.3	(381)	(1,036)
SUB-TOTAL EQUITY, GROUP SHARE		63,527	61,026
Non-controlling interests	Note 2.3	5,043	4,783
TOTAL EQUITY		68,570	65,809
TOTAL		1,356,303	1,309,428

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

(1) Since 1 January 2019, provisions for income tax are presented under "Tax liabilities" as a consequence of the application of IFRIC 23 "Uncertainty over income tax treatments" (see Note 1).

(2) As a result of the application of IFRS 16 "Leases" as from 1 January 2019, the Group has recorded a lease liability under "Other Liabilities" that represents the obligation to make lease payments (see Note 1).

6.1.3 CONSOLIDATED INCOME STATEMENT

(In EURm)		2019	2018
Interest and similar income	Note 3.7	23,712	22,678
Interest and similar expense	Note 3.7	(12,527)	(11,659)
Fee income	Note 4.1	9,068	9,124
Fee expense	Note 4.1	(3,811)	(3,600)
Net gains and losses on financial transactions		4,460	5,189
o/w net gains and losses on financial instruments at fair value through profit or loss	Note 3.1	4,343	5,119
o/w net gains and losses on financial instruments at fair value through other comprehensive income	Note 3.3	119	83
o/w net gains and losses from the derecognition of financial assets at amortised cost		(2)	(13)
Net income of insurance activities	Note 4.3	1,925	1,724
Income from other activities	Note 4.2	11,629	10,761
Expenses from other activities	Note 4.2	(9,785)	(9,012)
Net banking income		24,671	25,205
Personnel expenses	Note 5	(9,955)	(9,561)
Other operating expenses	Note 8.2	(6,285)	(7,366)
Amortisation, depreciation and impairment of tangible and intangible fixed assets	Note 8.4	(1,487)	(1,004)
Gross operating income		6,944	7,274
Cost of risk	Note 3.8	(1,278)	(1,005)
Operating income		5,666	6,269
Net income from investments accounted for using the equity method	Note 2.3	(129)	56
Net income/expense from other assets		(327)	(208)
Earnings before tax		5,210	6,117
Income tax*	Note 6	(1,264)	(1,304)
Consolidated net income*		3,946	4,813
Non-controlling interests		698	692
Net income, Group share*		3,248	4,121
Earnings per ordinary share	Note 7.2	3.05	4.24
Diluted earnings per ordinary share	Note 7.2	3.05	4.24

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

6.1.4 STATEMENT OF NET INCOME AND UNREALISED OR DEFERRED GAINS AND LOSSES

(In EURm)	2019	2018
Consolidated net income*	3,946	4,813
Unrealised or deferred gains and losses that will be reclassified subsequently into income	844	24
Translation differences	563	370
Revaluation of debt instruments at fair value through other comprehensive income	(28)	(233)
<i>Revaluation differences for the period</i>	48	(193)
<i>Reclassified into income</i>	(76)	(40)
Revaluation of available-for-sale financial assets ⁽¹⁾	188	(74)
<i>Revaluation differences for the period</i>	190	(54)
<i>Reclassified into income</i>	(2)	(20)
Revaluation of hedging derivatives	153	(120)
<i>Revaluation differences of the period</i>	195	(156)
<i>Reclassified into income</i>	(42)	36
Unrealised gains and losses of entities accounted for using the equity method	1	1
Related tax	(33)	80
Unrealised or deferred gains and losses that will not be reclassified subsequently into income	(160)	411
Actuarial gains and losses on defined benefit plans	(32)	30
Revaluation of own credit risk of financial liabilities at fair value through profit or loss	(121)	529
Revaluation of equity instruments at fair value through other comprehensive income	(48)	1
Unrealised gains and losses of entities accounted for using the equity method	3	(3)
Related tax	38	(146)
Total unrealised or deferred gains and losses	684	435
Net income and unrealised or deferred gains and losses*	4,630	5,248
<i>o/w Group share*</i>	3,903	4,588
<i>o/w non-controlling interests</i>	727	660

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

(1) Unrealised gains and losses on available-for-sale financial assets are related exclusively to insurance activities.

6.1.5 CHANGES IN SHAREHOLDERS' EQUITY

(In EURm)	Shareholders' equity Group share					Total	Non-controlling interests	Total consolidated shareholders' equity
	Issued common stocks and capital reserves	Other equity instruments	Retained earnings	Net income, Group share	Unrealised or deferred gains and losses			
Shareholders' equity at 1 January 2018	20,861	8,566	30,504	-	(1,503)	58,428	4,523	62,951
Increase in common stock and issuance/redemption/remuneration of equity instruments*	-	544	(715)	-	-	(171)	(33)	(204)
Elimination of treasury stock	(174)	-	(12)	-	-	(186)	-	(186)
Equity component of share-based payment plans	59	-	-	-	-	59	-	59
2018 dividends paid (see Note 7.2)	-	-	(1,764)	-	-	(1,764)	(368)	(2,132)
Effect of changes of the consolidation scope	-	-	52	-	-	52	(5)	47
Sub-total of changes linked to relations with shareholders*	(115)	544	(2,439)	-	-	(2,010)	(406)	(2,416)
2018 Net income*	-	-	-	4,121	-	4,121	692	4,813
Change in unrealised or deferred gains and losses	-	-	-	-	467	467	(32)	435
Other changes	-	-	20	-	-	20	6	26
Sub-total	-	-	20	4,121	467	4,608	666	5,274
Shareholders' equity at 31 December 2018*	20,746	9,110	28,085	4,121	(1,036)	61,026	4,783	65,809
Allocation to retained earnings	-	-	4,114	(4,121)	7	-	-	-
Shareholders' equity at 1 January 2019	20,746	9,110	32,199	-	(1,029)	61,026	4,783	65,809
Increase in common stock and issuance/redemption/remuneration of equity instruments (see Note 7.1)	1,011	23	(731)	-	-	303	(33)	270
Elimination of treasury stock (see Note 7.1)	152	-	(77)	-	-	75	-	75
Equity component of share-based payment plans (see Note 5.3)	60	-	-	-	-	60	-	60
2019 dividends paid (see Note 7.2)	-	-	(1,770)	-	-	(1,770)	(379)	(2,149)
Effect of changes of the consolidation scope	-	-	(10)	-	-	(10)	(56)	(66)
Sub-total of changes linked to relations with shareholders	1,223	23	(2,588)	-	-	(1,342)	(468)	(1,810)
2019 Net income	-	-	-	3,248	-	3,248	698	3,946
Change in unrealised or deferred gains and losses	-	-	-	-	648	648	31	679
Other changes	-	-	(53)	-	-	(53)	(1)	(54)
Sub-total	-	-	(53)	3,248	648	3,843	728	4,571
Shareholders' equity at 31 December 2019	21,969	9,133	29,558	3,248	(381)	63,527	5,043	68,570

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

6.1.6 CASH FLOW STATEMENT

(In EURm)	2019	2018**
Consolidated net income (I)*	3,946	4,813
Amortisation expense on tangible and intangible fixed assets (including operational leasing)	5,181	4,589
Depreciation and net allocation to provisions	(3,284)	2,343
Net income/loss from investments accounted for using the equity method	129	(53)
Change in deferred taxes	295	357
Net income from the sale of long-term assets and subsidiaries	(84)	(101)
Other changes*	1,295	(358)
Non-cash items included in net income and other adjustments excluding income on financial instruments at fair value through profit or loss (II)	3,532	6,777
Income on financial instruments at fair value through profit or loss	5,267	4,901
Interbank transactions	14,554	(1,921)
Customers transactions	5,429	(11,732)
Transactions related to other financial assets and liabilities	(36,748)	(1,598)
Transactions related to other non-financial assets and liabilities	14,424	(4,643)
Net increase/decrease in cash related to operating assets and liabilities (III)	2,926	(14,993)
Net cash inflow (outflow) related to operating activities (A) = (I) + (II) + (III)	10,404	(3,403)
Net cash inflow (outflow) related to acquisition and disposal of financial assets and long term investments	234	(5,758)
Net cash inflow (outflow) related to tangible and intangible fixed assets	(7,210)	(7,621)
Net cash inflow (outflow) related to investment activities (B)	(6,976)	(13,379)
Cash flow from/to shareholders	(1,219)	(2,543)
Other net cash flow arising from financing activities	3,229	(471)
Net cash inflow (outflow) related to financing activities (C)	2,010	(3,014)
Effect of changes in foreign exchange rates on cash and cash equivalents (D)	1,386	2,179
Net inflow (outflow) in cash and cash equivalents (A) + (B) + (C) + (D)	6,824	(17,617)
Cash, due from central banks (assets)	96,585	114,404
Due to central banks (liabilities)	(5,721)	(5,604)
Current accounts with banks (see Notes 3.5 and 4.3)	24,667	22,159
Demand deposits and current accounts with banks (see Note 3.6)	(13,875)	(11,686)
Cash and cash equivalents at the start of the year	101,656	119,273
Cash, due from central banks (assets)	102,311	96,585
Due to central banks (liabilities)	(4,097)	(5,721)
Current accounts with banks (see Notes 3.5 and 4.3)	21,843	24,667
Demand deposits and current accounts with banks (see Note 3.6)	(11,577)	(13,875)
Cash and cash equivalents at the end of the year	108,480	101,656
Net inflow (outflow) in cash and cash equivalents	6,824	(17,617)

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

** The amounts have been restated compared with the published consolidated financial statements for the year ended 31 December 2018 due to reclassification into a separate line item (D) of the effect of changes in foreign exchange rates on cash and cash equivalents.

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6.2 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors on 5 February 2020.

NOTE 1 SIGNIFICANT ACCOUNTING PRINCIPLES

NOTE 1.1 Introduction



ACCOUNTING STANDARDS

In accordance with European Regulation 1606/2002 of 19 July 2002 on the application of International Accounting Standards, the Societe Generale Group ("the Group") prepared its consolidated financial statements for the year ended 31 December 2019 in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and in force at that date.

These standards are available on the European Commission website at:

https://ec.europa.eu/info/law/international-accounting-standards-regulation-ec-no-1606-2002/amending-and-supplementary-acts/acts-adopted-basis-regulatory-procedure-scrutiny-rps_en

The most significant change made to the applied accounting principles is the application of IFRS 16 "Leases" as from 1 January 2019.

In accordance with the transitional measures provided by IFRS 9, the Group has elected to recognise hedging transactions under IAS 39 as adopted by the European Union, including measures related to macro-fair value hedge accounting (IAS 39 "carve-out").



FINANCIAL STATEMENTS PRESENTATION

As the IFRS accounting framework does not specify a standard model, the format of the primary financial statements used to present the data for financial year 2019 is consistent with the format of financial statements proposed by the French Accounting Standard Setter, the *Autorité des Normes Comptables* (ANC), under Recommendation No. 2017-02 of 2 June 2017.

The disclosures provided in these notes focus on information that is both relevant and material to the financial statements of the Societe Generale group, its activities and the circumstances in which it conducted its operations over the period.



PRESENTATION CURRENCY

The presentation currency of the consolidated financial statements is the euro.

The figures presented in the financial statements and in the notes are expressed in millions of euros, unless otherwise specified. The effect of rounding can generate discrepancies between the figures presented in the financial statements and those presented in the notes.

NOTE 1.2 New accounting standards applied by the Group as of 1st January 2019

IFRS 16 "Leases"

IFRIC 23 "Uncertainty over Income Tax Treatments"

Annual improvements (2015-2017 cycle)

Amendments to IAS 39, IFRS 7 and IFRS 9 in the context of the interest rate benchmark reform

Amendments to IAS 28 "Long-term Interests in Associates and Joint Ventures"

Amendments to IAS 19 "Plan amendments, curtailments and settlements"

IFRS 16 "LEASES"

This new standard supersedes the existing standard, IAS 17 and modifies the accounting requirements for leases, more specifically in relation to the lessees' financial statements, with very few impacts for the lessors.

As from 1 January 2019, the Group applies the IFRS 16 standard adopted by the European Union on 31 October 2017. The Group did not early apply the measures provided by IFRS 16 to previous reporting period. Consequently, the accounting principles applicable to leases and the disclosures presented in the notes have been amended as from 1 January 2019.

Accounting treatments provided by IFRS 16 standard**LEASES RECOGNITION**

For all lease agreements, except the exemptions provided by the standard, the lessee is required to recognise a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments.

In its income statement, the lessee separately recognises the depreciation of the right-of-use assets and the interest expense on lease liabilities.

The accounting treatments are detailed in the Note 8.4.

SCOPE

Regards Group's activities, these accounting treatments apply to building leases, computer equipment leases and a very small percentage of vehicle leases. The Group used the option not to apply IFRS 16 to intangible assets leases (softwares for example).

Transition requirements

For the first-time application of IFRS 16, the Group chose to implement the amended retrospective approach proposed by the standard.

At 1 January 2019, the amount of the lease liability on outstanding leases is calculated by discounting residual rental payments with the incremental borrowing rates in effect on that date of the lessees' entities (rates determined according to the requirements described on the Note 8.4), taking into account the residual maturity of the contracts. The corresponding rights-of-use are recorded on the balance sheet for an amount equal to the lease liability.

Leases that have a remaining life of less than 12 months and those that are automatically renewable as of 1 January 2019 are considered short-term leases (leases of less than one year) and not booked, in accordance with the option offered by IFRS 16 transition requirements.

Pursuant to IFRS 16 in its provisions on the amended retrospective approach, comparative data on financial year 2018 that are presented with regards to 2019 are not restated.

Impacts of the first-time application of IFRS 16

The first-time application of IFRS 16 resulted by the accounting of a lease liability and a corresponding right-of-use asset for 2,050 million of euros.

The lease liability is booked under the heading *Other liabilities* and the rights-of-use are classified under the tangible fixed assets, except leases included in a group of assets and liabilities held for sale which are stated under specific headings in the consolidated financial statement.

At 1 January 2019, the first-time application of IFRS 16 has no impact on the amount of the Group shareholders' equity.

On the date of the initial recording of the right-of-use and the lease liability, no deferred tax has been recorded since the deferred tax asset value equals to the deferred tax liability value. The net temporary differences that may result from subsequent changes in the right-of-use and lease liability results in the recognition of deferred tax.

IMPACTS ON THE BALANCE SHEET AT 1 JANUARY 2019

(In EURm)

01.01.2019

Assets		
Other assets		(3)
Non-current assets held for sale	(c)	42
Tangible and intangible fixed assets	(a)	2,011
TOTAL IFRS 16 IMPACTS		2,050
Liabilities		
Other liabilities	(b)	2,008
Non-current liabilities held for sale	(c)	42
TOTAL IFRS 16 IMPACTS		2,050

At 1 January 2019, the first-time application of IFRS 16 results from:

- (a) An increase of 2,011 million euros of the *Tangible and intangible fixed assets* heading which breaks down into:
- An increase of 2,118 million euros of tangible fixed assets due to:
 - the rights-of-use booking of 2,110 million euros linked to the accounting in the balance sheet of leases concerning the following underlying assets:
 - 2,012 million euros linked to building leases contracted for the lease of French and international commercial (branches in the retail banking networks) and office space;
 - 93 million euros relative to computer equipment leases (of which 83 million euros for the Data Centers);
 - 5 million euros concerning vehicle leases;
 - the reclassification for 107 million euros of the leaseholds linked to leases, previously booked under the intangible fixed assets and stated as a separate component of the right-of-use;
 - the reclassification for -102 million euros, mainly composed of 99 million euros of deferred revenues related to rent-free periods, previously recognised under *Other liabilities*;
 - the reclassification from *Other assets* of prepaid expenses for 3 million euros concerning the prepaid rents.
 - a decrease of 107 million euros of intangible fixed assets relative to the reclassification of leaseholds.
- (b) An increase of 2,008 million euros of *Other liabilities* linked to the following movements:
- the recognition of a lease liability for 2,110 million euros;
 - the reclassification of the rent-free periods for 102 million euros, including 99 million euros of the deferred revenues related to rent-free periods.
- (c) The accounting of rights-of-use and lease liability for 42 million euros by entities whose assets and liabilities are classified as *Non-current assets held for sale* and *Non-current liabilities related to non-current assets held for sale*.

RECONCILIATION OF AMOUNT OF THE FUTURE MINIMUM OPERATING LEASE PAYMENTS REPORTED AT 31 DECEMBER 2018 WITH THE AMOUNT OF THE LEASE LIABILITY BOOKED AT 1 JANUARY 2019

The table below aims to reconcile:

- the future minimum operating lease payments related to operating lease contracts on tangible assets used by the Group at 31 December 2018; and
- the lease liability recognised in the statement of financial position at 1 January 2019 applying IFRS 16.

(In EURm)

Future minimum operating lease payments related to operating lease contracts at 31 December 2018	2,388
Lease contracts not booked in the statement of financial position ⁽¹⁾	(38)
Non-discounted lease liability at 1 January 2019	2,350
Discount effect	(214)
Discount rate ⁽²⁾	2.74%
Scope effect ⁽³⁾	16
DISCOUNTED LEASE LIABILITY AT 1 JANUARY 2019⁽⁴⁾	2,152

(1) Short-term contracts or contracts on low-value items.

(2) The discount rate in the table corresponds to the weighted average lessee's incremental borrowing rate.

(3) Lease liability booked at 1 January 2019 relative to leases whose minimum operating lease payments had been excluded because of materiality issue from the amount stated in the Notes as of 31 December 2018.

(4) This amount excludes the lease liability stated under "Other liabilities" (2,110 million euros) and under "Non-current liabilities held for sale" (42 million euros).

IFRS INTERPRETATIONS COMMITTEE (IFRS IC) DECISIONS ON 26 NOVEMBER 2019

In the first half of 2019, IFRS IC received a request regarding the determination of the enforceable period to be used for the accounting of leases. At its meeting on 26 November 2019, IFRS IC concluded that the principles and requirements of IFRS 16 provide an adequate basis to determine the lease term, while indicating that the assessment of the enforceability of the contract must take into account all the economic aspects of the contract and not only the contractual termination penalties. Consequently, IFRS IC decided not to add the matter to its work program and did not consider it necessary to solicit the IASB (International Accounting Standards Board) for an amendment to clarify the interpretation of IFRS 16 regarding the matter.

The analysis of the potential consequences of this decision on the Group's financial statements is ongoing and will continue in the first half of 2020. As of 31 December 2019, the methods and assumptions used by the Group to determine the term of property leases, and in particular that of commercial leases in France, have not been modified from those implemented since the first application of IFRS 16.

IFRIC 23 "UNCERTAINTY OVER INCOME TAX TREATMENTS"

This interpretation provides clarifications about the measurement and accounting treatment of income tax when there is uncertainty over income tax treatments. It must be determined whether the treatment is likely to be accepted by the relevant authorities, on the basis that they will control the treatment in question and have all the relevant information. If the probability of acceptance of the tax treatment is less than 50%, this uncertainty must be reflected in the amount of tax assets and liabilities, based on a method that provides the best predictions of the resolution of the uncertainty.

To comply with these new principles, the process for identifying, analysing and monitoring tax uncertainties has been reviewed. This interpretation has no impact on the amount of the Group shareholders' equity at 1 January 2019 but leads as from this date to reclassification of the provisions for income tax adjustments in *Tax liabilities*.

ANNUAL IMPROVEMENTS (2015-2017)

As part of the annual Improvements to International Financial Reporting Standards, the IASB has issued amendments to IFRS 3 "Business Combinations", IFRS 11 "Joint Arrangements", IAS 12 "Income Taxes" and IAS 23 "Borrowing Costs".

The objective of the amendment to IAS 12 is to clarify the accounting for the tax consequences of remuneration paid to equity holders. It is now specified that the accounting of these tax consequences is linked more directly to past transactions or events that generated distributable profits than to distributions to owners.

The application of this amendment has resulted in a reclassification in the income statement (under the heading *Income tax*) of the tax savings related to the payment of coupons to holders of perpetual subordinated and deeply subordinated notes previously accounted in the retained earnings. This change in presentation is carried out retrospectively with a restatement of comparative data. The amount of tax savings amounted to 257 million euros at 31 December 2018 and 259 million euros at 31 December 2019.

The other amendments contained in the annual Improvements cycle (2015 -2017) did not have a significant impact on the Group consolidated financial statements.

AMENDMENTS TO IAS 39, IFRS 7 AND IFRS 9 IN THE CONTEXT OF THE INTEREST RATE BENCHMARK REFORM

In the context of the financial crisis, the inaccuracy and lack of integrity of interest rate benchmarks (EONIA, EURIBOR, LIBOR, etc.) made it necessary to reform their method of determination.

At the international level, the International Organisation of Securities Commissions (IOSCO) has set principles to make the determination of interest rate benchmark more reliable and the Financial Stability Board (FSB), mandated by the G20, has issued recommendations to enhance the transparency, the representativeness and the reliability of these rates. On the basis of these principles and recommendations, several reforms have been initiated to set up and promote the use of new Risk Free overnight Rates called "Risk Free Rate - RFR" whose determination will now be anchored on actual transactions: €STR (*Euro Short-Term Rate*) for contracts denominated in Euro, SOFR (*Secured Overnight Financing Rate*) for contracts denominated in USD, SONIA (*Sterling Overnight Index Average*) for contracts denominated in GBP, etc.

Within the European Union, regulation 2016/1011 (known as "BMR regulation") was passed to implement the principles and recommendations of IOSCO and FSB by creating, as of 1 January 2018, a uniform legal framework regarding the provision of benchmarks. As part of the implementation of this regulation, the administrators of EONIA, EURIBOR and LIBOR were required to review and, if necessary, to modify the methodologies used for these indexes in order to make them compliant to the new BMR provisions.

Since 2 October 2019, €STER has come to replace EONIA; this latter will however be published until 31 December 2021 by anchoring on €STER (EONIA = €STER +8.5 bps). The reform of the EURIBOR was started in December 2018 and this index was declared compliant with BMR regulation on 3 July 2019. The EURIBOR quotation should continue for at least 5 years. The new SOFR and SONIA benchmarks, intended to replace the LIBOR benchmarks, have been published since 2018, but the publication of the latter will continue at least until 2021.

The Group has set up a project structure to monitor developments in the interest rate benchmarks IBOR reform and to anticipate the consequences of the transition to new interest rate benchmarks. The work undertaken aims on one hand to limit the Group's exposure to the current interbank interest rate benchmarks which might be discontinued in the short or medium term and, on the other hand, to prepare the migration of the stock of legacy transactions identifying these current interest rates benchmarks and which will mature after 2021.

Uncertainties about the timing and the precise methods of transition between the current benchmarks and the new benchmarks, as well as the modifications which could be made to the financial instruments referencing the current benchmarks, are likely to have consequences on accounting treatment related to the hedge accounting, and to the modification applied to these instruments (following the application of replacement contractual clauses - "Fallback" clauses - or following a renegotiation of the contract).

To limit these accounting consequences, the IASB published in September 2019 amendments to IAS 39, IFRS 9 and IFRS 7 to prevent uncertainties existing before the transition from jeopardising the hedge accounting applied for hedging interest rate risk. These amendments introduce reliefs related mainly to the compliance with the highly probable nature of the cash flows covered, the compliance with the identifiable nature of the risk covered, the carrying out of prospective and retrospective effectiveness tests. These reliefs will be applicable until the uncertainties referred to are removed, that is to say until the clauses of the financial instruments concerned are effectively modified.

These amendments were adopted by the European Union on 15 January 2020 and can be early-applied from 2019. The Group

decided to early-apply the amendments in its 31 December 2019 financial statements and to use the reliefs provided for hedging relationships affected by the uncertainties at that date, including those linked to the EONIA, EURIBOR and LIBOR (USD, GBP, CHF, JPY) benchmarks. The hedging derivatives instruments to which these amendments have been applied are subject to specific disclosures in Note 3.2.

The IASB is currently studying the additional amendments that could be made to the accounting treatment of the contractual modifications that will be made to financial instruments as part of the IBOR reform (replacement of the interest rate benchmark, introduction of new fallback clauses). An exposure draft is expected to be issued at the end of the 2nd quarter 2020.

The amendments described below did not have any impact on the Group consolidated financial statements.

AMENDMENTS TO IAS 28 "LONG-TERM INTERESTS IN ASSOCIATES AND JOINT VENTURES"

The amendments clarify that IFRS 9 "Financial Instruments" shall be applied to financial instruments that form part of the net investment in an associate or a joint venture but to which the equity method is not applied.

AMENDMENTS TO IAS 19 "PLAN AMENDMENT, CURTAILMENT OR SETTLEMENT"

These amendments clarify how pension expenses are determined in the event of amendment, curtailment or settlement of defined benefit pension plans. In these cases, IAS 19 currently calls for the net cost of the defined benefit asset or liability to be remeasured.

The amendments require the entity to use the updated actuarial assumptions from this remeasurement to determine past service cost and net interest.

NOTE 1.3 Accounting standards, amendments or interpretations to be applied by the Group in the future

IASB publishes accounting standards and amendments, some of which have not been adopted by the European Union as at 31 December 2019. They are required to be applied from annual periods beginning on 1 January 2020 at the earliest or on the date of their adoption by the European Union.

These standards are expected to be applied according to the following schedule:

2020	• Amendments to IAS 1 and IAS 8 "Definition of material" [Adopted by EU] • Amendments to IFRS 3 "Business Combinations"
2021	• IFRS 17 "Insurance Contracts"

AMENDMENTS TO IAS 1 AND IAS 8 "DEFINITION OF MATERIAL"

Adopted by the European Union on 29 November 2019

These amendments are intended to clarify the definition of "material" in order to facilitate the exercise of judgement during the preparation financial statements, particularly when selecting the information to be presented in the Notes.

AMENDMENTS TO IFRS 3 "BUSINESS COMBINATIONS"

Issued by IASB on 22 October 2018

The amendments are intended to provide clearer application guidance to make it easier to differentiate between the acquisition of a business and the acquisition of a group of assets, whose accounting treatment is different.

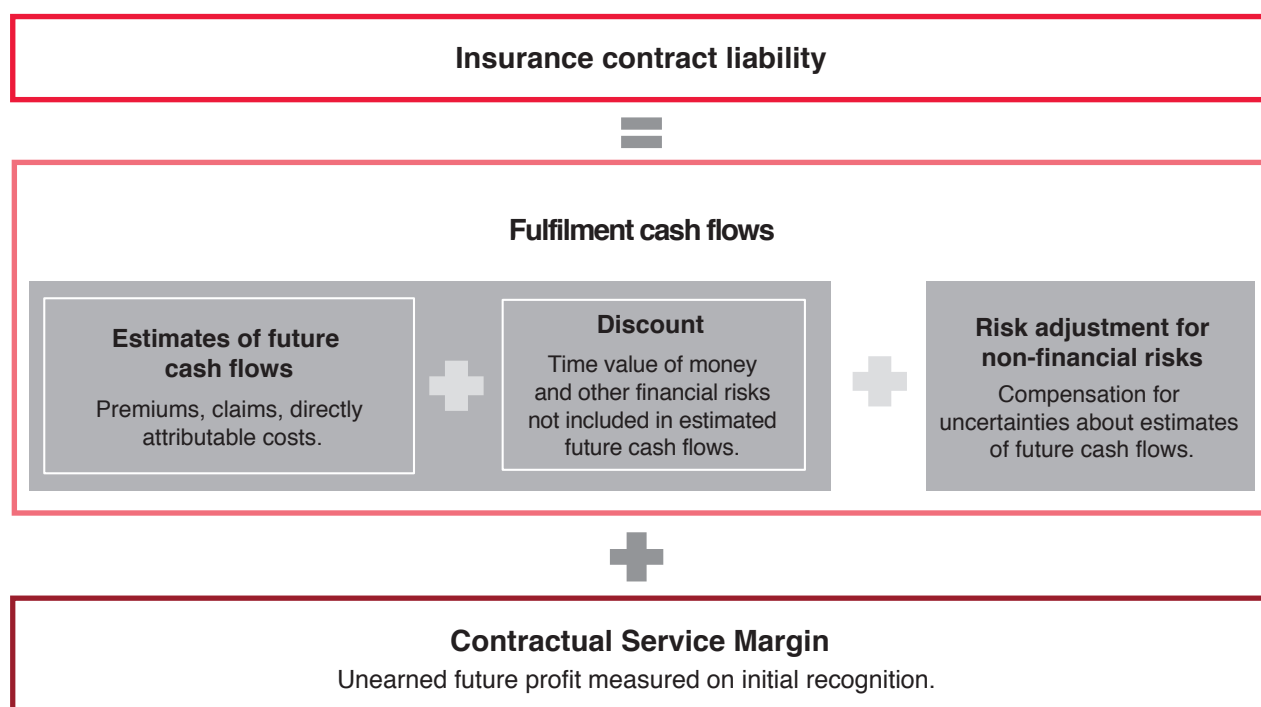
IFRS 17 "INSURANCE CONTRACTS"

Issued by IASB on 18 May 2017

This new standard will replace IFRS 4 "Insurance Contracts" that was issued in 2004 and which currently allows entities to use national requirements for the accounting of insurance contracts.

IFRS 17 provides new rules for the recognition, measurement, presentation and disclosure of insurance contracts that belong to its application scope (insurance contracts issued, reinsurance contracts held and investment contracts issued with discretionary participation features). The underwriting reserves currently recognised among liabilities in the balance sheet will be replaced by a current value measurement of insurance contracts.

The general model provided for the measurement of insurance contracts in the balance sheet will be based on a building-blocks approach: a current estimate of future cash flows, a risk adjustment, and a contractual service margin.



Positive contractual service margins will be recognised as income over the duration of the insurance service, whereas negative margins will be immediately recognised as expense, as soon as the insurance contract is identified as onerous.

The general model will be the default measurement model for all insurance contracts.

However, IFRS 17 also provides a mandatory alternative model for insurance contracts with direct participation features. Under this model, called “variable fee approach”, the measurement of the insurance contract liability shall take into account the obligation to pay to policyholders a substantial share of the fair value returns on the underlying items, less a fee for future services provided by the insurance contract (changes in the fair value of underlying items due to policyholders are then recognised as an adjustment of the contractual service margin).

A simplified measurement (premium allocation approach) is also allowed by the standard under conditions for short-term contracts (12 months or less) and contracts for which the result of premium allocation approach is closed to the general approach.

These measurement models will have to be applied to homogeneous portfolios of insurance contracts. The level of aggregation of these portfolios will be assessed considering:

- contracts that are subject to similar risks and managed together;

- the year during which contracts are issued; and
- at initial recognition, contracts that are onerous, contracts that have no significant possibility of becoming onerous subsequently, and the remaining contracts.

On 26 June 2019, the IASB issued an exposure draft including a number of amendments to IFRS 17 “Insurance contracts.” These modifications aim to facilitate the implementation of the standard. In particular, it is proposed to defer the first application date by one year, postponing it to the annual periods beginning on 1 January 2022 with a mandatory comparative period. The Group will not exercise the option offered by IFRS 17 to apply the standard by anticipation. In addition, EFRAG, commenting IASB exposure draft, considers that it would be more realistic to postpone IFRS 17 first application by one more year to 1 January 2023.

During 2018, the Group determined a project framework for the implementation of the new standard in order to identify the stakes and impacts for the Insurance business unit. The project work continued during 2019.

NOTE 1.4 Use of estimates and judgment

When applying the accounting principles disclosed in the following notes for the purpose of preparing the Group's consolidated financial statements, the Management makes assumptions and estimates that may have an impact on the figures recorded in the income statement or among other comprehensive income, on the valuation of assets and liabilities in the balance sheet, and on information disclosed in the notes to the consolidated financial statements.

In order to make these assumptions and estimates, the Management uses the information available at the date of preparation of the consolidated financial statements and can exercise its judgment. By their nature, valuations based on estimates include risks and uncertainties relating to their occurrence in the future. Consequently, actual future results may differ from these estimates and may then have a significant impact on the financial statements.

The use of estimates and judgment mainly concerns the following accounting topics:

- the fair value in the balance sheet of financial instruments not quoted in an active market which are classified as *Financial assets and liabilities at fair value through profit or loss*, *Hedging derivatives*, *Financial assets at fair value through other comprehensive income* or even *Investments of insurance companies* (described in Notes 3.1, 3.2, 3.3, 3.4 and 4.3) and fair value of instruments measured at amortised cost for which this information must be disclosed in the notes to the financial statements (see Note 3.9);
- the amount of impairment and provisions for credit risk related to financial assets measured at amortised cost, or at fair value through other comprehensive income, loan commitments granted and guarantee commitments granted measured with models or internal assumptions based on historical, current and prospective data (see Note 3.8). The uses of estimates and judgment relates in particular to the assessment of the deterioration in credit risk observed since the initial recognition of financial assets and the measurement of the amount of expected credit losses on these same financial assets;
- for the purpose of documenting the related macro fair value hedge accounting, assumptions and amortisation conventions used to determine the maturities of financial assets and liabilities, measuring and monitoring the structural interest rate risks (see Note 3.2);

- the amount of impairment on goodwill (see Note 2.2);
- the provisions recognised under liabilities, underwriting reserves of insurance companies and deferred profit-sharing (see Notes 4.3, 5.2 and 8.3);
- the amount of tax assets and liabilities recognised in the balance sheet (see Note 6);
- the analysis of the contractual cash flow characteristics of financial assets (see Note 3);
- the assessment of control for determining the scope of consolidated entities, especially for structured entities (see Note 2).

In addition, the application of IFRS 16 has led the Group to expand its use of judgment to estimate the lease period to be applied in determining the right-of-use assets and the lease liability.

BREXIT

On 23 June 2016, the United Kingdom European Union Membership referendum took place and the British people voted to leave the European Union (*Brexit*).

After having been postponed several times, the United Kingdom withdrawal agreement was approved by the British Parliament on 9 January 2020 and by the European Parliament on 29 January 2020, coming into effect the 31 January 2020. European Union law will stop applying to the United Kingdom starting 1 January 2021. During the 11-month transition period, the United Kingdom will keep its European Union member status.

The Group has taken all the necessary steps to guarantee service continuity to its customers starting 31 January 2020, and will be following the developments in the negotiations that will be held during the transition period. The Group has taken into account Brexit's short-, medium- and long-term consequences in the hypotheses and estimates retained in the preparation of the annual consolidated financial statements.

NOTE 2 CONSOLIDATION



MAKE IT SIMPLE

The various activities of the Societe Generale group in France and abroad are carried out by Societe Generale – Parent company (which includes the Societe Generale foreign branches) and by all of the entities that it controls either directly or indirectly (subsidiaries and joint arrangements) or on which it exercises significant influence (associates). All of these entities make up the scope of the Group consolidation.

Consolidation uses a standardised accounting process to give an aggregated presentation of the accounts of Societe Generale – Parent company and its subsidiaries, joint arrangements and associates, presented as if they were a single entity.

To do so, the individual accounts of the entities that make up the Group are restated so that they are in accordance with IFRS, as adopted by the European Union, in order to present consistent information in the consolidated financial statements.

In addition, the accounting balances (assets, liabilities, income and expense) generated by transactions between Group entities are eliminated through the consolidation process so that the consolidated financial statements present only the transactions and results made with third parties outside of the Group.

ACCOUNTING PRINCIPLES

The consolidated financial statements of Societe Generale include the financial statements of the parent company and of the main French and foreign companies as well as foreign branches over which the Group exercises control, joint control or significant influence.

Consolidated entities

SUBSIDIARIES

Subsidiaries are the entities over which the Group has exclusive control. The Group controls an entity if and only if the following conditions are met:

- the Group has power over the entity (ability to direct its relevant activities, *i.e.* the activities that significantly affect the entity's returns), through the holding of voting rights or other rights; and
- the Group has exposure or rights to variable returns from its involvement with the entity; and
- the Group has the ability to use its power over the entity to affect the amount of the Group's returns.

Power

When determining voting rights for the purpose of establishing the Group's degree of control over an entity and the appropriate consolidation method, potential voting rights are taken into account where they can be freely exercised at the time the assessment is made or at the latest when decisions about the direction of the relevant activities need to be made. Potential voting rights are instruments such as call options on ordinary shares outstanding on the market or rights to convert bonds into new ordinary shares.

When voting rights are not relevant to determine whether or not the Group controls an entity, the assessment of this control shall consider all the facts and circumstances, including the existence of one or more contractual arrangements. Power over an investee exists only if the investor has substantive rights that give it the current ability to direct relevant activities without barriers.

Some rights are designed to protect the interests of their holder (protective rights) without giving that party power over the investee to which those rights relate.

If several investors each have substantive rights that give them the unilateral ability to direct different relevant activities, the investor that has the current ability to direct the activities that most significantly affect the variable returns of the investee is presumed to have power over the investee.

Exposure to variable returns

Control exists only if the Group is significantly exposed to the variability of variable returns generated by its investment or its involvement in the entity. These returns, which could be dividends, interest, fees, etc., can be only positive, only negative or both positive and negative.

Link between power and returns

Power over the relevant activities does not give control to the Group if this power does not allow it to affect its returns from its involvement with the entity. If the Group has been delegated decision-making rights that it exercises on behalf and for the benefit of third parties (the principals), it is presumed to act as an agent for these principals, and therefore it does not control the entity when it exercises its decision-making power. In asset management activities, an analysis shall be performed in order to determine whether the asset manager is acting as agent or principal when managing the net assets of a fund; the fund is presumed to be controlled by the asset manager if the latter is considered as a principal.

Special case of structured entities

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Such is the case, for example, when the relevant activities are directed by means of contractual arrangements.

A structured entity often presents certain characteristics such as a limited business activity, a specific and carefully defined purpose, or insufficient capital to fund its activities without the use of subordinated financing.

Structured entities may assume different legal forms: stock companies, partnerships, securitisation vehicles, mutual funds, unincorporated entities, etc.

When assessing the existence of control over a structured entity, all facts and circumstances shall be considered among which:

- the purpose and design of the entity;
- the structuring of the entity;
- risks to which the entity is exposed by way of its design and the Group's exposure to some or all of these risks;
- potential returns and benefits for the Group.

Unconsolidated structured entities are those that are not exclusively controlled by the Group.

JOINT ARRANGEMENTS

Through a joint arrangement (either a joint operation or a joint venture) the Group exercises joint control over an entity if decisions about the direction of its relevant activities require the unanimous consent of the parties that collectively control the entity. Assessing joint control requires an analysis of the rights and obligations of all the parties.

In the case of a joint operation, the parties to the arrangement have rights to the assets and obligations for the liabilities.

In the case of a joint venture, the parties have rights to the net assets of the entity.

ASSOCIATES

Associates are companies over which the Group exercises significant influence and are accounted for using the equity method in the Group's consolidated financial statements. Significant influence is the power to participate in the financial and operating policies of an entity without exercising control. In particular, significant influence can result from Societe Generale being represented on the Board of Directors or Supervisory Board, from its involvement in strategic decisions, from the existence of significant intercompany transactions, from the exchange of management staff, or from the company's technical dependency on Societe Generale. The Group is assumed to exercise significant influence over the financial and operating policies of an entity when it directly or indirectly holds at least 20% of the voting rights in this entity.

Consolidation rules and methods

The consolidated financial statements are built up from the financial statements of the entities that are included in the consolidation scope. Companies with a fiscal year ending more than three months before or after that of Societe Generale prepare pro forma statements for a twelve-month period ended 31 December. All significant balances, profits and transactions between Group companies are eliminated.

The results of newly acquired subsidiaries are included in the consolidated financial statements from the date the acquisition became effective and results of subsidiaries disposed of during the fiscal year are included up to the date where the Group relinquished control.

CONSOLIDATION METHODS

The subsidiaries, which may include structured entities over which the Group has exclusive control, are fully consolidated.

In the consolidated balance sheet, full consolidation consists in replacing the value of the subsidiary's equity securities held by the Group with each of the subsidiary's assets and liabilities, in addition to the goodwill recognised when the Group assumed control over the entity (see Note 2.2).

In the income statement and the statement of net income and unrealised or deferred gains and losses, the subsidiary's expense and income items are aggregated with those of the Group.

The share of non-controlling interests in the subsidiary is presented separately in the consolidated balance sheet and income statement. However, in consolidated structured entities that are controlled by the Group, the shares of said entities not held by the Group are recognised as *Debt* in the balance sheet.

In the case of a joint operation, the Group distinctly recognises in its consolidated financial statements its share in the assets and liabilities as well as its share in the related revenue and expense.

Associates and joint ventures are accounted for using the equity method in the consolidated financial statements of the Group. Under the equity method, on initial recognition the investment in an associate is recognised under *Investments accounted for using the equity method* at the cost of the Group's investment in the joint venture or associate, including goodwill and after the date of acquisition the carrying amount is increased or decreased to recognise the changes in the investor's share in the net asset value of the investee.

These investments are tested for impairment if there is objective evidence of impairment. If the recoverable amount of the investment (value in use or market value net of selling costs, whichever is higher) is lower than its carrying amount, an impairment loss is recorded on the balance sheet at the carrying amount of the investment. Impairment allowances and reversals are recorded under *Net income from investments accounted for using the equity method*.

The Group's share in the entity's net income and unrealised or deferred gains and losses is presented on separate lines in the consolidated income statement and the consolidated statement of net income and unrealised or deferred gains and losses. If the Group's share in the losses of an entity consolidated using the equity method becomes greater than or equal to its ownership interest in the Company, the Group ceases to recognise its share in subsequent losses unless it is required to do so by legal or implied obligations, in which case it records a provision for said losses. Capital gains and losses generated on disposal of companies accounted for using the equity method are recorded under *Net income/expense from other assets*.

TRANSLATION OF FOREIGN ENTITY FINANCIAL STATEMENTS

The balance sheet items of consolidated companies reporting in foreign currencies are translated into euro at the official exchange rates prevailing at the closing date. Income statement items of these companies are translated into euros, at the average month-end exchange rates. Gains and losses arising from the translation of capital, reserves, retained earnings and income are recognised under *Unrealised or deferred gains and losses – Translation differences*. Gains and losses arising from the translation of the capital contribution of foreign branches of Group banks are also included in changes in consolidated shareholders' equity under the same heading.

In accordance with the option allowed under IFRS 1, the Group allocated all differences arising on translation of foreign entity financial statements at 1 January 2004 to consolidated reserves. As a result, if any of these entities are sold, the proceeds from the sale will only include write-backs of those translation differences arising since 1 January 2004.

CHANGES IN GROUP'S OWNERSHIP INTEREST IN A CONSOLIDATED ENTITY

In the event of an increase in Group's ownership interest in a subsidiary over which it already exercises control, the differences between the price paid for the additional stake and the assessed fair value of the proportion of net assets acquired at this date is recorded under *Consolidation reserves, Group share*.

The costs related to these transactions are recognised directly in equity.

When the Group loses control of a consolidated subsidiary, any investment retained in the former subsidiary is remeasured at fair value through profit or loss, at the same time the capital gain or loss is recorded under *Net income/expense from assets* in the consolidated income statement. The gains or losses on disposals include a share of goodwill previously allocated to the cash-generating units to which the subsidiary belongs. This share's determination is based on a normative capital allocated to the subsidiary that is sold and to the portion of cash-generating unit that is retained.

Commitments to buy out minority shareholders in fully consolidated subsidiaries

In some fully consolidated Group subsidiaries, the Group has awarded minority shareholders commitments to buy out their stakes. For the Group, these buyout commitments are put option sales (put options without transfer of the risks and advantages associated with the ownership interest before the option's exercise). The exercise price for these options can be established using a formula agreed upon at the time of the acquisition of the shares in the subsidiary that takes into account its future performance. It can also be set as the fair value of these shares at the exercise date of the options.

The commitments are recorded as follows:

- in accordance with IAS 32, the Group records a financial liability for the put options granted to minority shareholders of the subsidiaries over which it exercises control. This liability is initially recognised at the present value of the estimated exercise price of the put options under *Other Liabilities*;
- the obligation to recognise a liability even though the put options have not been exercised means that, in order to be consistent, the Group must use the same accounting treatment as the one applied to transactions in *Non-controlling interests*. As a result, the counterpart of this liability is a write-down in value of non-controlling interests underlying the options, with any balance deducted from *Retained earnings, Group share*;
- subsequent variations in this liability (linked to changes in the estimated exercise price of the options and the carrying value of *Non-controlling interests*) are recorded in full in *Retained earnings, Group share*;
- if the buy-out takes place, the liability is settled by the cash payment linked to the acquisition of non-controlling interests in the subsidiary. However if, when the commitment reaches its term, the buy-out has not occurred, the liability is written off against *Non-controlling interests* and *Retained earnings, Group share* for their respective portions;
- as long as the options have not been exercised, the results linked to *Non-controlling interests* with a put option are recorded under *Non-controlling interests* on the Group's consolidated income statement.

NOTE 2.1 Consolidation scope

The consolidation scope includes subsidiaries and structured entities under the Group's exclusive control, joint arrangements (joint ventures and joint operations) and associates whose financial statements are significant relative to the Group's consolidated financial statements, notably regarding Group consolidated total assets and gross operating income.

The main changes to the consolidation scope at 31 December 2019, compared with the scope applicable at the closing date of 31 December 2018, are as follows:

SG EXPRESS BANK

On 15 January 2019, the Group sold all its participation in SG Express Bank, its Bulgarian subsidiary, to OTP Bank. The sale reduced the Group's balance sheet by EUR 3.4 billion, mainly through a decrease of EUR 2.4 billion in customer loans and a decrease of EUR 2.7 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

SOCIETE GENERALE PRIVATE BANKING NV/SA

On 28 February 2019, the Group sold all its participation in Societe Generale Private Banking NV/SA, its Belgian private banking subsidiary, to ABN AMRO. The sale reduced the Group's balance sheet by EUR 1.1 billion, due to a decrease of EUR 1.1 billion in Non-current assets held for sale (o/w EUR 0.4 billion in cash, due from central banks and EUR 0.5 billion in customer loans) and a decrease of EUR 1.0 billion in Non-current liabilities held for sale (o/w EUR 1.0 billion in customer deposits).

LA BANQUE POSTALE FINANCEMENT

On 28 March 2019, the Group sold to La Banque Postale its investment in La Banque Postale Financement (35%) accounted for using the equity method.

BANKA SOCIETE GENERALE ALBANIA SH.A.

On 29 March 2019, the Group sold all its participation in Banka Societe Generale Albania SH.A., its Albanian subsidiary, to OTP Bank. The sale reduced the Group's balance sheet by EUR 0.7 billion, mainly through a decrease of EUR 0.4 billion in customer loans and a decrease of EUR 0.6 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

EURO BANK S.A.

On 31 May 2019, the Group sold all its participation in Eurobank, its Polish subsidiary, to Bank Millennium. The sale reduced the Group's balance sheet by EUR 3.4 billion, mainly through a decrease of EUR 2.9 billion in customer loans and of EUR 1.8 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

SOCIETE GENERALE BANKA MONTENEGRO A.D.

On 16 July 2019, the Group sold all its participation in SG Banka Montenegro A.D., its Montenegrin subsidiary, to OTP Bank. The sale reduced the Group's balance sheet by EUR 0.5 billion, mainly through a decrease of EUR 0.4 billion in customer loans and a decrease of EUR 0.4 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

MOBIASBANCA GROUPE SOCIETE GENERALE

On 25 July 2019, the Group sold all its participation in Mobiasbanca, its Moldavian subsidiary, to OTP Bank. The sale reduced the Group's balance sheet by EUR 0.5 billion, mainly through a decrease of EUR 0.3 billion in customer loans and a decrease of EUR 0.5 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

SOCIETE GENERALE BANKA SRBIJA A.D. BEOGRAD

On 24 September 2019, the Group sold all its participation in SG Banka Srbija A.D. Beograd, its Serbian subsidiary, to OTP Bank. The sale reduced the Group's balance sheet by EUR 2.7 billion, mainly through a decrease of EUR 2 billion in customer loans and a decrease of EUR 1.6 billion in customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

OHRIDSKA BANKA A.D. SKOPJE

On 4 November 2019, the Group sold all its participation in SG Banka Ohridska Banka A.D. Skopje, its Macedonian subsidiary, to Steiermärkische Sparkasse. The sale reduced the Group's balance sheet by EUR 0.6 billion, mainly through a decrease of EUR 0.5 billion in customer loans and a decrease of EUR 0.5 billion of customer deposits, reported respectively under *Non-current assets held for sale* and *Non-current liabilities held for sale* at 31 December 2018.

PEMA GMBH

On 2 December 2019, the Group sold all its participation in PEMA GmbH, a rental company with truck and trailer service, to TIP Trailer Services. This transfer resulted in the reduction in *Tangible and intangible fixed assets* for EUR 0.6 billion and a decrease in *Customer deposits* for EUR 0.5 billion compared to 31 December 2018.

SKB GROUP

On 13 December 2019, the Group sold the entity SKB Banka D.D. Ljubljana (Slovenia) and its subsidiaries Leasing D.O.O and SKB Leasing Select D.O.O. to OTP Bank. The sale reduced the Group's balance sheet by EUR 3 billion, mainly through a decrease of EUR 2.4 billion in customer loans and a decrease of EUR 2.5 billion of customer deposits, compared to 31 December 2018.

The result of these disposals recorded in *Net income/expense from other assets* amounts to EUR -277 million for the 2019 financial year.

NOTE 2.2 Goodwill**MAKE IT
SIMPLE**

When the Group acquires a company, it integrates in its consolidated balance sheet all of the new subsidiary's assets and liabilities at fair value, as if they had been individually acquired.

But the acquisition price of a company is generally higher than the net revalued amount of its assets and liabilities. The excess value, called goodwill, can represent part of the Company's intangible capital (reputation, quality of its personnel, market shares, etc.) which contributes to its overall value, or the value of the future synergies that the Group hopes to develop by integrating the new subsidiary in its existing activities.

In the consolidated balance sheet, the goodwill is recognised as an intangible asset, the useful life of which is presumed to be unlimited; it is not amortised and therefore does not generate any recurring expense in the Group's future results.

However, every year, the Group assesses whether the value of its goodwill has not depreciated. If it has, an irreversible expense is immediately recognised in the Group results, which indicates that the profitability of the intangible capital of the acquired entity is inferior to initial expectations, or that the anticipated synergies have not been fulfilled.

ACCOUNTING PRINCIPLES

The Group uses the acquisition method to recognise its business combinations.

At the acquisition date, all assets, liabilities, off-balance sheet items and contingent liabilities of the acquired entities that are identifiable under the provisions of IFRS 3 "Business Combinations" are measured individually at their fair value regardless of their purpose. The analyses and professional appraisals required for this initial valuation must be carried out within 12 months as from the acquisition date, as must any corrections to the value based on new information related to facts and circumstances existing at the acquisition date. At the same time, non-controlling interests are valued according to their share of the fair value of the identifiable assets and liabilities of the acquired entity. However, for each business combination, the Group may also choose to measure *Non-controlling* interests initially at their fair value, in which case a fraction of goodwill is allocated.

The acquisition cost is calculated as the total fair value, at the date of acquisition, of all assets given, liabilities incurred or assumed and equity instruments issued in exchange for the control of the acquired entity. The costs directly linked to business combinations are recognised in the income statement for the period except those related to the issuance of equity instruments.

Any contingent consideration is included in the acquisition cost at its fair value on the acquisition date, even if its occurrence is only potential. It is recognised under equity or debt in the balance sheet depending on the settlement alternatives.

If recognised as debt, any subsequent adjustment is recorded under income for financial liabilities in accordance with IFRS 9 and within the scope of the appropriate standards for other debts. For equity instruments, these subsequent adjustments are not recognised. Any excess of the price paid over the assessed fair value of the proportion of net assets acquired is recorded on the asset side of the consolidated balance sheet under Goodwill. Any deficit is immediately recognised in the income statement. On the date of acquisition of an entity, any stake in this entity already held by the Group is remeasured at fair value through profit or loss. In the case of a step acquisition, goodwill is therefore determined by referring to the fair value on the acquisition date.

At the acquisition date, each item of goodwill is allocated to one or more cash-generating units expected to derive benefits from the acquisition. When the Group reorganises its reporting structure in a way that changes the composition of one or more Cash-Generating Units, goodwill previously allocated to modified units is reallocated to the units affected (new or existing). This reallocation is generally performed using a relative approach based on the normative capital requirements of each Cash-Generating Unit affected.

Goodwill is reviewed regularly by the Group and tested for impairment whenever there is any indication that its value may have diminished, and at least once a year. Any impairment of goodwill is calculated based on the recoverable value of the relevant cash-generating unit(s).

If the recoverable amount of the cash-generating unit(s) is less than its (their) carrying amount, an irreversible impairment is recorded in the consolidated income statement for the period under *Value adjustments on goodwill*.

At 31 December 2019, goodwill is split into the following 11 Cash-Generating Units (CGUs):

Pillars	Activities
French Retail Banking	
Societe Generale network	Societe Generale's retail banking network, Boursorama online banking activities, consumer and equipment financing in France
Crédit du Nord	Retail banking network of Crédit du Nord and its 7 regional banks
International Retail Banking and Financial Services	
Europe	Retail banking and consumer finance services in Europe, notably in Germany (Hanseatic Bank, BDK), Italy (Fiditalia), France (CGL), Czech Republic (KB, Essox), Romania (BRD)
Russia	Integrated banking group including Rosbank and its subsidiary Rusfinance
Africa, Mediterranean Basin and Overseas	Retail banking and consumer finance in Africa, the Mediterranean Basin and Overseas, including in Morocco (SGMA), Algeria (SGA), Tunisia (UIB), Cameroon (SGBC), Côte d'Ivoire (SGBCI) and Senegal (SGBS)
Insurance	Life and non-life insurance activities in France and abroad (including Sogécap, Sogessur, Oradéa Vie and Antarius)
Equipment and Vendor Finance	Financing of sales and professional equipment by Societe Generale Equipment Finance
Auto Leasing Financial Services	Operational vehicle leasing and fleet management services (ALD Automotive)
Global Banking and Investor Solutions	
Global Markets and Investor Services	Market solutions for businesses, financial institutions, the public sector, family offices and a full range of securities services, clearing services, execution, prime brokerage and custody
Financing and Advisory	Advisory and financing services for businesses, financial institutions, the public sector and transaction and payment management services
Asset and Wealth Management	Asset and Wealth Management Solutions in France and abroad

The table below shows the changes in the net values of goodwill:

(In EURm)	Net book value at 31.12.2018	Acquisitions and other increases	Disposals and other decreases ⁽¹⁾	Net book value at 31.12.2019
French Retail Banking	797			797
Societe Generale network	286			286
Crédit du Nord	511			511
International Retail Banking & Financial Services	2,885	43	(199)	2,729
Europe	1,450		(89)	1,361
Russia	-			
Africa, Mediterranean Basin and Overseas	231		(3)	228
Insurance	335			335
Equipment and Vendor Finance	335		(107)	228
Auto Leasing Financial Services	534	43		577
Global Banking and Investor Solutions	970	132	(1)	1,101
Global Markets and Investor Services	501	83		584
Financing and Advisory	57			57
Asset and Wealth Management	412	49	(1)	460
TOTAL	4,652	175	(200)	4,627

(1) The other decreases include the reclassification of the entities held for sale's goodwill to Non-current assets held for sale (see Note 2.5).

ACQUISITION OF COMMERZBANK “EQUITY MARKETS AND COMMODITIES” BUSINESS

Following the agreement signed on 8 November 2018, the Group is committed to acquiring the Commerzbank “Equity Markets and Commodities” (EMC) business. The EMC business purchased comprises manufacturing and market-making of flow (“Flow” business) and structured products (“Exotic, Vanilla and Funds” business) as well as part of asset management activities (“Asset Management” business).

The integration process of staff, trading books and infrastructure started in the first half of 2019 and is expected to continue until the beginning of the first half of 2020.

Based on the progress of the staff integration and the transfers of trading books at 31 December, the Group already took control of the “Exotic, Vanilla and Funds” (EVF) business and the asset management activities leading to the recognition of a EUR 83 million goodwill for the EVF business (included in the “Global Markets and Investor Services” CGU) and a EUR 49 million goodwill for the asset management business (included in the “Asset and Wealth Management” CGU).

The transfers of trading books related the EVF business are recorded under *Financial assets at fair value through profit or loss* and *Financial liabilities at fair value through profit or loss* in the consolidated balance sheet (see Note 3.1).

ANNUAL IMPAIRMENT TEST

The Group performed an annual impairment test at 31 December 2019 for each CGU to which goodwill had been allocated. A CGU is defined as the smallest identifiable group of assets that generates cash inflows, which are largely independent of the cash inflows from the Group’s other assets or groups of assets. Impairment tests consist into assessing the recoverable value of each CGU and comparing it with its carrying value. An irreversible impairment loss is recorded in the income statement if the carrying value of a CGU, including goodwill, exceeds its recoverable value. This loss is booked to the impairment of goodwill.

The table below presents discount rates and long-term growth rates specific for the CGUs of the Group’s three core businesses:

Assumptions at 31 December 2019	Discount rate	Long-term growth rate
French Retail Banking		
Societe Generale network and Crédit du Nord	7.7%	2%
International Retail Banking and Financial Services		
Retail Banking and Consumer Finance	10.1% to 14.5%	2% to 3%
Insurance	9.0%	2.5%
Equipment and Vendor Finance and Auto Leasing Financial Services	9.2%	2%
Global Banking and Investor Solutions		
Global Markets and Investor Services	12.3%	2%
Financing and Advisory	10.0%	2%
Asset and Wealth Management	9.7%	2%

The recoverable amount of a Cash-Generating Unit is calculated using the most appropriate method, generally the discounted cash flow (DCF) method applied to the entire cash-generating unit. The cash flows used in this calculation are income available for distribution generated by all the entities included in the cash-generating unit, taking into account the Group targeted equity allocated to each CGU.

The cash flows were determined this year on a five-year period, with the prospective four-year budgets (from 2020 to 2023) extrapolated over the year 2024, this one corresponding to a “normative” year used to calculate the terminal value:

- allocated equity at 31 December 2019 amounted to 11% of risk-weighted assets, excepted for Crédit du Nord, whose allocated equity amounted to 10.5%, in accordance with the entity’s management guidelines;
- the discount rate is calculated using a risk-free rate grossed up by a risk premium based on the CGU’s underlying activities. This risk premium, specific to each activity, is calculated from a series of equity risk premiums published by SG Cross Asset Research and from its specific estimated volatility (beta). Where appropriate, the risk-free rate is also grossed up by a sovereign risk premium, representing the difference between the risk-free rate available in the area of monetary assignment (mainly US dollar area or Euro area) and the interest rate observed on liquid long-term treasury bonds issued (mainly US dollar area or Euro area), in proportion with risk-weighted assets for CGUs covering several countries;
- the growth rates used to calculate the terminal value is determined using forecasts on long-term economic growth and sustainable inflation. These rates are estimated using two main sources, namely the International Monetary Fund and the economic analyses produced by SG Cross Asset Research which provide 2024 forecasts.

No goodwill impairment was recognised as at 31 December 2019 as a result of the annual CGU impairment test.

Budget projections are based on the following main business line and macroeconomic assumptions:

French Retail Banking

Societe Generale network and Crédit du Nord	■ In a challenging environment (regulatory constraints, low inflation, historically low rates), ongoing efforts to shift operations and relationship banking at Societe Generale and Crédit du Nord towards a digital model ■ Confirmation of Boursorama's customer acquisition plan

International Retail Banking & Financial Services

Europe	■ Continued adaptation of our models to capture growth potential in the region and consolidate the competitive positions of our operations ■ Strict discipline applied to operating expenses and normalisation of cost of risk
Russia	■ Continued recovery of activities in Russia in stabilising economic conditions ■ Strict discipline applied to operating expenses and cost of risk
Africa, Mediterranean Basin and Overseas	■ Continued development of Societe Generale's sales network and expansion of services through the mobile banking offer ■ Continued focus on operating efficiency
Insurance	■ Reinforcement of integrated bank insurance model and continued dynamic growth in France and abroad in synergy with the retail banking network, Private Banking and financial services to businesses
Equipment and Vendor Finance	■ Consolidation of leadership in these corporate financing businesses ■ Consolidation of profitability by continuing to focus on activities with the best risk/reward ■ Strict discipline applied to operating expenses
Auto Leasing Financial Services	■ Reinforcement of leadership of ALD relative to solutions of mobility and continued growth for strategic partners and for long-time leasing to retail customers ■ Continued focus on operating efficiency

Global Banking and Investor Solutions

Global Markets and Investor Services	■ Adaptation of market activities to a competitive environment, coupled with further business and regulatory investments. ■ Consolidation of market-leading franchises (equities) particularly through the integration of Commerzbank Equity Markets and Commodities activities ■ Continued of optimisation measures and investments in information systems
Financing and Advisory	■ Continuation of origination momentum of financing activities ■ Consolidation of market-leading franchises (commodity and structured financing) ■ Management of cost of risk despite challenging economic conditions
Asset and Wealth Management	■ Consolidation of commercial and operational efficiency in Wealth Management in a constrained environment and continued development of synergies with retail bank network ■ Integration of Commerzbank Asset Management activities

Sensitivity tests are carried out to measure the impact on each CGU's recoverable value of the variation in certain assumptions.

At 31 December 2019, in light of the risks associated with business activity in the current environment (market volatility, regulatory uncertainties), sensitivities to variations in the discount rate, long-term growth were measured.

According to the results of these tests:

- an increase of 50 basis points applied to all discount rates for the CGUs disclosed in the table above would lead to a decrease of 25.3% in recoverable value and would not generate any additional impairment;
- similarly, a decrease of 50 basis points in long-term growth rates would lead to a decrease of 8.1% in recoverable value and would not generate any additional impairment.

NOTE 2.3 Additional disclosures for consolidated entities and investments accounted for using the equity method

This Note provides additional disclosures for entities included in the consolidation scope.

These disclosures concern entities over which Societe Generale exercises exclusive control, joint control or significant influence,

provided that these entities have significant impact on the Group's consolidated financial statements. The significance of the impact is considered in particular regarding Group consolidated total assets and gross operating income.

NOTE 2.3.1 CONSOLIDATED STRUCTURED ENTITIES

Consolidated structured entities include:

- collective investment vehicles such as SICAVs (open-ended investment funds) and mutual funds managed by the Group's asset management subsidiaries;
- securitisation funds and conduits issuing financial instruments that can be subscribed for by investors and that generate credit risks inherent in an exposure or basket of exposures which can be divided into tranches;
- asset financing vehicles (aircraft, rail, shipping or real estate finance facilities).

The Group has entered into contractual agreements with certain consolidated structured entities that may lead to financial support for these entities due to their exposure to credit, market or liquidity risks.

In 2019, the Group did not provide any financial support to these entities outside of any binding contractual arrangement and, as of 31 December 2019, does not intend to provide such support.

Securities issued by structured debt vehicles carry an irrevocable and unconditional guarantee from Societe Generale for payment of amounts due by the issuer. These issuers also enter into hedging transactions with Societe Generale to enable them to meet their payment obligations. As of 31 December 2019, the amount of outstanding loans thus guaranteed is EUR 58 billion.

As part of its securitisation activities on behalf of its clients or investors, Societe Generale grants two liquidity lines to ABCP (Asset Back Commercial Paper) conduits for a total amount of EUR 20.2 billion as of 31 December 2019.

NOTE 2.3.2 NON-CONTROLLING INTERESTS

Non-controlling interests refer to equity holdings in fully consolidated subsidiaries that are neither directly nor indirectly attributable to the Group. They include equity instruments issued by these subsidiaries and not held by the Group, as well as the share of income and accumulated reserves, and of unrecognised or deferred gains and losses attributable to the holders of these instruments.

Non-controlling interests amount to EUR 5,043 million at 31 December 2019 (vs. EUR 4,783 million at 31 December 2018) and account for 7% of total shareholders' equity at 31 December 2019 (vs. 7% at 31 December 2018).

INFORMATION ON SHAREHOLDER'S EQUITY OF NON-CONTROLLING INTERESTS

(In EURm)	31.12.2019	31.12.2018
Capital and reserves	4,291	4,060
Other equity instruments issued by subsidiaries (see Note 7.1)	800	800
Unrealised or deferred gains and losses	(48)	(77)
TOTAL	5,043	4,783

The *Non-controlling interests*, of significant amount in terms of contribution to the total shareholders' equity in the Group's consolidated balance sheet, relate to:

- listed subsidiaries Komerční Banka A.S., BRD - Groupe Societe Generale SA and SG Marocaine de Banques;

- ALD SA, whose data presented here correspond to those of the ALD group;

- Sogécap, fully owned, with the subordinated notes issued in December 2014.

31.12.2019					
(In EURm)	Group voting interest	Group ownership interest	Net income attributable to non-controlling interests	Total non-controlling interests	Dividends paid during the year to holders of non-controlling interests
KOMERCNI BANKA A.S	60.73%	60.73%	221	1,540	(134)
BRD - GROUPE SOCIETE GENERALE SA	60.17%	60.17%	125	654	(93)
GROUPE ALD	79.82%	79.82%	122	840	(52)
SG MAROCAINE DE BANQUES	57.58%	57.58%	41	447	(11)
SOGÉCAP	100.00%	100.00%	33	829	(33)
Other entities	-	-	156	733	(89)
TOTAL	-	-	698	5,043	(412)

31.12.2018					
(In EURm)	Group voting interest	Group ownership interest	Net income attributable to non-controlling interests	Total non-controlling interests	Dividends paid during the year to holders of non-controlling interests
KOMERCNI BANKA A.S	60.73%	60.73%	220	1,437	(122)
BRD - GROUPE SOCIETE GENERALE SA	60.17%	60.17%	128	623	(94)
GROUPE ALD *	79.82%	79.82%	120	766	(50)
SG MAROCAINE DE BANQUES	57.57%	57.57%	39	413	(8)
SOGÉCAP	100.00%	100.00%	33	829	(33)
Other entities *	-	-	152	715	(94)
TOTAL	-	-	692	4,783	(401)

* Amounts restated compared with the published consolidated statements for the year-ended 31 December 2018.

SUMMARISED FINANCIAL INFORMATION FOR MAIN NON-CONTROLLING INTERESTS

The information below are the data of the entities or subgroups (excluding Sogécap) taken at 100% and before the elimination of intra-group operations.

31.12.2019				
(In EURm)	Net banking income	Net income	Net income and unrealised or deferred gains and losses	Total balance sheet
KOMERCNI BANKA A.S	1,240	595	1,024	41,605
BRD - GROUPE SOCIETE GENERALE SA	658	322	50	11,684
GROUPE ALD	1,349	567	446	47,214
SG MAROCAINE DE BANQUES	432	105	148	9,424

31.12.2018				
(In EURm)	Net banking income	Net income	Net income and unrealised or deferred gains and losses	Total balance sheet
KOMERCNI BANKA A.S	1,227	595	969	40,501
BRD - GROUPE SOCIETE GENERALE SA	636	327	62	11,618
GROUPE ALD	1,321	561	408	43,681
SG MAROCAINE DE BANQUES	399	100	128	8,583

NOTE 2.3.3. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD (ASSOCIATES AND JOINT VENTURES)

SUMMARISED FINANCIAL INFORMATION FOR JOINT VENTURES AND ASSOCIATES

(In EURm)	Joint ventures		Associates		Total investments accounted for using the equity method	
	2019	2018	2019	2018	2019	2018
Group share:						
Net income ⁽¹⁾	5	5	(134)	51	(129)	56
Unrealised or deferred gains and losses (net of tax)	-	-	3	(3)	3	(3)
NET INCOME AND UNREALISED OR DEFERRED GAINS AND LOSSES	5	5	(131)	48	(126)	53

(1) 2019 net income includes an impairment of EUR 158 million of the Group's investment in SG de Banque au Liban.

COMMITMENTS TO RELATED PARTIES

(In EURm)	31.12.2019	31.12.2018
Loan commitments granted	-	-
Guarantee commitments granted	45	54
Forward financial instrument commitments	-	142

NOTE 2.3.4. RESTRICTIONS

SIGNIFICANT RESTRICTIONS ON THE ABILITY TO ACCESS OR USE THE ASSETS OF THE GROUP

Legal, regulatory, statutory or contractual constraints or requirements may restrict the ability of the Group to transfer assets freely to or from entities within the Group.

The ability of consolidated entities to distribute dividends or to grant or repay loans and advances to entities within the Group depends on, among other things, local regulatory requirements, statutory reserves and financial and operating performance. Local regulatory requirements may concern regulatory capital, exchange controls or non-convertibility of the local currency (as it is the case in countries belonging to the West African Economic and Monetary Union or to the Economic and Monetary Community of Central Africa), liquidity ratios (as in the United States) or large exposures ratios that aim to cap the entity's exposure in relation to the Group (regulatory requirement to be fulfilled in most countries in Eastern and Central Europe, Maghreb and sub-Saharan Africa).

The ability of the Group to use assets may also be restricted in the following cases:

- assets pledged as security for liabilities, notably guarantees provided to the central banks, or assets pledged as security for transactions in financial instruments, mainly through guarantee deposits with clearing houses;
- securities that are sold under repurchase agreements or that are lent;
- assets held by insurance subsidiaries in representation of unit-linked liabilities with life-insurance policy holders;
- assets held by consolidated structured entities for the benefit of the third-party investors that have bought the notes or securities issued by the entity;
- mandatory deposits placed with central banks.

NOTE 2.4 Unconsolidated structured entities

The information provided hereafter concerns entities structured but not controlled by the Group. This information is grouped by main type of similar entities, such as Financing activities, Asset management and Others (including Securitisation and Issuing vehicles).

Asset financing includes lease finance partnerships and similar vehicles that provide aircraft, rail, shipping or real estate finance facilities.

Asset management includes mutual funds managed by the Group's asset management subsidiaries.

Securitisation includes securitisation funds or similar vehicles issuing financial instruments that can be subscribed for by investors and that generate credit risks inherent in an exposure or basket of exposures which can be divided into tranches.

The Group's interests in unconsolidated entities that have been structured by third parties are classified among financial instruments in the consolidated balance sheet according to their nature.

NOTE 2.4.1 INTERESTS IN UNCONSOLIDATED STRUCTURED ENTITIES

The Group's interests in an unconsolidated structured entity refer to contractual and non-contractual involvements that expose the Group to the variability of returns from the performance of this structured entity.

Such interests can be evidenced by:

- the holding of equity or debt instruments (regardless of their rank of subordination);
- other funding (loans, cash facilities, loan commitments, liquidity facilities...);
- credit enhancement (guarantees, subordinated instruments, credit derivatives...);
- issuance of guarantees (guarantee commitments);
- derivatives that absorb all or part of the risk of variability of the structured entity's returns, except Credit Default Swap (CDS) and options purchased by the Group;
- contracts remunerated by fees indexed to the structured entity's performance;
- tax consolidation agreements.

	Asset financing		Asset management		Others	
(In EURm)	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Total balance sheet of the entity⁽¹⁾	7,436	7,900	135,564	121,154	31,038	27,464
Net carrying amount of Group interests in unconsolidated structured entities						
Assets	2,011	3,232	13,139	5,596	8,950	10,645
Financial assets at fair value through profit or loss	446	384	12,652	4,964	3,801	5,509
Financial assets at fair value through other comprehensive income	-	-	-	-	55	56
Financial assets at amortised cost	1,553	2,843	361	462	5,094	5,080
Others	12	5	126	170		-
Liabilities	1,851	1,533	12,241	4,701	4,261	5,680
Financial liabilities at fair value through profit or loss	218	198	8,927	3,122	3,438	4,845
Due to banks and customer deposits	1,621	1,313	1,625	1,487	823	830
Others	12	22	1,689	92		5

(1) For Asset management, NAV (Net Asset Value) of funds.

In 2019, the Group did not provide any financial support to these entities outside of any binding contractual arrangement and, as of 31 December 2019, does not intend to provide such support.

The maximum exposure to loss related to interests in unconsolidated structured entities is measured as:

(In EURm)	Asset financing		Asset management		Others	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Amortised cost or fair value ⁽¹⁾ (according to the measurement of the financial instrument) of non-derivative financial assets entered into with the structured entity	3,029	2,910	5,097	5,227	2,333	2,450
Fair value ⁽¹⁾ of derivative financial assets recognised in the balance sheet	327	248	9,885	1,268	2,885	4,309
Notional amount of CDS sold (maximum amount to be paid)	-	-	-	-	-	-
Notional amount of loan or guarantee commitments granted	534	387	978	1,355	1,848	1,198
Maximum exposure to loss	3,890	3,545	15,960	7,850	7,066	7,957

The amount of maximum exposure to loss can be mitigated by:

- the notional amount of guarantee commitments received;
- the fair value⁽¹⁾ of collateral received;

- the carrying amount of surety deposits received.

These mitigating amounts must be capped in case of legal or contractual limitation of their realisable or recoverable amounts. They amounted to EUR 2,009 million and mainly concern Asset financing.

(1) Fair value at closing date. This fair value can change during subsequent financial years.

NOTE 2.4.2. INFORMATION ON UNCONSOLIDATED STRUCTURED ENTITIES SPONSORED BY THE GROUP

The Group may have no ownership interest in a structured entity, but still be considered as a sponsor of this structured entity if it acts or has acted as:

- a structurer;
- an originator for potential investors;
- an asset manager;
- an implicit or explicit guarantor of the entity's performance (in particular *via* capital or return guarantees granted to mutual fund unit holders).

A structured entity is also considered to be sponsored by the Group if its name includes the name of the Group or the name of one of its subsidiaries.

Conversely, entities that are structured by the Group according to specific needs expressed by one or more customers or investors are considered to be sponsored by said customers or investors.

At 31 December 2019, the total amount of the balance sheet of these unconsolidated structured entities, sponsored by the Group, and in which the Group does not have any interest, was EUR 2,570 million (including EUR 252 million for Other structures).

In 2019, no significant revenue has been recognised for these structured entities.

NOTE 2.5 Non-current assets held for sale and related debt**ACCOUNTING PRINCIPLES**

A non-current asset or group of assets and liabilities is deemed to be “held for sale” if its carrying value will primarily be recovered through a sale and not through its continuing use. For this classification to apply, the asset or group of assets and liabilities must then be immediately available-for-sale in its present condition and it must be highly probable that the sale will occur within twelve months.

For this to be the case, the Group must be committed to a plan to sell the asset (or disposal group if assets and liabilities) and have begun actively searching for a buyer. Furthermore, the asset or group of assets and liabilities must be measured at a price that is reasonable in relation to its current fair value.

Assets and liabilities into this category are classified as *Non-current assets held for sale* and *Non-current liabilities held for sale*, with no netting.

If the fair value less selling costs of non-current assets and groups of assets and liabilities held for sale is less than their net carrying value, an impairment is then recognised in profit or loss. Moreover, *Non-current assets held for sale* are no longer amortised or depreciated.

(In EURm)	31.12.2019	31.12.2018
Assets	4,507	13,502
Fixed assets and Goodwill	5	262
Financial assets	4,464	11,245
<i>Financial assets at fair value through profit or loss</i>	26	111
<i>Hedging derivatives</i>	10	-
<i>Financial assets at fair value through other comprehensive income</i>	-	1,429
<i>Securities at amortised cost</i>	-	59
<i>Due from banks at amortised cost</i>	68	324
<i>Customer loans at amortised cost</i>	4,360	9,322
Other assets	38	1,995
Liabilities	1,333	10,454
Provisions	14	22
Financial liabilities	1,211	10,309
<i>Financial liabilities at fair value through profit or loss</i>	-	2
<i>Hedging derivatives</i>	9	-
<i>Debt securities issued</i>	-	116
<i>Due to banks</i>	786	596
<i>Customer deposits</i>	416	9,595
<i>Subordinated debts</i>	-	-
Other liabilities	108	123

As at 31 December 2019, the *Non-current assets held for sale* and *Non-current liabilities held for sale* items mainly encompass the assets and liabilities of the retail banking SG de Banque aux Antilles, the assets and liabilities of the equipment finance and factoring company SG Finans AS, and the assets and liabilities related to the South African securities services activity (SG Johannesburg).

The changes of the *Non-current assets held for sale* and *Non-current liabilities held for sale* items compared to 31 December 2018 mainly come from:

- the sale of entities detailed in the Note 2.1;
- the reclassification of assets and liabilities of the entities SG de Banque aux Antilles and SG Finans AS.

Some *Non-current assets held for sale* (mostly goodwill and fixed assets) are measured at the lowest between accounting value and fair value less disposal costs. It means that all or part of any expected capital loss from the sale of a group of assets can be allocated as soon as the assets are reclassified under *Non-current assets held for sale*. In this context, the impairment cost recognised by the Group at 31 December 2019 amounts to EUR -109 million under *Net income/expense from other assets*.

NOTE 3 FINANCIAL INSTRUMENTS



MAKE IT SIMPLE

The financial instruments represent the contractual rights or obligations to receive or to pay cash or other financial assets. The Group's banking activities generally take the form of financial instruments covering a broad spectrum of assets and liabilities, such as loans, investment portfolios (equity, bonds, etc.), deposits, regulated savings accounts, debt securities issued and derivative instruments (swaps, options, forward contracts, credit derivatives, etc.).

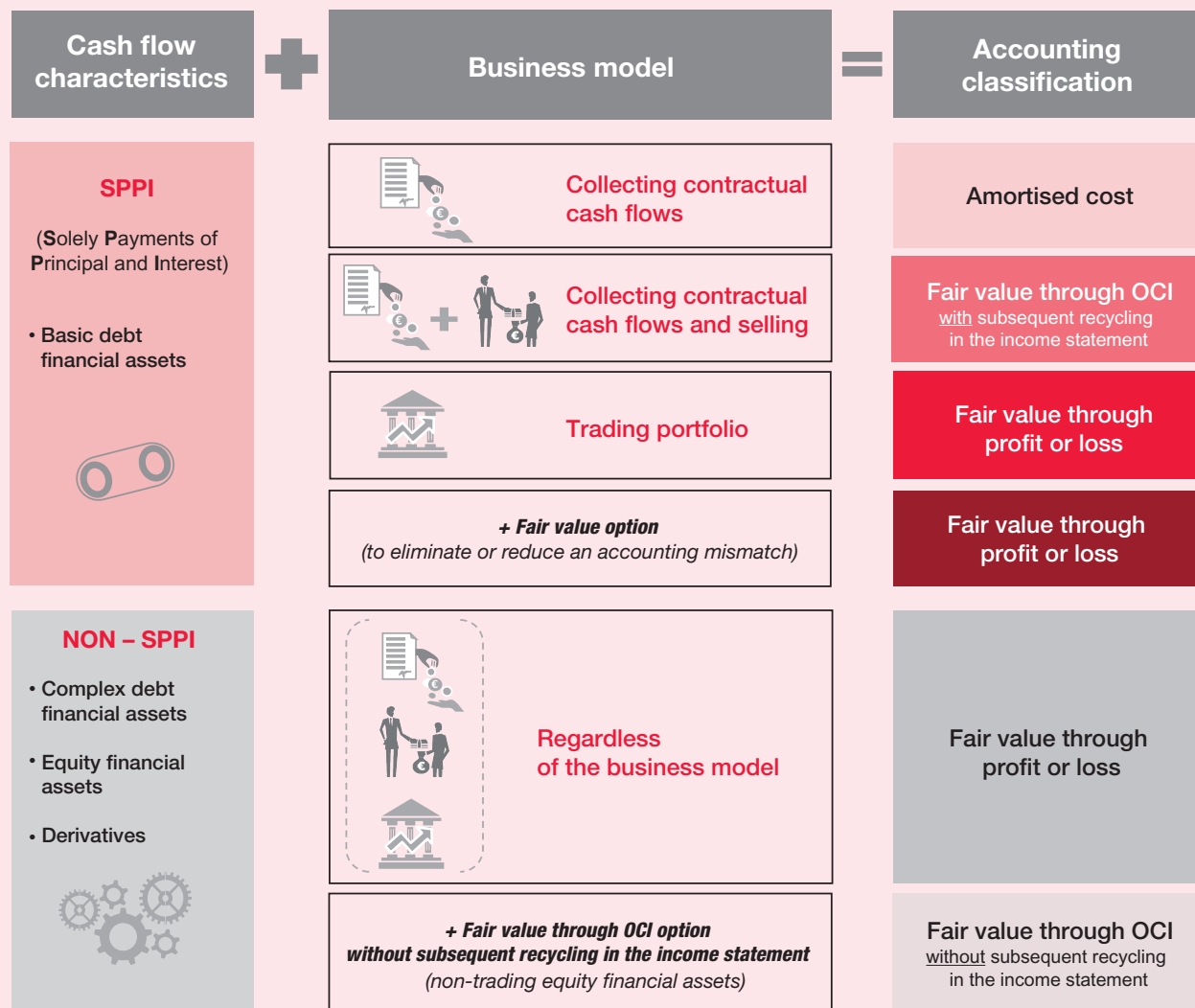
In the financial statements, the classification and valuation of financial assets and liabilities depend on their contractual characteristics and the way the entity manages those financial instruments.

However, this distinction is not applicable to derivative instruments, which are always measured at fair value in the balance sheet, no matter what their purpose is (market activities or hedging transactions).

ACCOUNTING PRINCIPLES

Classification of financial assets

At initial recognition, financial instruments are classified in the Group balance sheet in one of three categories (amortised cost, fair value through profit or loss, and fair value through other comprehensive income) that determine their accounting treatment and subsequent measurement method. Classification is based on their contractual cash flow characteristics and the entity's business model for managing the assets.



The accounting principles for classifying financial assets require the entity to analyse the contractual cash flows generated by the financial instruments and to analyse the business model for managing the financial instruments.

ANALYSIS OF CONTRACTUAL CASH FLOW CHARACTERISTICS

The aim of the analysis of contractual cash flow characteristics is to limit the option of recognising revenues from financial assets using the effective interest method exclusively to instruments whose characteristics are similar to those of a basic lending arrangement, meaning their associated cash flows are highly predictable. All other financial instruments that do not share these characteristics are measured at fair value through profit or loss, regardless of the business model used to manage them.

Contractual inflows that represent Solely Payments of Principal and Interest (SPPI) on the principal amount outstanding are consistent with a basic lending arrangement.

In a basic lending arrangement, interest predominantly consists of a consideration for the time value of money and for credit risk. Interest may also include a consideration for liquidity risk, administrative costs, and a commercial profit margin. Negative interest is not inconsistent with this definition.

All financial assets that are not basic will be mandatorily measured at fair value through profit or loss, regardless of the business model for managing them.

Derivatives qualifying as hedging instruments for accounting purposes are recorded on a separate line in the balance sheet (see Note 3.2).

The Group can make the irrevocable decision, on a security-by-security basis, to classify and measure an investment in an equity instrument (shares and other equity securities) that is not held for trading purposes at fair value through other comprehensive income. Subsequently, the profit or loss accumulated in other comprehensive income will never be reclassified to profit or loss (only dividends from those investments will be recognised as income).

ANALYSIS OF THE BUSINESS MODEL

The business model represents how the financial instruments are managed in order to generate cash flows and income.

The Group uses several business models in the course of exercising its different business lines. Business models are assessed on how groups of financial instruments are managed together to achieve a particular business objective. The business model is not assessed on an instrument-by-instrument basis, but at a portfolio level, considering relevant evidence such as:

- how the performance of the portfolio is evaluated and reported to the Group's management;
- how risks related to financial instruments within that business model are managed;
- how managers of the business are compensated;
- sales of assets realised or expected (value, frequency, purpose).

To determine the classification and measurement of financial assets, three different business models shall be distinguished:

- a business model whose objective is to collect contractual cash flows ("Collect" business model);
- a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets ("Collect and Sell" business model);
- a separate business model for other financial assets, especially those that are held for trading purposes, where collecting contractual cash flows is only incidental.

FAIR VALUE OPTION

SPPI financial assets that are not held for trading purposes can be designated, at initial recognition, at fair value through profit or loss if such designation eliminates or significantly reduces discrepancies in the accounting treatment of related financial assets and liabilities (accounting mismatch).

Classification of financial liabilities

Financial liabilities are classified into one of the following two categories:

- *Financial liabilities at fair value through profit or loss*: these are financial liabilities held for trading purposes, which by default include derivative financial liabilities not qualifying as hedging instruments and non-derivative financial liabilities designated by the Group upon initial recognition to be measured at fair value through profit or loss using the fair value option;
- *Debts*: these include the other non-derivative financial liabilities and are measured at amortised cost.

Derivative financial assets and liabilities qualifying as hedging instruments are presented on separate lines of the balance sheet (see Note 3.2).

Reclassification of financial assets

Reclassification of financial assets are only required in the exceptional event that the Group changes the business model used to manage these assets.

Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The valuation methods used by the Group to establish the fair value of financial instruments are detailed in Note 3.4.

Initial recognition

Financial assets are recognised on the balance sheet:

- at the settlement/delivery date for securities;
- at the trade date for derivatives;
- at the disbursement date for loans.

For instruments measured at fair value, changes in fair value between the trade date and the settlement-delivery date are recorded in net income statement or in other comprehensive income, depending on the accounting classification of the financial assets in question. The trade date is the date on which the contractual commitment becomes binding and irrevocable for the Group.

When initially recognised, financial assets and liabilities are measured at fair value including transaction costs directly attributable to their acquisition or issuance, except for financial instruments recognised at fair value through profit or loss, for which these costs are booked directly to the income statement.

If the initial fair value is based on observable market data, any difference between the fair value and the transaction price, *i.e.* the sales margin, is immediately recognised in the income statement. However, if valuation inputs are not observable or if the valuation models are not recognised by the market, the recognition of the sales margin is then generally deferred in the income statement. For some instruments, due to their complexity, this margin is recognised at their maturity or upon disposal in the event of early sale. When valuation inputs become observable, any portion of the sales margin that has not yet been recorded is recognised in the income statement at that time (see Note 3.4.7).

Derecognition of financial assets and liabilities

The Group derecognises all or part of a financial asset (or group of similar assets) when the contractual rights to the cash flows on the asset expire or when the Group has transferred the contractual rights to receive the cash flows and substantially all of the risks and rewards linked to ownership of the asset.

The Group also derecognises financial assets over which it has retained the contractual rights to the associated cash flows but is contractually obligated to pass these same cash flows through to a third party ("pass-through agreement") and for which it has transferred substantially all the risks and rewards.

Where the Group has transferred the cash flows of a financial asset but has neither transferred nor retained substantially all the risks and rewards of its ownership and has effectively not retained control of the financial asset, the Group derecognises it and, where necessary, recognises a separate asset or liability to cover any rights and obligations created or retained as a result of the asset's transfer. If the Group has retained control of the asset, it continues to recognise it in the balance sheet to the extent of its continuing involvement in that asset.

When a financial asset is derecognised in its entirety, a gain or loss on disposal is recorded in the income statement for an amount equal to the difference between the carrying value of the asset and the payment received for it, adjusted where necessary for any unrealised profit or loss previously recognised directly in equity and for the value of any servicing asset or servicing liability. Indemnities billed to borrowers following the prepayment of their loan are recorded in the income statement on the prepayment date among *Interest and similar income*.

The Group derecognises all or part of a financial liability when it is extinguished, *i.e.* when the obligation specified in the contract is discharged, cancelled or expired.

A financial liability may also be derecognised in the event of a substantial amendment to its contractual conditions or where an exchange is made with the lender for an instrument whose contractual conditions are substantially different.

ANALYSIS OF CONTRACTUAL CASH FLOWS OF FINANCIAL ASSETS

The Group has established procedures for determining if financial assets pass the SPPI test at initial recognition (loans granting, acquisition of securities, etc.).

All contractual terms shall be analysed, particularly those that could change the timing or amount of contractual cash flows. A contractual term that permits the borrower or the lender to prepay or to return the debt instrument to the issuer before maturity remains consistent with SPPI cash flows, provided the prepayment amount primarily represents the principal remaining due and accrued but unpaid contractual interest, which may include a reasonable compensation. The fact that such compensation can be either positive or negative is not inconsistent with the SPPI nature of cash flows.

The prepayment compensation is considered as reasonable especially when:

- the amount is calculated as a percentage of the outstanding amount of the loan and is capped by regulations (in France, for example, compensation for the prepayment of mortgage loans by individuals is legally capped at an amount equal to six months of interest or 3% of the principal outstanding), or is limited by competitive market practices;
- the amount is equal to the difference between contractual interest that should have been received until the maturity of the loan and the interest that would be obtained by the reinvestment of the prepaid amount at a rate that reflects the relevant benchmark interest rate.

Some loans are prepayable at their current fair value, while others can be prepayable at an amount that includes the fair value cost to terminate an associated hedging swap. It is possible to consider such prepayment amounts as SPPI provided that they reflect the effect of changes in the relevant benchmark interest rate.



Basic financial assets (SPPI) are debt instruments which mainly include:

- fixed-rate loans;
- variable-rate loans that can include caps or floors;
- fixed or variable-rate debt securities (government or corporate bonds, other negotiable debt securities);
- securities purchased under resale agreements (reverse repos);
- guarantee deposits paid;
- trade receivables.

Contractual terms that would introduce exposure to risks or volatility in the contractual cash flows, unrelated to a basic lending arrangement (such as exposure to changes in equity prices or stock indexes for instance, or leverage features), could not be considered as being SPPI, except if their effect on the contractual cash flows remains minimum.



Non-basic financial assets (non-SPPI) mainly include:

- derivative instruments;
- shares and other equity instruments held by the entity;
- equity instruments issued by mutual funds;
- debt financial assets that can be converted or redeemed into a fixed number of shares (convertible bonds, equity-linked securities, etc.).

When the time value component of interest can be modified according to the contractual term of the instrument, it may be necessary to compare the contractual cash flow with the cash flow that would arise from a benchmark instrument. For instance, that is the case when an interest rate is periodically reset, but the frequency of that reset does not match the tenor of the interest rate (such as an interest rate reset every month to a one-year rate), or when the interest rate is periodically reset to an average of short- and long-term interest rates.

If the difference between the undiscounted contractual cash flows and the undiscounted benchmark cash flows is or may become significant, then the instrument is not considered basic.

Depending on the contractual terms, the comparison with benchmark cash flow may be performed through a qualitative assessment; but in other cases, a quantitative test is required. The difference between contractual and benchmark cash flows has to be considered in each

reporting period and cumulatively over the life of the instrument. When performing this benchmark test, the entity considers factors that could affect future undiscounted contractual cash flows: using the yield curve at the date of the initial assessment is not enough, and the entity also has to consider whether the curve could change over the life of the instrument according to reasonably possible scenarios.

Within the Group, the financial instruments concerned by a benchmark test include, for instance, variable-rate housing loans for which interest rates are reset every year based on the twelve-month Euribor average observed over the two months previous to the reset. Another example is loans granted to real estate professionals for which interest is revised quarterly based on the one-month Euribor average observed over the three months previous to the reset. Following the benchmark analysis performed by the Group, it has been concluded that these loans are basic.

Furthermore, a specific analysis of contractual cash flow is required when financial assets are instruments issued by a securitisation vehicle or a similar entity that prioritises payments to holders using multiple contractually-linked instruments that create concentrations of credit risk (tranches). When assessing whether contractual cash flows are SPPI or not, the entity must analyse the contractual terms, as well as the credit risk of each tranche and the exposure to credit risk in the underlying pool of financial instruments. To that end, the entity must apply a “look-through approach” to identify the underlying instruments that are creating the cash flows.

The data presented in Note 3 exclude the financial instruments of insurance subsidiaries; the data for insurance subsidiaries are presented in Note 4.3.

The information on the types of risks, the risk management linked to financial instruments as well as the information on capital management and compliance with regulatory ratios, required by IFRS as adopted by the European Union, are disclosed in Chapter 4 of the present Universal Registration Document (Risks and capital adequacy).

NOTE 3.1 Financial assets and liabilities at fair value through profit or loss**OVERVIEW OF FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS**

(In EURm)	31.12.2019		31.12.2018	
	Assets	Liabilities	Assets	Liabilities
Trading portfolio ⁽¹⁾	358,033	281,246	338,312	285,478
Financial assets measured mandatorily at fair value through profit or loss	24,977		24,057	
Financial instruments measured using fair value option through profit or loss	2,729	82,883	3,181	77,605
TOTAL	385,739	364,129	365,550	363,083
o/w securities purchased/sold under resale/repurchase agreements	111,818	97,895	129,628	98,874

(1) At 31 December 2019, the trading portfolio includes trading books related to the activities of manufacturing and market making of structured products ("Exotic, Vanilla and Funds") acquired from Commerzbank during the first half of 2019 (see Note 2.2).

NOTE 3.1.1 TRADING PORTFOLIO**ACCOUNTING PRINCIPLES**

The trading book contains financial assets and liabilities held or accrued for the purpose of capital markets activities.

This portfolio also includes, among other trading assets, physical commodities that are held by the Group as part of its market-maker activity on commodity derivative instruments.

By default, derivative financial instruments are classified into the trading portfolio, unless they qualify as hedging instruments (see Note 3.2).

The financial instruments recorded in the trading portfolio are measured at fair value at the closing date and recognised in the balance sheet under *Financial assets or liabilities at fair value through profit or loss*. Changes in their fair value and revenues associated to those instruments are recorded in the income statement as *Net gains and losses on financial instruments at fair value through profit or loss*.

TRADING ACTIVITIES

Financial assets held for trading are:

- acquired with the intention of selling them in the short term; or
- held for market-making purposes; or
- acquired for the purposes of the specialised management of a trading portfolio, including derivative financial instruments, securities or other financial instruments that are managed together and for which there is evidence of a recent pattern of short-term profit-taking.

**Global market activities**

The trading business model is applied by Global Banking and Investor Solutions to manage its global market activities.

It is also applied for managing syndicated loan commitments and loans that are not intended to be kept by the Group and that have been identified since their origination as to be sold in the short term (within 6 to 12 months) on the secondary market, as well as for loans originated by the Group through originate-to-distribute activities and that are expected to be sold shortly.

Financial assets held in run-off portfolios are also monitored based on their fair value. Although those portfolios are not related to market activities, those assets are presented amongst trading portfolio and are measured at fair value through profit or loss.

Trading portfolio includes all the financial assets held for trading purpose regardless of the characteristics of their contractual cash flows. Only non-SPPI financial assets that are not held for trading are classified amongst Financial assets measured mandatorily at fair value through profit or loss (see section 2 below).

ASSETS

(In EURm)	31.12.2019	31.12.2018
Bonds and other debt securities	26,080	29,732
Shares and other equity securities	77,966	49,297
Loans, receivables and securities purchased under resale agreements	117,956	135,861
Trading derivatives ⁽¹⁾	135,849	122,983
Other trading assets	182	439
TOTAL	358,033	338,312
<i>o/w securities lent</i>	<i>13,681</i>	<i>12,411</i>

(1) See Note 3.2 Financial derivatives.

LIABILITIES

(In EURm)	31.12.2019	31.12.2018
Amounts payable on borrowed securities	38,950	51,264
Bonds and other debt instruments sold short	3,518	6,231
Shares and other equity instruments sold short	1,466	1,248
Borrowings and securities sold under repurchase agreements	97,820	98,299
Trading derivatives ⁽¹⁾	138,120	126,946
Other trading liabilities	1,372	1,490
TOTAL	281,246	285,478

(1) See Note 3.2 Financial derivatives.

NOTE 3.1.2. FINANCIAL INSTRUMENTS MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS

ACCOUNTING PRINCIPLES

Financial assets measured mandatorily at fair value through profit or loss include:

- loans, bonds and bond equivalents that are not held for trading purposes and do not pass the SPPI test (non-basic or non-SPPI instruments).
- shares and share equivalents that are not classified in any other sub-category: trading book at fair value through profit or loss, instruments designated by the Group at fair value through other comprehensive income without subsequent reclassification to profit or loss.

These assets are recorded at fair value in the balance sheet under *Financial assets at fair value through profit or loss* and changes in the fair value of these instruments (excluding interest income) are recorded in the income statement under *Net gains or losses on financial instruments at fair value through profit or loss*.

BREAKDOWN OF FINANCIAL ASSETS MEASURED MANDATORILY AT FAIR VALUE THROUGH PROFIT OR LOSS

(In EURm)	31.12.2019	31.12.2018
Bonds and other debt securities	177	158
Shares and other equity securities	2,492	1,996
Loans, receivables and securities purchased under resale agreements	22,308	21,903
TOTAL	24,977	24,057

BREAKDOWN OF LOANS AND RECEIVABLES AND SECURITIES PURCHASED UNDER RESALE AGREEMENTS

(In EURm)	31.12.2019	31.12.2018
Short-term loans	2,029	2,354
Equipment loans	18,152	15,796
Other loans	2,127	3,753
TOTAL	22,308	21,903

The loans and receivables and securities purchased under resale agreements recorded in the balance sheet under Financial assets mandatorily at fair value through profit or loss are mainly:

- loans that include prepayment features with compensation that do not reflect the effect of changes in the benchmark interest rate;
- loans that include indexation clauses that do not permit to recognise them as basic loans (SPPI).

NOTE 3.1.3. FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS USING FAIR VALUE OPTION**ACCOUNTING PRINCIPLES**

In addition to financial assets and liabilities held for trading, and financial assets measured mandatorily at fair value through profit or loss, the same headings in the financial statements include non-derivative financial assets and liabilities that the Group has designated at fair value through profit or loss. Changes in the fair value of these instruments (including interest) are recorded in the income statement under *Net gains or losses on financial instruments at fair value through profit or loss*, except the share related to the Group's own credit risk on financial liabilities which is booked under *Unrealised or deferred gains and losses*.

Furthermore, in case of derecognition of a financial liability at fair value through profit or loss using the fair value option before its contractual maturity, gains and losses, if any, related to the Group's own credit risk are booked under *Unrealised or deferred gains and losses* and then reclassified under *Retained earnings* at the beginning of the subsequent financial year.

For financial assets, this option may only be used to eliminate or significantly reduce accounting mismatches that would otherwise arise from applying different accounting treatments to certain related financial assets and liabilities.

For financial liabilities, this option may only be used in the following cases:

- to eliminate or reduce discrepancies in the accounting treatment of certain related financial assets and liabilities;
- when it applies to a hybrid financial instrument with one or more embedded derivatives, which should be recognised separately;
- when a group of financial assets and/or liabilities is managed together and its performance is measured at fair value.

The Group thus recognises structured bonds issued by Societe Generale Corporate and Investment Banking at fair value through profit or loss. These issuances are purely commercial and the associated risks are hedged on the market using financial instruments managed in trading portfolios. By using the fair value option, the Group can ensure consistency between the accounting treatment of these bonds and that of the derivatives hedging the associated market risks, which have to be carried at fair value.

ASSETS

(In EURm)	31.12.2019	31.12.2018
Bonds and other debt securities	1,458	1,310
Loans, receivables and securities purchased under resale agreements	145	819
Separate assets for employee benefits plans	1,126	1,052
TOTAL	2,729	3,181

LIABILITIES

Financial liabilities measured at fair value through profit or loss in accordance with the fair value option predominantly consist of structured bonds issued by the Societe Generale group.

The revaluation differences attributable to the Group's issuer credit risk are determined using valuation models taking into account the Societe Generale group's most recent financing terms and conditions on the markets and the residual maturity of the related liabilities.

Changes in fair value attributable to own credit risk generated a loss of EUR -121 million at 31 December 2019. Up to this date, the total gains

and losses attributable to own credit risk amounted to EUR -317 million booked in equity (see Note 7.3).

At 31 December 2019, the difference between the fair value of financial liabilities measured using the fair value option through profit or loss (EUR 82,883 million versus EUR 77,605 million at 31 December 2018) and their amount redeemable at maturity (EUR 83,249 million versus EUR 78,080 million at 31 December 2018) stood at EUR -366 million (EUR -475 million at 31 December 2018).

NOTE 3.1.4. NET GAINS AND LOSSES ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

(In EURm)	2019	2018
Net gain/loss on trading portfolio (excluding derivatives)	5,754	(6,091)
Net gain/loss on financial instruments at fair value through profit or loss ⁽¹⁾	3,661	941
Net gain/loss on financial instruments measured using fair value option	(15,028)	4,277
Net gain/loss on derivative instruments	9,712	6,263
Net gain/loss on hedging instruments ⁽²⁾	100	35
<i>Net gain/loss on fair value hedging derivatives</i>	1,155	(947)
<i>Revaluation of hedged items attributable to hedged risks⁽³⁾</i>	(1,055)	982
Net gain/loss on foreign exchange transactions	144	(306)
TOTAL	4,343	5,119
<i>o/w gains on financial instruments at fair value through other comprehensive income</i>	<i>84</i>	<i>103</i>

(1) This item includes realised and unrealised gains and losses on debt and equity instruments, with the exception of the income component of debt instruments representative of an interest rate, which is recorded under net interest margin (see Note 3.7).

(2) This item includes only the net gain/loss on hedging transactions related to financial instruments. For the hedging transactions related to non-financial assets and liabilities, the net gain/loss on hedging transactions is included under the profit and loss account of the hedged item.

(3) This item includes the revaluation of fair value hedged items, including the change in revaluation differences in portfolios hedged against interest rate risk.

Insofar as income and expenses recorded in the income statement are classified by type of instrument rather than by purpose, the net income generated by activities in financial instruments at fair value through profit or loss must be assessed as a whole. It should be noted that the income shown here does not include the refinancing cost of these financial instruments, which is shown under interest expense and interest income.

NOTE 3.2 Financial derivatives**MAKE IT
SIMPLE**

Derivative instruments are financial instruments for which the value changes according to that of an underlying item and can be accompanied by a leverage effect. The items underlying these instruments are various (interest rates, exchange rates, equity, indexes, commodities, credit rating...), as are their forms (forward contracts, swaps, calls and puts...).

The Group may use these derivative instruments for their market activities to provide to its customers solutions to meet their risk management or revenue optimisation needs. In that case, they are accounted for as trading derivatives.

The Group may also use derivative instruments to manage and hedge its own risks. In which case, they are qualified as hedging derivatives. Hedging transactions can concern individual items or transactions (micro-hedging relationships) or portfolios of financial assets and liabilities that can generate a structural interest-rate risk (macro-hedging relationships).

Contrary to other financial instruments, derivative instruments are always measured at fair value in the balance sheet, regardless their purpose (market activities or hedging transactions). The fair value adjustments of trading derivatives are directly recognised in the income statement. However, the accounting method used on hedging transactions aims to neutralise in the income statement the effects of the revaluation of hedging derivatives, as long as the hedge is effective.

ACCOUNTING PRINCIPLES

Derivatives are financial instruments meeting the following three criteria:

- their value changes in response to the change in a specified interest rate, foreign exchange rate, share price, index of prices, commodity price, credit rating, etc.;
- they require little to no initial investment;
- they are settled at a future date.

All financial derivatives are recognised at fair value in the balance sheet as financial assets or financial liabilities. They are considered to be trading derivatives by default, unless they are designated as hedging instruments for accounting purposes.

Special case - financial derivatives having Societe Generale shares as their underlying instrument

Financial derivatives having Societe Generale shares as their underlying instrument or shares in Group subsidiaries and whose liquidation entails the payment of a fixed amount in cash (or another financial asset) against a fixed number of Societe Generale shares (other than derivatives) are equity instruments. These instruments, and any related premiums paid or received, are recognised directly in equity, and any changes in the fair value of these derivatives are not recorded. For sales of put options on Societe Generale shares and forward on Societe Generale shares, a debt is recognised for the value of the notional with a contra entry in equity.

Other financial derivatives having Societe Generale shares as their underlying instrument are recorded in the balance sheet at fair value in the same manner as derivatives with other underlying instruments.

Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host instrument.

Where the host contract is a financial asset, the entire hybrid contract is measured at fair value through profit or loss because its contractual cash flows do not pass the SPPI test.

Where the host contract is a financial liability and is not measured at fair value through profit or loss, the embedded derivative is separated from the host contract if:

- at acquisition, the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host; and
- it would meet the definition of a derivative.

Once separated, the derivative is recognised at fair value in the balance sheet under *Financial assets or Financial liabilities at fair value through profit or loss* under the aforementioned conditions. The host contract is classified as a financial liability and measured in accordance with its accounting category.

NOTE 3.2.1. TRADING DERIVATIVES

ACCOUNTING PRINCIPLES

Trading derivatives are recorded in the balance sheet under *Financial assets or liabilities at fair value through profit or loss*. Changes in fair value are recorded in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss*.

Changes in the fair value of financial derivatives involving counterparties which subsequently went into default are recorded under *Net gains and losses on financial instruments at fair value through profit or loss* until the termination date of these instruments. At this termination date, receivables and debts on these counterparties are recognised at fair value in the balance sheet. Any further impairment of these receivables is recognised under *Cost of risk* in the income statement.

BREAKDOWN OF FAIR VALUE OF TRADING DERIVATIVES

(In EURm)	31.12.2019		31.12.2018	
	Assets	Liabilities	Assets	Liabilities
Interest rate instruments	91,146	88,501	74,253	73,835
Foreign exchange instruments	18,036	18,354	19,246	19,466
Equities & index Instruments	22,318	26,141	21,450	23,675
Commodities Instruments	1,860	2,201	5,708	6,081
Credit derivatives	2,415	2,037	2,224	2,704
Other forward financial instruments	74	886	102	1,185
TOTAL	135,849	138,120	122,983	126,946

The Group uses credit derivatives in the management of its Corporate credit portfolio, primarily to reduce individual, sector and geographic concentration and to implement a proactive risk and capital management approach. All credit derivatives, regardless of their

purpose, are measured at fair value through profit or loss and cannot be qualified as hedging instruments for accounting purposes. Accordingly, they are recognised at fair value among trading derivatives.

BREAKDOWN OF TRADING DERIVATIVES COMMITMENTS (NOTIONAL AMOUNTS)

(In EURm)	31.12.2019	31.12.2018
Interest rate instruments	11,988,127	11,489,020
Firm instruments	9,959,001	9,476,579
<i>Swaps</i>	8,324,621	7,868,534
<i>FRAs</i>	1,634,380	1,608,045
Options	2,029,126	2,012,441
Foreign exchange instruments	3,192,776	3,823,369
Firm instruments	2,475,393	2,661,823
Options	717,383	1,161,546
Equity and index instruments	1,124,549	1,086,822
Firm instruments	186,691	154,988
Options	937,858	931,834
Commodities instruments	96,900	190,706
Firm instruments	83,509	139,558
Options	13,391	51,148
Credit derivatives	246,006	293,463
Other forward financial instruments	38,428	38,423
TOTAL	16,686,786	16,921,803

NOTE 3.2.2 HEDGING DERIVATIVES

According to the transitional provisions of IFRS 9, the Group made the choice to maintain the IAS 39 provisions related to hedge accounting. Consequently, equity instruments do not qualify for hedge accounting regardless of their accounting category.

ACCOUNTING PRINCIPLES

In order to be hedged against certain market risks, the Group sets up hedging derivatives. From an accounting standpoint, the Group designates the hedging transaction as a fair value hedge, a cash flow hedge, or a hedge of a net investment in a foreign operation, depending on the risk and on the instruments that are hedged.

To designate an instrument as a hedging derivative, the Group must document the hedging relationship in detail, from the inception of the hedge. This documentation specifies the asset, liability, or future transaction hedged, the risk to be hedged and the associated risk management strategy, the type of financial derivative used and the valuation method that will be used to measure its effectiveness.

A derivative designated as a hedging instrument must be highly effective in offsetting the change in fair value or cash flows arising from the hedged risk. This effectiveness is verified when changes in the fair value or cash flows of the hedged instrument are almost entirely offset by changes in the fair value or cash flows of the hedging instrument, with the expected ratio between the two changes ranging from 80% to 125%. Effectiveness shall be assessed both when the hedge is first set up and throughout its life. Effectiveness is measured each quarter prospectively (expected effectiveness over the future periods) and retrospectively (effectiveness measured on past periods). Where the effectiveness falls outside the range specified above, hedge accounting is discontinued.

Hedging derivatives are recognised in the balance sheet under *Hedging derivatives*.

Fair value hedges

The purpose of these hedges is to protect the Group against an adverse fluctuation in the fair value of an instrument which could affect profit or loss if the instrument were derecognised from the balance sheet.

Changes in the fair value of the hedging derivative are recorded in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss*; for interest rate derivatives, however, accrued interest income and expenses on the derivative are recorded in the income statement under *Interest income and expense – Hedging derivatives* at the same time as accrued interest income and expenses related to the hedged item.

In the balance sheet, the carrying value of the hedged item is adjusted for gains and losses attributable to the hedged risk, which are reported in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss*. To the extent that the hedge is highly effective, changes in the fair value of the hedged item and changes in the fair value of the hedging derivative are accurately offset through profit or loss, the difference corresponding to an ineffectiveness gain or loss.

Prospective effectiveness is assessed *via* a sensitivity analysis based on probable market trends or *via* a regression analysis of the statistical relationship (correlation) between certain components of the hedged item and the hedging instrument. Retrospective effectiveness is assessed by comparing any changes in the fair value of the hedging instrument with any changes in the fair value of the hedged item.

If it becomes apparent that the derivative has ceased to meet the effectiveness criteria for hedge accounting or if it is terminated or sold, hedge accounting is discontinued prospectively. Thereafter, the carrying amount of the hedged asset or liability ceases to be adjusted for changes in fair value attributable to the hedged risk and the cumulative adjustments previously recognised under hedge accounting are amortised over its remaining life. Hedge accounting is also discontinued if the hedged item is sold prior to maturity or early-redeemed, the valuation adjustments are then immediately recognised in the income statement.

Cash flow hedges

The purpose of interest rate cash flow hedges is to protect against changes in future cash flows associated with a financial instrument on the balance sheet (loans, securities or floating-rate notes) or with a highly probable future transaction (future fixed rates, future prices, etc.). The purpose of these hedges is to protect the Group against adverse fluctuations in the future cash-flows of an instrument or transaction that could affect profit or loss.

The effective portion of changes in the fair value of hedging derivatives is booked to *Unrealised or deferred gains and losses*, while the ineffective portion is recognised in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss*. For interest rate derivatives, accrued interest income and expenses on the derivative are recorded in the income statement under *Interest income and expense – Hedging derivatives* at the same time as accrued interest income and expenses related to the hedged item.

The effectiveness of the hedge is assessed using the hypothetical derivative method, which consists in i) creating a hypothetical derivative bearing exactly the same characteristics as the instrument being hedged (in notional terms, in terms of the date on which the rates are reset, in terms of the rates themselves, etc.), but which moves in the opposite direction and whose fair value is nil when the hedge is set up, then ii) comparing the expected changes in the fair value of the hypothetical derivative with those of the hedging instrument (sensitivity analysis) or performing a regression analysis on the prospective effectiveness of the hedge.

Amounts directly recognised in equity in respect of the revaluation of cash flow hedging derivatives are subsequently reclassified to *Interest income and expense* in the income statement at the same time as the cash flows being hedged.

Whenever the hedging derivative ceases to meet the effectiveness criteria for hedge accounting or is terminated or sold, hedge accounting is discontinued prospectively. Amounts previously recognised directly in equity are reclassified under *Interest income and expense* in the income statement over the periods during which interest income is affected by cash flows arising from the hedged item. If the hedged item is sold or redeemed earlier than expected or if the hedged forecast transaction ceases to be highly probable, unrealised gains and losses recognised in equity are immediately reclassified in the income statement.

Hedging of a net investment in a foreign operation

The purpose of a hedge of a net investment in a foreign company is to protect against exchange rate risk.

The hedged item is an investment in a country whose currency differs from the Group's functional currency. The hedge therefore serves to protect the net position of a foreign subsidiary or branch against an exchange rate risk linked to the entity's functional currency.

The effective portion of the changes in the fair value of a hedging derivative designated for accounting purposes as a hedge of a net investment is recognised in equity under *Unrealised or deferred gains and losses*, while the ineffective portion is recognised in the income statement.

Portfolio hedges (macro-hedge)

In this type of hedge, interest rate derivatives are used to globally hedge the structural interest rate risk resulting mainly from Retail Banking activities.

When accounting for these transactions, Group entities apply either the fair value hedge or the cash flow hedge principles.

Group entities, documenting a macro fair value hedge of assets and liabilities portfolios at fix rate, apply the IAS 39 "carve-out" standard as adopted by the European Union, which facilitates:

- the application of fair value hedge accounting to macro-hedges used for asset-liability management, including customer demand deposits in the fixed-rate positions being hedged;
- the performance of effectiveness tests required by IAS 39 as adopted by the European Union.

The accounting treatment of financial derivatives designated as macro fair value hedges is similar to that of other fair value hedging instruments. Changes in the fair value of the portfolio of macro-hedged instruments are reported on a separate line in the balance sheet under *Revaluation differences on portfolios hedged against interest rate risk* through profit or loss.

Group entities, documenting a macro cash flow hedge apply the same accounting principles as those presented above for cash flow hedge. Thus, macro-hedged assets or liabilities portfolios are not measured at fair value for the hedged risk.

In the case of macro cash flow hedge, hedged portfolios include assets or liabilities at variable rate.

BREAKDOWN OF FAIR VALUE OF HEDGING DERIVATIVES

(In EURm)	31.12.2019		31.12.2018	
	Assets	Liabilities	Assets	Liabilities
Fair value hedge	16,617	9,981	11,666	5,767
Interest rate instruments	16,616	9,981	11,650	5,765
Foreign exchange instruments	1	-	16	2
Equity and index instruments	-	-	-	-
Cash flow hedge	181	124	105	204
Interest rate instruments	169	65	27	140
Foreign exchange instruments	10	46	78	38
Equity and index Instruments	2	13	-	26
Net investment hedge	39	107	128	22
Foreign exchange instruments	39	107	128	22
TOTAL	16,837	10,212	11,899	5,993

The Group sets up hedging relationships recognised for accounting purposes as fair value hedges in order to protect its fixed-rate financial assets and liabilities (primarily loans/borrowings, securities issued and fixed-rate securities) against changes in long-term interest rates. The hedging instruments used mainly consist of interest rate swaps.

Through some of its Corporate and Investment Banking operations, the Group is exposed to future cash flow changes in its short and

medium-term funding requirements, and sets up hedging relationships recognised for accounting purposes as cash flow hedges. Highly probable funding requirements are determined using historic data established for each activity and representative of balance sheet outstandings. These data may be increased or decreased with changes in management methods.

BREAKDOWN OF HEDGING DERIVATIVES COMMITMENTS (NOTIONAL AMOUNTS)

Commitments presented in the table below show the cumulated notional amounts of hedging derivatives instruments. No netting of notional amounts has been applied to reflect the economic exposure generated by those instruments (for example, when a fix rate payer /

Euribor 3 months receiver swap is netted by a Euribor 3 months payer / fix rate receiver). Consequently, the amount of commitments may be in some cases superior to the carrying amount of the hedged items presented in the following tables.

(In EURm)	31.12.2019	31.12.2018
Interest rate instruments	757,099	488,398
Firm instruments	755,847	487,149
<i>Swaps</i>	755,775	486,994
<i>FRAs</i>	72	155
Options	1,252	1,249
Foreign exchange instruments	11,314	14,747
Firm instruments	11,314	14,747
Equity and index instruments	90	74
Options	90	74
TOTAL	768,503	503,219

MATURITIES OF HEDGING FINANCIAL DERIVATIVES (NOTIONAL AMOUNTS)

These items are presented according to the contractual maturity of the financial instruments.

(In EURm)	Up to 3 months	From 3 months to 1 year	From 1 year to 5 years	Over 5 years	31.12.2019
Interest rate instruments	108,682	15,877	460,280	172,260	757,099
Foreign exchange instruments	10,542	337	435	-	11,314
Equity and index instruments	15	22	53	-	90
Other forward financial instruments	-	-	-	-	-
TOTAL	119,239	16,236	460,768	172,260	768,503

BREAKDOWN OF FAIR VALUE HEDGED ITEMS

(In EURm)	31.12.2019		
	Carrying amount	Cumulative change in the fair value ⁽²⁾	Change in the fair value booked during the period ⁽²⁾
Hedge of interest rate risk	309,183	10,879	(1,067)
Hedged assets	71,252	2,365	974
<i>Due from banks, at amortised cost</i>	1,331	30	12
<i>Customer loans, at amortised cost</i>	4,680	384	44
<i>Securities at amortised cost</i>	748	19	(0)
<i>Financial assets at fair value through other comprehensive income</i>	39,135	1,531	1,016
<i>Customer loans (macro hedged)⁽¹⁾</i>	25,358	401	(98)
Hedged liabilities	237,931	8,514	(2,041)
<i>Debt securities issued</i>	33,424	948	(234)
<i>Due to banks</i>	14,389	308	(183)
<i>Customer deposits</i>	2,506	196	24
<i>Subordinated debts</i>	11,985	391	(395)
<i>Customer deposits (macro hedged)^{(1) (3)}</i>	175,627	6,671	(1,253)
Hedge of currency risk	605	3	12
Hedged assets	-	-	-
<i>Customer loans, at amortised cost</i>	-	-	-
Hedged liabilities	605	3	12
<i>Due to banks</i>	605	3	12
Hedge of equity risk	1	(0)	(0)
Hedged liabilities	1	(0)	(0)
<i>Other liabilities</i>	1	(0)	(0)
TOTAL	309,789	10,882	(1,055)

31.12.2018

(In EURm)	Carrying amount*	Cumulative change in the fair value ⁽²⁾	Change in the fair value booked during the period ⁽²⁾
Hedge of interest rate risk	175,974	8,018	943
Hedged assets	60,186	1,521	(230)
<i>Due from banks, at amortised cost</i>	1,170	19	(6)
<i>Customer loans, at amortised cost</i>	3,762	336	(10)
<i>Securities at amortised cost</i>	594	25	11
<i>Financial assets at fair value through other comprehensive income</i>	33,190	642	124
<i>Customer loans (macro hedged)⁽¹⁾</i>	21,470	499	(349)
Hedged liabilities	115,788	6,497	1,173
<i>Debt securities issued</i>	26,433	745	232
<i>Due to banks</i>	13,241	114	(20)
<i>Customer deposits</i>	1,422	219	48
<i>Subordinated debts</i>	12,599	1	120
<i>Customer deposits (macro hedged)^{(1) (3)}</i>	62,093	5,418	793
Hedge of currency risk	783	16	39
Hedged assets	31	1	1
<i>Customer loans, at amortised cost</i>	31	1	1
Hedged liabilities	752	15	38
<i>Due to banks</i>	752	15	38
Hedge of equity risk	-	-	-
Hedged liabilities	-	-	-
<i>Other liabilities</i>	-	-	-
TOTAL	176,757	8,034	982

(1) The carrying amount of the macro-hedged items represents the sum of the hedged outstanding and the revaluation differences on portfolios hedged against interest rate risk.

(2) Changes in fair value attributable to the hedged risk only and used to determine the ineffective portion of the fair value of the hedging instrument. This change is excluding accrued interests for the items hedged against interest rate risk.

(3) During 2019 financial year, the increase in the carrying amount of customer deposits (macro-hedged) as well as commitments (notional) of the associated hedging swaps, presented in the tables hereafter, are explained by:

- A change of the interest rate risk management of the banking book which now includes partial hedging of the sensitivity of the Net Interest Margin on the French domestic market ;
- The drop in the level of rates, which has led to increase the duration of fixed-rate modeled liabilities (negative convexity of the portfolio) and therefore to increase the notional amounts of associated hedges. At the same time, the change in fair value of the macro-hedged liability portfolios can be explained by the drop in rates over the period.

* Amounts restated compared with the published consolidated statements for the year-ended 31 December 2018.

At 31 December 2019, EUR 267 million of cumulative change in fair value are still to be amortised because of the disappearance of the hedged item.

BREAKDOWN OF FAIR VALUE HEDGING INSTRUMENTS

(In EURm)	31.12.2019				
	Commitments ⁽³⁾ (notional amounts)	Fair value ⁽²⁾		Change in fair value booked during the period	Ineffectiveness recognised during the period
		Asset	Liabilities		
Hedge of interest rate risk	290,820	16,619	9,979	1,167	100
Firm instruments – Swaps	289,568	16,615	9,979	1,165	100
For hedged assets	43,831	155	2,415	(1,086)	(14)
For hedged portfolios of assets (macro hedge) ⁽¹⁾	25,377	1,715	1,738	97	1
For hedged liabilities	61,370	2,279	226	866	78
For hedged portfolios of liabilities (macro hedge) ⁽¹⁾	158,990	12,466	5,600	1,288	35
Options	1,252	4	-	2	0
For hedged portfolios of assets (macro hedge) ⁽¹⁾	1,252	4	-	2	0
Hedge of currency risk	828	11	7	(12)	0
Firm instruments	828	11	7	(12)	0
For hedged liabilities	828	11	7	(12)	0
Non-derivative financial instruments	-	-	-	-	-
For hedged assets	-	-	-	-	-
Hedge of equity risk	2	-	0	0	(0)
Options	2	-	0	0	(0)
For hedged liabilities	2	-	0	0	(0)
TOTAL	291,650	16,630	9,986	1,155	100

(In EURm)	31.12.2018				
	Commitments (notional amounts)	Fair value ⁽²⁾		Change in fair value booked during the period	Ineffectiveness recognised during the period
		Asset	Liabilities		
Hedge of interest rate risk	169,944	11,650	5,765	(909)	34
Firm instruments – Swaps	168,695	11,645	5,765	(909)	34
For hedged assets	37,271	314	1,380	(138)	(18)
For hedged portfolios of assets (macro hedge) ⁽¹⁾	20,986	955	1,436	323	(33)
For hedged liabilities	52,178	2,111	612	(358)	3
For hedged portfolios of liabilities (macro hedge) ⁽¹⁾	58,260	8,265	2,337	(736)	82
Options	1,249	5	-	-	-
For hedged portfolios of assets (macro hedge) ⁽¹⁾	1,249	5	-	-	-
Hedge of currency risk	2,055	16	30	(38)	1
Firm instruments	2,055	16	2	(38)	-
For hedged liabilities	2,055	16	2	(38)	-
Non-derivative financial instruments	-	-	28	-	1
For hedged assets	-	-	28	-	1
Hedge of equity risk	-	-	-	-	-
Options	-	-	-	-	-
For hedged liabilities	-	-	-	-	-
TOTAL	171,999	11,666	5,795	(947)	35

(1) For macro fair value transactions, the commitment described above equals the net hedging derivatives position in order to represent the economic exposure from these instruments. This position should be linked with the carrying amount of the hedged items which represents the hedged exposure.

(2) The fair value of interest rate hedging derivatives includes accrued interests.

(3) The notional amounts of hedging instruments for which IAS 39 amendments is applied, permitting to use exceptions to hedge accounting requirement in the frame of benchmark interest rates reform, are EUR 27,843 million for instrument identifying EONIA, EUR 203,459 million for instruments identifying EURIBOR, EUR 14,248 million for instrument identifying LIBOR USD.

BREAKDOWN OF CASH FLOW HEDGED ITEMS

The following table describes the change of fair value of hedged items used to book the ineffective portion of the hedge during the current period. Regarding the cash flow hedges, the change in fair value of hedged items is assessed using the hypothetical derivative method described in the accounting principles above.

	31.12.2019	31.12.2018
(In EURm)	Change in the fair value	Change in the fair value
Hedge of interest rate risk	(181)	54
Hedged assets	1	16
<i>Customer loans, at amortised cost</i>	-	2
<i>Financial assets at fair value through other comprehensive income</i>	(1)	8
<i>Customer loans (macro hedged)</i>	2	6
Hedged liabilities	(182)	38
<i>Debt securities issued</i>	(1)	2
<i>Due to banks</i>	(25)	(0)
<i>Customer deposits (macro hedged)</i>	(156)	36
Hedge of currency risk	(0)	33
Hedged liabilities	(0)	33
<i>Due to banks</i>	-	33
Hedge of equity risk	(26)	46
Forecast transactions	(26)	46
TOTAL	(207)	133

BREAKDOWN OF CASH FLOW HEDGING INSTRUMENTS

	31.12.2019					
	Commitments ⁽²⁾ (notional amounts)	Fair value		Changes in fair value recorded during the period		Cumulative change in fair value recorded in unrealised or deferred gains and losses
(In EURm)		Asset	Liability	Portion booked in unrealised or deferred gains and losses	Ineffectiveness recorded in the profit or loss	
Hedge of interest rate risk	13,538	169	64	180	0	34
Firm instruments – Swaps	13,466	169	64	179	0	35
<i>For hedged assets</i>	2,222	3	10	1	-	(9)
<i>For hedged portfolios of assets (macro hedge)⁽¹⁾</i>	3,129	2	39	(2)	0	(26)
<i>For hedged liabilities</i>	3,874	63	6	25	0	(19)
<i>For hedged portfolios of liabilities (macro hedge)⁽¹⁾</i>	4,241	101	9	155	-	89
Firm instruments – FRAs	72	-	-	1	0	(1)
<i>For hedged liabilities</i>	72	-	-	1	0	(1)
Hedge of currency risk	3,489	15	47	0	-	(0)
Firm instruments	3,489	10	46	-	-	-
<i>For hedged assets</i>	707	9	36	(0)	(0)	(0)
<i>For hedged liabilities</i>	2,782	1	10	0	(0)	0
Non-derivative financial instruments		5	1	0	-	(0)
<i>For hedged future transactions</i>		5	1	0	-	(0)
Hedge of equity risk	88	2	13	25	4	(2)
Options	88	2	13	25	4	(2)
<i>For hedged future transactions</i>	88	2	13	25	4	(2)
TOTAL	17,115	186	124	205	4	32

(In EURm)	31.12.2018					
	Commitments (notional amounts)	Fair value		Changes in fair value recorded during the period		Cumulative change in fair value recorded in unrealised or deferred gains and losses
		Asset	Liability	Portion booked in unrealised or deferred gains and losses	Ineffectiveness recorded in the profit or loss	
Hedge of interest rate risk	15,965	27	140	(54)	-	(100)
Firm instruments – Swaps	15,810	27	139	(45)	-	(96)
For hedged assets	2,257	1	10	(10)	-	(9)
For hedged portfolios of assets (macro hedge) ⁽¹⁾	4,775	5	43	(6)	-	(27)
For hedged liabilities	3,047	-	2	7	-	5
For hedged portfolios of liabilities (macro hedge) ⁽¹⁾	5,731	21	84	(36)	-	(65)
Firm instruments – FRAs	155	-	1	(9)	-	(4)
For hedged liabilities	155	-	1	(9)	-	(4)
Hedge of currency risk	5,599	89	39	(33)	-	(13)
Firm instruments	5,599	78	38	(33)	-	(13)
For hedged assets	674	8	31	-	-	-
For hedged liabilities	4,925	70	7	(33)	-	(13)
Non-derivative financial instruments		11	1	-	-	-
For hedged future transactions		11	1	-	-	-
Hedge of equity risk	74	-	26	(46)	(7)	(15)
Options	74	-	26	(46)	(7)	(15)
For hedged future transactions	74	-	26	(46)	(7)	(15)
TOTAL	21,638	116	205	(133)	(7)	(128)

(1) For the macro hedge transactions, the commitment described above equals the net hedging derivatives position in order to represent the economic exposure from these instruments. This position should be linked with the carrying amount of the hedged items which represents the hedged exposure.

(2) The national amounts of hedging instrument for which IAS 39 amendment is applied, permitting to use exceptions to hedge accounting requirement in the frame of benchmark interest rates reform, are EUR 2,820 million for instrument identifying EONIA, EUR 327 million for instrument identifying EURIBOR, EUR 89 million for instrument identifying LIBOR USD.

In 2019, EUR 42 million of unrealised or deferred gains and losses were transferred into net income, following the accounting of the cash flows hedge effects in the profit or loss.

BREAKDOWN OF NET INVESTMENT HEDGED ITEMS

(In EURm)	31.12.2019	31.12.2018
	Change in the fair value of the hedged item during the period ⁽¹⁾	Cumulative translations differences related to the hedged items
Hedge of currency risk	(355)	839
Hedged net investment in GBP	(166)	145
Hedged net investment in CZK	(27)	(200)
Hedged net investment in RUB	(161)	797
Hedged net investment in RON	18	38
Hedged net investment in USD	1	(39)
Hedged net investment (other currencies)	(20)	98

(1) Changes in fair value attributable to the hedged risk only and used to determine the ineffective portion of the fair value of the hedged instruments.

BREAKDOWN OF NET INVESTMENT HEDGE INSTRUMENTS

31.12.2019						
(In EURm)	Commitments (notional amounts)	Carrying amount ⁽¹⁾		Changes in fair value recorded during the period		Cumulative change in fair value recorded in unrealised or deferred gains or losses
		Asset	Liability	Portion booked in unrealised or deferred gains and losses	Ineffectiveness recorded in the profit or loss	
Hedge of currency risk	6,934	39	2,349	355	(50)	(839)
Firm instruments	6,934	39	107	171	(50)	103
Hedged net investment in GBP	1,218	14	60	67	(12)	155
Hedged net investment in CZK	1,231	(6)	6	16	(10)	23
Hedged net investment in RUB	857	1	36	113	(22)	14
Hedged net investment in RON	805	0	(6)	(16)	(2)	(24)
Hedged net investment in USD	552	10	2	(5)	(3)	4
Hedged net investment (other currencies)	2,271	20	9	(4)	(1)	(69)
Non derivatives instruments	-	-	2,242	184	-	(942)
Hedged net investment in GBP	-	-	478	98	-	(300)
Hedged net investment in CZK	-	-	850	10	-	177
Hedged net investment in RUB	-	-	396	48	-	(811)
Hedged net investment in RON	-	-	43	(1)	-	(14)
Hedged net investment in USD	-	-	203	4	-	35
Hedged net investment (other currencies)	-	-	272	25	-	(29)

31.12.2018						
(In EURm)	Commitments (notional amounts)	Carrying amount ⁽¹⁾		Changes in fair value recorded during the period		Cumulative change in fair value recorded in unrealised or deferred gains or losses
		Asset	Liability	Portion booked in unrealised or deferred gains and losses	Ineffectiveness recorded in the profit or loss	
Hedge of currency risk	6,992	128	2,515	(191)	18	(1,212)
Firm instruments	6,992	128	22	(107)	18	(93)
Hedged net investment in GBP	1,491	21	3	(10)	1	64
Hedged net investment in CZK	1,065	3	-	(1)	(4)	6
Hedged net investment in RUB	752	83	-	(136)	26	(99)
Hedged net investment in RON	689	1	-	16	(2)	(7)
Hedged net investment in USD	461	-	4	34	(3)	9
Hedged net investment (other currencies)	2,534	20	15	(10)	-	(66)
Non derivatives instruments	-	-	2,493	(84)	-	(1,119)
Hedged net investment in GBP	-	-	346	(15)	-	(362)
Hedged net investment in CZK	-	-	839	(6)	-	166
Hedged net investment in RUB	-	-	348	(52)	-	(860)
Hedged net investment in RON	-	-	45	-	-	(13)
Hedged net investment in USD	-	-	199	9	-	6
Hedged net investment (other currencies)	-	-	716	(20)	-	(56)

(1) The carrying value equals fair value in the case of derivative instruments and equals amortised cost, translated at the closing date, in the case of loans and borrowings in foreign currencies.

NOTE 3.3 Financial assets at fair value through other comprehensive income**OVERVIEW OF FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME**

(In EURm)	31.12.2019	31.12.2018
Debt instruments	53,012	49,736
<i>Bonds and other debt securities</i>	52,991	49,696
<i>Loans and receivables and securities purchased under resale agreements</i>	21	40
Shares and other equity securities	244	290
TOTAL	53,256	50,026
<i>o/w securities lent</i>	146	483

NOTE 3.3.1 DEBT INSTRUMENTS**ACCOUNTING PRINCIPLES**

Debt instruments (loans and receivables, bonds and bond equivalents) are classified as *Financial assets at fair value through other comprehensive income* where their contractual cash flows are consistent with basic lending arrangements (SPPI) and they are managed under a Collect and Sell business model.

Accrued or earned income on debt instruments is recorded in profit or loss based on the effective interest rate, under *Interest and similar income*.

At the reporting date, these instruments are measured at fair value and changes in fair value excluding income, are recorded within equity under *Unrealised or deferred gains and losses*, except for foreign exchange differences on money market instruments denominated in local currencies, which are recorded in profit or loss. Furthermore, as these financial assets are subject to impairment for credit risk, changes in expected credit losses are recorded in profit or loss under *Cost of risk* with a corresponding entry to *Unrealised or deferred gains and losses*. The applicable impairment rules are described in Note 3.8.

BUSINESS MODEL “HOLD TO COLLECT AND SELL”

The objective of this business model is to realise cash flows by both collecting contractual payments and selling financial assets. In this type of business model, the sales of financial assets are not incidental or exceptional, but they are integral to achieving the business' objectives.

**Cash management**

Within the Group, except for the insurance activities, the “hold to collect and sell” business model is mainly applied by cash management activities for managing HQLA securities (High Quality Liquid Assets) included in the liquidity reserve. Only a few subsidiaries apply a “hold to collect” business model for managing their HQLA securities.

CHANGES IN THE CARRYING AMOUNT OF THE DEBT INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

(In EURm)	2019
Balance on 1 January	49,736
Acquisitions/disbursements	49,764
Disposals/redemptions	(47,324)
Change in scope and others	(782)
Changes in fair value during the period	906
Change in related receivables	(4)
Translation differences	716
Balance on 31 December	53,012

BREAKDOWN OF CUMULATED UNREALISED GAINS AND LOSSES RECOGNISED DIRECTLY IN EQUITY AND THAT WILL BE RECLASSIFIED SUBSEQUENTLY INTO INCOME

(In EURm)	31.12.2019	31.12.2018
Unrealised gains	391	416
Unrealised losses	(186)	(183)
TOTAL	205	233

NOTE 3.3.2 EQUITY INSTRUMENTS

ACCOUNTING PRINCIPLES

Equity instruments (shares and share equivalents), that are not held for trading purpose, can be initially designated by the Group to be measured at fair value through other comprehensive income. This option, made instrument by instrument, is irrevocable.

These equity instruments are then measured at fair value and changes in fair value, are recognised under *Unrealised or deferred gains and losses* with no subsequent reclassification to profit or loss. If the instruments are sold, the realised gains and losses are reclassified to *Retained earnings* at the opening of the next financial year. Only dividend income, if it is considered as a return on investment, are recorded in the income statement under Net gains or losses on financial assets at fair value through other comprehensive income.

The Group choose only in few cases to designate equity instruments to be measured at fair value through other comprehensive income.

NOTE 3.3.3 NET GAINS AND LOSSES RECOGNISED IN NET INCOME ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

(In EURm)	2019	2018
Realised gains and losses on sale of debt instruments	78	39
Dividends incomes on financial assets at fair value through other comprehensive income	41	44
TOTAL	119	83

NOTE 3.4 Fair value of financial instruments measured at fair value**MAKE IT SIMPLE**

The financial assets and liabilities recognised in the Group balance sheet are measured either at fair value or at amortised cost. In the latter case, the fair value of the instruments is disclosed in the notes (see Note 3.9).

If an instrument is quoted on an active market, its fair value is equal to its market price.

But many financial instruments are not listed (for example, most customer loans and deposits, interbank debts and claims, etc.), or are only negotiable on illiquid markets or over-the-counter markets (which is the case for many derivative instruments).

In such situations, the fair value of the instruments is calculated using measurement techniques or valuation models. Market parameters are included in these models and must be observable; otherwise they are determined based on internal estimates. The models and parameters used are subject to independent validations and internal controls.

ACCOUNTING PRINCIPLES**Definition of fair value**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In the absence of observable prices for identical assets or liabilities, the fair value of financial instruments is determined using another measurement technique that maximises the use of observable market input based on assumptions that market operators would use to set the price of the instrument in question.

Fair value hierarchy

For information purposes, in the notes to the consolidated financial statements, the fair value of financial instruments is classified using a fair value hierarchy that reflects the observability level of the inputs used. The fair value hierarchy is composed of the following levels:

LEVEL 1 (L1): INSTRUMENTS VALUED ON THE BASIS OF QUOTED PRICES (UNADJUSTED) IN ACTIVE MARKETS FOR IDENTICAL ASSETS OR LIABILITIES.

Level 1 instruments carried at fair value on the balance sheet include in particular shares listed in an active market, government or corporate bonds priced directly by external brokers/dealers, derivatives traded on organised markets (futures, options), and units of funds (including UCITS) whose net asset value is available on the balance sheet date.

A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and if they reflect actual and regular market transactions on an arm's length basis.

Determining whether a market is inactive requires the use of indicators such as a sharp decline in trading volume and the level of activity in the market, a sharp disparity in prices over time and among the various above-mentioned market participants, or the fact that the latest transactions conducted on an arm's length basis did not take place recently enough.

Where a financial instrument is traded in several markets to which the Group has immediate access, its fair value is represented by the market price at which volumes and activity levels are highest for the instrument in question.

Transactions resulting from involuntary liquidations or distressed sales are usually not taken into account to determine the market price.

LEVEL 2 (L2): INSTRUMENTS VALUED USING INPUTS OTHER THAN THE QUOTED PRICES INCLUDED IN LEVEL 1 THAT ARE OBSERVABLE FOR THE ASSET OR LIABILITY, EITHER DIRECTLY (I.E. AS PRICES) OR INDIRECTLY (I.E. DERIVED FROM PRICES).

These are instruments measured using a financial model based on observable market inputs. Prices published by an external source derived from the valuation of similar instruments are considered as data derived from prices.

Level 2 instruments include in particular non derivative financial instruments carried at fair value on the balance sheet that are not directly quoted or do not have a quoted price on a sufficiently active market (e.g. corporate bonds, repos transactions, mortgage-backed securities, units of funds), and firm derivatives and options traded over-the-counter: interest rate swaps, caps, floors, swaptions, equity options, index options, foreign exchange options, commodity options and credit derivatives. The maturities of these instruments are linked to ranges of terms commonly traded in the market, and the instruments themselves can be simple or offer a more complex remuneration profile (e.g. barrier options, products with multiple underlying instruments), with said complexity remaining limited however. The valuation techniques used in this category are based on common methods shared by the main market participants.

This category also includes the fair value of loans and receivables at amortised cost granted to counterparties whose credit risk is quoted *via* Credit Default Swap (see Note 3.9).

LEVEL 3 (L3): INSTRUMENTS VALUED USING INPUTS THAT ARE NOT BASED ON OBSERVABLE MARKET DATA (REFERRED TO AS UNOBSERVABLE INPUTS).

Level 3 instruments carried at fair value on the balance sheet are valued based on financial models with unobservable market inputs or observable inputs that are not quoted on active markets. For the Group, those instruments match with the instruments for which the sales margin is not immediately recognised in profit or loss (see Note 3.4.7).

Accordingly, Level 3 financial instruments include derivatives and repo transactions with longer maturities than those usually traded and/or with specifically-tailored return profiles, structured debts including embedded derivatives valued based on a method using unobservable inputs or long-term equity investments valued based on a corporate valuation method, which is the case for unlisted companies or companies listed on an insufficiently liquid market.

The main L3 complex derivatives are:

- equity derivatives: options with long maturities and/or incorporating bespoke remuneration mechanisms. These instruments are sensitive to market inputs (volatility, dividend rates, correlations, etc.). In the absence of market depth and an objective approach made possible by regularly observed prices, their valuation is based on proprietary methods (e.g. extrapolation from observable data, historical analysis). Hybrid equity instruments (*i.e.* having at least one non-equity underlying instrument) are also classified as L3 insofar as correlations between the different underlyings are generally unobservable;
- interest rate derivatives: long-term and/or exotic options, products sensitive to correlation between different interest rates, different exchange rates, or between interest rates and exchange rates, for example for quanto products (in which the instrument is settled in a currency different from the currency of the underlying); they are liable to be classified as L3 because the valuation inputs are unobservable due to the liquidity of the correlated pair and the residual maturity of the transactions (e.g. exchange rate correlations are deemed unobservable for the USD/JPY);
- credit derivatives: L3 credit derivatives mainly include baskets of instruments exposed to time to default correlation ("N to default" products in which the buyer of the hedge is compensated as of the Nth default, which are exposed to the credit quality of the issuers comprising the basket and to their correlation, or CDO Bespoke products, which are Collateralised Debt Obligations created specifically for a group of investors and structured according to their needs), as well as products subject to credit spread volatility;
- commodity derivatives: this category includes products involving unobservable volatility or correlation inputs (*i.e.* options on commodity swaps or instruments based on baskets of underlyings).

NOTE 3.4.1 FINANCIAL ASSETS MEASURED AT FAIR VALUE

(In EURm)	31.12.2019				31.12.2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading portfolio	89,037	129,130	4,017	222,184	69,429	144,430	1,470	215,329
Bonds and other debt securities	22,645	2,976	459	26,080	26,059	3,403	270	29,732
Shares and other equity securities	66,392	11,465	109	77,966	43,370	5,926	1	49,297
Loans, receivables and securities purchased under resale agreements	-	114,507	3,449	117,956	-	134,662	1,199	135,861
Other trading assets	-	182	-	182	-	439	-	439
Trading derivatives	191	132,572	3,086	135,849	23	119,460	3,500	122,983
Interest rate instruments	6	88,868	2,272	91,146	8	71,628	2,617	74,253
Foreign exchange instruments	182	17,717	137	18,036	8	19,038	200	19,246
Equity and index instruments	-	21,938	380	22,318	-	21,211	239	21,450
Commodity instruments	-	1,784	76	1,860	-	5,666	42	5,708
Credit derivatives	-	2,195	220	2,415	-	1,826	398	2,224
Other forward financial instruments	3	70	1	74	7	91	4	102
Financial assets measured mandatorily at fair value through profit or loss	350	21,746	2,881	24,977	117	21,091	2,849	24,057
Bonds and other debt securities	11	44	122	177	12	36	110	158
Shares and other equity securities	339	185	1,968	2,492	105	194	1,697	1,996
Loans, receivables and securities purchased under resale agreements	-	21,517	791	22,308	-	20,861	1,042	21,903
Financial assets measured using fair value option through profit or loss	1,296	1,320	113	2,729	1,126	1,702	353	3,181
Bonds and other debt securities	1,296	162	-	1,458	1,126	184	-	1,310
Loans, receivables and securities purchased under resale agreements	-	32	113	145	-	466	353	819
Other financial assets	-	-	-	-	-	-	-	-
Separate assets for employee benefit plans	-	1,126	-	1,126	-	1,052	-	1,052
Hedging derivatives	-	16,837	-	16,837	-	11,899	-	11,899
Interest rate instruments	-	16,785	-	16,785	-	11,677	-	11,677
Foreign exchange instruments	-	50	-	50	-	222	-	222
Equity and index instruments	-	2	-	2	-	-	-	-
Financial assets measured at fair value through other comprehensive income	51,730	1,282	244	53,256	48,738	998	290	50,026
Bonds and other debt securities	51,730	1,261	-	52,991	48,738	958	-	49,696
Shares and other equity securities	-	-	244	244	-	-	290	290
Loans and receivables	-	21	-	21	-	40	-	40
TOTAL	142,604	302,887	10,341	455,832	119,433	299,580	8,462	427,475

NOTE 3.4.2 FINANCIAL LIABILITIES MEASURED AT FAIR VALUE

(In EURm)	31.12.2019				31.12.2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Trading portfolio	5,001	136,800	1,325	143,126	7,787	149,776	969	158,532
Amounts payable on borrowed securities	71	38,743	136	38,950	308	50,956	-	51,264
Bonds and other debt instruments sold short	3,464	54	-	3,518	6,231	-	-	6,231
Shares and other equity instruments sold short	1,466	-	-	1,466	1,248	-	-	1,248
Borrowings and securities sold under repurchase agreements	-	96,631	1,189	97,820	-	97,330	969	98,299
Other trading liabilities	-	1,372	-	1,372	-	1,490	-	1,490
Trading derivatives	216	132,371	5,533	138,120	81	123,075	3,790	126,946
Interest rate instruments	31	85,177	3,293	88,501	6	70,986	2,843	73,835
Foreign exchange instruments	175	18,064	115	18,354	5	19,346	115	19,466
Equity and index instruments	-	24,529	1,612	26,141	-	23,103	572	23,675
Commodity instruments	-	2,131	70	2,201	-	6,041	40	6,081
Credit derivatives	-	1,594	443	2,037	-	2,484	220	2,704
Other forward financial instruments	10	876	-	886	70	1,115	-	1,185
Financial liabilities measured using fair value option through profit or loss	-	38,160	44,723	82,883	265	39,408	37,932	77,605
Hedging derivatives	-	10,212	-	10,212	-	5,993	-	5,993
Interest rate instruments	-	10,045	-	10,045	-	5,905	-	5,905
Foreign exchange instruments	-	154	-	154	-	62	-	62
Equity and index instruments	-	13	-	13	-	26	-	26
TOTAL	5,217	317,543	51,581	374,341	8,133	318,252	42,691	369,076

NOTE 3.4.3 VARIATION IN LEVEL 3 FINANCIAL INSTRUMENTS

FINANCIAL ASSETS AT FAIR VALUE

(In EURm)	Balance at 31.12.2018	Acqui- sitions	Disposal/ redemptions	Transfer to Level 2	Transfer from Level 2	Gains and losses	Translation differences	Change in scope and others	Balance at 31.12.2019
Trading portfolio	1,470	4,355	(1,147)	(1,328)	165	483	19	-	4,017
Bonds and other debt securities	270	1,156	(976)	(42)	-	40	11	-	459
Shares and other equity securities	1	54	(1)	-	55	-	-	-	109
Loans, receivables and securities purchased under resale agreements	1,199	3,145	(170)	(1,286)	110	443	8	-	3,449
Other trading assets	-	-	-	-	-	-	-	-	-
Trading derivatives	3,500	209	(101)	(370)	303	(475)	20	-	3,086
Interest rate instruments	2,617	35	(22)	(343)	294	(317)	8	-	2,272
Foreign exchange instruments	200	7	(1)	(3)	1	(67)	-	-	137
Equity and index instruments	239	161	(78)	(22)	5	64	11	-	380
Commodity instruments	42	6	-	-	-	28	-	-	76
Credit derivatives	398	-	-	(2)	3	(180)	1	-	220
Other forward financial instruments	4	-	-	-	-	(3)	-	-	1
Financial assets measured mandatorily at fair value through profit or loss	2,849	297	(106)	(705)	8	530	19	(11)	2,881
Bonds and other debt securities	110	17	(12)	-	-	7	-	-	122
Shares and other equity securities	1,697	258	(94)	(22)	8	124	8	(11)	1,968
Loans, receivables and securities purchased under resale agreements	1,042	22	-	(683)	-	399	11	-	791
Financial assets measured using fair value option through profit or loss	353	-	(50)	-	-	(191)	1	-	113
Bonds and other debt securities	-	-	-	-	-	-	-	-	-
Loans, receivables and securities purchased under resale agreements*	353	-	(50)	-	-	(191)	1	-	113
Other financial assets	-	-	-	-	-	-	-	-	-
Separate assets for employee benefit plans	-	-	-	-	-	-	-	-	-
Hedging derivatives	-	-	-	-	-	-	-	-	-
Financial assets measured at fair value option through other comprehensive income	290	3	-	-	-	(49)	-	-	244
Debt instruments	-	-	-	-	-	-	-	-	-
Equity instruments	290	3	-	-	-	(49)	-	-	244
Loans and receivables	-	-	-	-	-	-	-	-	-
TOTAL	8,462	4,864	(1,404)	(2,403)	476	298	59	(11)	10,341

FINANCIAL LIABILITIES AT FAIR VALUE

(In EURm)	Balance at 31.12.2018	Issues	Redemptions	Transfer to Level 2	Transfer from Level 2	Gains and losses	Translation differences	Change in scope and others	Balance at 31.12.2019
Trading portfolio	969	1,119	(6)	(10)	105	(854)	2	-	1,325
Debt securities issued	-	-	-	-	-	-	-	-	-
Amounts payable on borrowed securities	-	31	-	-	105	(2)	2	-	136
Bonds and other debt instruments sold short	-	-	-	-	-	-	-	-	-
Shares and other equity instruments sold short	-	-	-	-	-	-	-	-	-
Borrowings and securities sold under repurchase agreements	969	1,088	(6)	(10)	-	(852)	-	-	1,189
Other trading liabilities	-	-	-	-	-	-	-	-	-
Trading derivatives	3,790	896	(74)	(549)	47	1,168	156	99	5,533
Interest rate instruments	2,843	31	-	(474)	1	648	145	99	3,293
Foreign exchange instruments	115	6	-	-	-	(5)	(1)	-	115
Equity and index instruments	572	856	(74)	(75)	4	318	11	-	1,612
Commodity instruments	40	3	-	-	-	27	-	-	70
Credit derivatives	220	-	-	-	42	180	1	-	443
Other forward financial instruments	-	-	-	-	-	-	-	-	-
Financial liabilities measured using fair value option through profit or loss	37,932	18,855	(15,510)	(1,659)	218	4,414	552	(79)	44,723
Hedging derivatives	-	-	-	-	-	-	-	-	-
TOTAL	42,691	20,870	(15,590)	(2,218)	370	4,728	710	20	51,581

NOTE 3.4.4 VALUATION METHODS OF FINANCIAL INSTRUMENTS CARRIED AT FAIR VALUE ON THE BALANCE SHEET

For financial instruments recognised at fair value on the balance sheet, fair value is determined primarily on the basis of the prices quoted in an active market. These prices can be adjusted if none are available on the balance sheet date or if the clearing value does not reflect transaction prices.

However, due notably to the varied characteristics of financial instruments traded over-the-counter on the financial markets, a large number of financial products traded by the Group does not have quoted prices in the markets.

For these products, fair value is determined using models based on valuation techniques commonly used by market participants to measure financial instruments, such as discounted future cash flows for swaps or the Black & Scholes formula for certain options, and using valuation parameters that reflect current market conditions at the balance sheet date. These valuation models are validated independently by the experts from the Market Risk Department of the Group's Risk Division.

Furthermore, the inputs used in the valuation models, whether derived from observable market data or not, are checked by the Finance Division of Market Activities, in accordance with the methodologies defined by the Market Risk Department.

If necessary, these valuations are supplemented by additional reserves (such as bid-ask spreads and liquidity) determined reasonably and appropriately after an analysis of available information.

Derivatives and security financing transactions are subject to a Credit Valuation Adjustment (CVA) or Debt Valuation Adjustment (DVA). The Group includes all clients and clearing houses in this adjustment,

which also reflects the netting agreements existing for each counterparty.

The CVA is determined on the basis of the Group entity's expected positive exposure to the counterparty, the counterparty's probability of default and the amount of the loss given default. The DVA is determined symmetrically based on the negative expected exposure. These calculations are carried out over the life of the potential exposure, with a focus on the use of relevant and observable market data.

Similarly, an adjustment to take into account the costs or profits linked to the financing of these transactions (FVA, Funding Value Adjustment) is also performed.

Observable data must be: independent, available, publicly distributed, based on a narrow consensus and/or backed up by transaction prices.

For example, consensus data provided by external counterparties are considered observable if the underlying market is liquid and if the prices provided are confirmed by actual transactions. For long maturities, these consensus data are not observable. This is the case for the implied volatility used for the valuation of equity options with maturities of more than five years. However, when the residual maturity of the instrument falls below five years, its fair value becomes sensitive to observable inputs.

In the event of unusual tensions on the markets, leading to a lack of the usual reference data used to measure a financial instrument, the Risk Division may implement a new model in accordance with pertinent available data, similar to methods used by other market players.

SHARES AND OTHER EQUITY SECURITIES

For listed shares, fair value is taken to be the quoted price on the balance sheet date. For unlisted shares, fair value is determined depending on the type of financial instrument and according to one of the following methods:

- valuation based on a recent transaction involving the issuing company (third party buying into the issuing company's capital, appraisal by a professional valuation agent, etc.);
- valuation based on a recent transaction in the same sector as the issuing company (income multiple, asset multiple, etc.);
- proportion of net asset value held.

For unlisted securities in which the Group has significant holdings, valuations based on the above methods are supplemented by a discounted future cash flow valuation based on business plans or on valuation multiples of similar companies.

DEBT INSTRUMENTS HELD IN PORTFOLIO, ISSUES OF STRUCTURED SECURITIES MEASURED AT FAIR VALUE AND FINANCIAL DERIVATIVES

The fair value of these financial instruments is determined based on the quoted price on the balance sheet date or prices provided by brokers on the same date, when available. For unlisted financial instruments, fair value is determined using valuation techniques. Concerning liabilities measured at fair value, the on-balance sheet amounts include changes in the Group's issuer credit risk.

OTHER DEBTS

For listed financial instruments, fair value is taken as their closing quoted price on the balance sheet date. For unlisted financial instruments, fair value is determined by discounting future cash flows to present value at market rates (including counterparty risks, non-performance and liquidity risks).

CUSTOMER LOANS

The fair value of loans and receivables is calculated, in the absence of an actively traded market for these loans, by discounting the expected cash flows to present value at a discount rate based on interest rates prevailing on the market at the reporting date for loans with broadly similar terms and maturities. These discount rates are adjusted for borrower credit risk.

NOTE 3.4.5 ESTIMATES OF MAIN UNOBSERVABLE INPUTS

The following table provides the valuation of Level 3 instruments on the balance sheet and the range of values of the most significant unobservable inputs by main product type.

(In EURm)		Value in balance sheet				
Cash instruments and derivatives ⁽¹⁾	Assets	Liabilities	Main products	Valuation techniques used	Significant unobservable inputs	Range of inputs min & max
Equities/funds	844	32,586	Simple and complex instruments or derivatives on funds, equities or baskets of stocks	Various option models on funds, equities or baskets of stocks	Equity volatilities	3.8%; 90.5%
					Equity dividends	0%; 21.3%
					Correlations	-80.0%; 97.8%
					Hedge fund volatilities	8.5%; 20%
					Mutual fund volatilities	1.7%; 42.2%
Rates and Forex	7,344	18,483	Hybrid forex/interest rate or credit/interest rate derivatives	Hybrid forex interest rate or credit interest rate option pricing models	Correlations	-47.3%; 90%
			Forex derivatives	Forex option pricing models	Forex volatilities	1%; 32.8%
			Interest rate derivatives whose notional is indexed to prepayment behaviour in European collateral pools	Prepayment modelling	Constant prepayment rates	0%; 20%
			Inflation instruments and derivatives	Inflation pricing models	Correlations	50.5%; 88.9%
Credit	220	442	Collateralised Debt Obligations and index tranches	Recovery and base correlation projection models	Time to default correlations	0%; 100%
			Other credit derivatives	Credit default models	Recovery rate variance for single name underlyings	0%; 100%
					Time to default correlations	0%; 100%
					Quanto correlations	-50%; 40%
Commodities	76	70	Derivatives on commodities baskets	Option models on commodities	Credit spreads	0 bps; 1,000 bps
Long term equity investments	1,857	-	Securities held for strategic purposes	Net Book Value/Recent transactions	Commodities correlations	9.88%; 96.4%
					Non applicable	-
TOTAL	10,341	51,581				

(1) Hybrid instruments are broken down by main unobservable inputs.

NOTE 3.4.6 SENSITIVITY OF FAIR VALUE FOR LEVEL 3 INSTRUMENTS

Unobservable inputs are assessed carefully, particularly in this persistently uncertain economic environment and market. However, by their very nature, unobservable inputs inject a degree of uncertainty into the valuation of Level 3 instruments.

To quantify this, fair value sensitivity was estimated at 31 December 2019 on instruments whose valuation requires certain unobservable inputs. This estimate was based either on a “standardised” variation in unobservable inputs, calculated for each input on a net position, or on

assumptions in line with the additional valuation adjustment policies for the financial instruments in question.

The “standardised” variation is:

- either the standard deviation of consensus prices (TOTEM, etc.) used to measure an input nevertheless considered as unobservable; or
- the standard deviation of historic data used to measure the input.

SENSITIVITY OF LEVEL 3 FAIR VALUE TO A REASONABLE VARIATION IN UNOBSERVABLE INPUTS

(In EURm)	31.12.2019		31.12.2018	
	Negative impact	Positive impact	Negative impact	Positive impact
Shares and other equity instruments and derivatives	(9)	79	(13)	96
Equity volatilities	0	19	0	19
Dividends	(1)	13	(3)	9
Correlations	(8)	43	(9)	62
Hedge Fund volatility	0	0	0	0
Mutual Fund volatility	0	4	(1)	6
Rates or Forex instruments and derivatives	(6)	43	(6)	58
Correlations between exchange rates and/or interest rates	(4)	41	(4)	55
Forex volatilities	(1)	2	(1)	2
Constant prepayment rates	0	0	0	0
Inflation/inflation correlations	(1)	0	(1)	1
Credit instruments and derivatives	(3)	13	(4)	14
Time to default correlations	(3)	7	(2)	4
Recovery rate variance for single name underlyings	0	0	0	0
Quanto correlations	0	5	(2)	10
Credit spreads	0	1	0	0
Commodity derivatives	0	1	0	1
Commodities correlations	0	1	0	1
Long term securities	NA	NA	NA	NA

It should be noted that, given the already conservative valuation levels, this sensitivity is higher for a favourable impact on results than for an unfavourable impact. Moreover, the amounts shown above illustrate the uncertainty of the valuation as of the computation date

on the basis of a reasonable variation in inputs. Future variations in fair value or consequences of extreme market conditions cannot be deduced or forecast from these estimates.

NOTE 3.4.7 DEFERRED MARGIN RELATED TO MAIN UNOBSERVABLE INPUTS

The remaining amount to be recorded in the income statement, resulting from the difference between the transaction price and the amount determined at this date using valuation techniques, minus the

amounts recorded in the income statement after initial recognition, is shown in the table below. This amount is recorded in the income statement over time, or when the inputs become observable.

<i>(In EURm)</i>	2019	2018
Deferred margin at 1 January	1,237	1,281
Deferred margin on new transactions during the period	693	744
Margin recorded in the income statement during the period	(779)	(788)
<i>o/w amortisation</i>	(473)	(479)
<i>o/w switch to observable inputs</i>	(16)	(45)
<i>o/w disposed, expired or terminated</i>	(290)	(264)
Deferred margin at 31 December	1,151	1,237

NOTE 3.5 Loans, receivables and securities at amortised cost**OVERVIEW OF FINANCIAL ASSETS AT AMORTISED COST**

(In EURm)	31.12.2019		31.12.2018	
	Carrying amount	o/w impairment	Carrying amount	o/w impairment
Due from banks	56,366	(24)	60,588	(32)
Customer loans	450,244	(10,727)	447,229	(11,435)
Securities	12,489	(10)	12,026	(10)
TOTAL	519,099	(10,761)	519,843	(11,477)

ACCOUNTING PRINCIPLES

Loans, receivables and debt securities are measured at amortised cost where their contractual cash flows are consistent with basic lending arrangements (SPPI) and they are managed under a "Hold to Collect" business model.

Subsequent to initial recognition, they are measured at amortised cost using the effective interest method, and their accrued or earned income are recorded in the income statement under *Interest and similar income*. Furthermore, as these financial assets are subject to impairment for credit risk, changes in expected credit losses are recorded in profit or loss under *Cost of risk* with a corresponding impairment of the amortised cost on the asset side of the balance sheet. The applicable impairment rules are described in Note 3.8. When a loan or a receivable is classified in Stage 3 for impairment (doubtful outstanding), subsequent accrued interest incremented to the carrying amount of the financial asset before impairment is limited to interest recognised in profit or loss. The amount of such interest is then calculated by applying the effective interest rate to the net carrying amount of the financial asset (cf. Note 3.7).

Loans granted by the Group may be subject to renegotiations for commercial reasons, where the borrowing customer is not experiencing financial difficulties or insolvency. Such efforts are undertaken for customers for which the Group agrees to renegotiate their debt in the interest of preserving or developing a business relationship, in accordance with the credit approval procedures in force and without relinquishing any principal or accrued interest. Except in specific cases where the modification due to the renegotiation would not be considered significant, renegotiated loans are derecognised at the renegotiation date, and the new loans contractualised under the renegotiated terms and conditions replace the previous loans in the balance sheet at this same date. The new loans are subject to the SPPI test to determine how they are classified in the balance sheet. If a loan qualifies as basic instrument (SPPI), renegotiation fees received are included in the effective interest rate of the new instrument.

Customer loans at amortised cost include lease receivables where they are classified as finance leases. Leases granted by the Group are classified as finance leases if they transfer substantially all the risks and rewards incidental to ownership of the leased asset to the lessee. Otherwise, they are classified as operating leases (see Note 4.2).

These finance lease receivables represent the Group's net investment in the lease, calculated as the present value of the minimum payments to be received from the lessee, plus any unguaranteed residual value, discounted at the interest rate implicit in the lease. In the event of a subsequent reduction in the estimated unguaranteed residual value used to calculate the lessor's investment in the finance lease, the present value of this reduction is recognised as a loss under *Expenses from other activities* in the income statement and as a reduction of finance lease receivables on the asset side of the balance sheet.

BUSINESS MODEL "HOLD TO COLLECT"

Under this model, financial assets are managed to obtain cash flows by collecting contractual payments over the life of the instrument.

To achieve the objective of this business model, it is not necessary for the entity to hold all the instruments until maturity. Selling assets remains consistent with a business model whose objective is to collect contractual cash flows in the following cases:

- the financial asset is sold following an increase in the asset's credit risk; or
- the sale of the financial asset occurs close to its maturity and the proceeds from the sale are similar to the amount to be collected from the remaining contractual cash flows.

Other sales can be consistent with the objective of collecting contractual cash flows, as well, provided they are infrequent (even if significant in value) or insignificant in value, both individually and in aggregate terms (even if frequent). Such other sales include sales made to manage credit concentration risk (without an increase in the asset's credit risk). The Group has set up procedures for reporting and analysing all significant projected sales of financial assets held for collecting contractual cash flows, as well as a periodic review of sales that have occurred.

**Financing activities**

Within the Group, the “hold to collect” business model is mainly applied by financing activities managed by French Retail Banking, International Retail Banking and Financial Services and by Global Banking and Investor Solutions, except for the part of syndicated loans that is expected to be sold.

NOTE 3.5.1 DUE FROM BANKS

(In EURm)	31.12.2019	31.12.2018
Current accounts	20,717	23,958
Deposits and loans	17,269	18,453
Securities purchased under resale agreements	18,168	18,000
Subordinated and participating loans	88	91
Related receivables	118	99
Due from banks before impairments⁽¹⁾	56,360	60,601
Credit loss impairment	(24)	(32)
Revaluation of hedged items	30	19
TOTAL	56,366	60,588

(1) At 31 December 2019, the amount due from banks classified as Level 3 impairment (credit impaired) was EUR 38 million compared to EUR 51 million at 31 December 2018. The accrued interests included in this amount are limited to interests recognised in net income by applying the effective interest rate to the net carrying amount of the financial asset (see Note 3.7).

NOTE 3.5.2 CUSTOMER LOANS

(In EURm)	31.12.2019	31.12.2018
Overdrafts	19,181	21,230
Other customer loans	388,167	375,982
Lease financing agreements	30,761	32,345
Securities purchased under resale agreements	19,541	26,078
Related receivables	2,937	2,692
Customer loans before impairments⁽¹⁾	460,587	458,327
Credit loss impairment	(10,727)	(11,435)
Revaluation of hedged items	384	337
TOTAL	450,244	447,229

(1) At 31 December 2019, the amount due from customers classified as Level 3 impairment (credit impaired) was EUR 15,976 million compared to EUR 17,818 million at 31 December 2018. The accrued interests included in this amount are limited to interests recognised in net income by applying the effective interest rate to the carrying amount to the net carrying amount of the financial asset (see Note 3.7).

BREAKDOWN OF OTHER CUSTOMER LOANS

<i>(In EURm)</i>	31.12.2019	31.12.2018
Trade notes	9,700	10,056
Short-term loans	123,452	118,978
Export loans	11,582	11,485
Equipment loans	58,683	57,253
Housing loans	136,333	126,160
Loans secured by notes and securities	98	92
Other loans	48,319	51,958
TOTAL	388,167	375,982

ADDITIONAL INFORMATION ON LEASE FINANCING AND SIMILAR AGREEMENTS

<i>(In EURm)</i>	31.12.2019	31.12.2018
Gross investments	33,517	34,562
less than one year	8,490	8,243
1-5 years	19,105	20,847
more than five years	5,922	5,472
Present value of minimum payments receivable	29,110	30,233
less than one year	7,889	7,576
1-5 years	17,096	18,291
more than five years	4,125	4,366
Unearned financial income	2,754	2,217
Unguaranteed residual values receivable by the lessor	1,652	2,112

NOTE 3.5.3 SECURITIES

<i>(In EURm)</i>	31.12.2019	31.12.2018
Government securities	6,005	5,826
Negotiable certificates, bonds and other debt securities	6,390	6,106
Related receivables	85	79
Securities before impairments	12,480	12,011
Impairment	(10)	(10)
Revaluation of hedged items	19	25
TOTAL	12,489	12,026

NOTE 3.6 Debts**ACCOUNTING PRINCIPLES**

Debts include non-derivative financial liabilities that are not measured at fair value through profit or loss.

They are recognised in the balance sheet according to the type of instrument and counterparty, under *Due to banks*, *Customer deposits*, *Debt securities issued* or *Subordinated debt*.

Subordinated debts are all dated or undated borrowings, whether or not in the form of debt securities, which in the event of the liquidation of the borrowing company may only be redeemed after all other creditors have been paid.

Debts are initially recognised at cost, this valuation being the fair value of the amount borrowed net of transaction fees. These liabilities are measured at reporting date at amortised cost using the effective interest rate method. As a result, issue or redemption premiums on bonds are amortised over the lifetime of the instruments concerned. Accrued or paid expenses are recorded in profit or loss under *Interest and similar expense*.

The Group's obligations arising from mortgage savings accounts and plans are recorded under *Customer deposits – Regulated savings accounts*. A provision may be recorded in respect of such mortgage savings instruments (see Note 8.3).

NOTE 3.6.1 DUE TO BANKS

(In EURm)	31.12.2019	31.12.2018
Demand deposits and current accounts	11,577	13,875
Overnight deposits and borrowings and others	3,680	2,248
Term deposits ⁽¹⁾	82,893	72,965
Related payables	186	130
Revaluation of hedged items	308	129
Securities sold under repurchase agreements	9,285	5,359
TOTAL	107,929	94,706

(1) Including deposits linked to governments and central administrations.

NOTE 3.6.2 CUSTOMER DEPOSITS

(In EURm)	31.12.2019	31.12.2018
Regulated savings accounts	96,642	93,230
<i>Demand</i>	70,610	68,082
<i>Term</i>	26,032	25,148
Other demand deposits ⁽¹⁾	229,756	222,642
Other term deposits ⁽¹⁾	82,817	82,932
Related payables	441	387
Revaluation of hedged items	196	219
TOTAL CUSTOMER DEPOSITS	409,852	399,410
Securities sold to customers under repurchase agreements	8,760	17,408
TOTAL	418,612	416,818

(1) Including deposits linked to governments and central administrations.

BREAKDOWN OF OTHER DEMAND DEPOSITS BY CUSTOMER TYPE

<i>(In EURm)</i>	31.12.2019	31.12.2018
Professionals and corporates	111,079	98,459
Individual customers	76,135	72,372
Financial customers	29,093	38,413
Others ⁽¹⁾	13,449	13,398
TOTAL	229,756	222,642

(1) Including deposits linked to governments and central administrations.

NOTE 3.6.3 DEBT SECURITIES ISSUED

<i>(In EURm)</i>	31.12.2019	31.12.2018
Term savings certificates	510	474
Bond borrowings	23,847	24,381
Interbank certificates and negotiable debt instruments	99,107	89,913
Related payables	776	804
Revaluation of hedged items	928	767
TOTAL	125,168	116,339
<i>o/w floating-rate securities</i>	<i>49,343</i>	<i>39,121</i>

NOTE 3.7 Interest income and expense**MAKE IT SIMPLE**

Interest is compensation for a financial service, consisting in a lender making a certain amount of cash available to a borrower for an agreed period of time. Such compensated financing arrangements can be loans, deposits or securities (bonds, negotiable debt securities...).

This compensation is a consideration for the time value of money, and additionally for credit risk, liquidity risk and administrative costs, all borne by the lender for the duration of the financing agreement. The interest can also include a margin used by the lending bank to remunerate equity instruments (such as ordinary shares) that are required by prudential regulation to be issued in relation to the amount of financing granted, so as to guarantee its own solvency.

Interest is recognised as expense or income over the life of the financing service granted or received, proportionally to the principal amount outstanding.

ACCOUNTING PRINCIPLES

Interest income and expense are recorded in the income statement under *Interest and similar income* and *Interest and similar expense* for all financial instruments measured using the effective interest method (instruments at amortised cost and debt instruments at fair value through other comprehensive income) and for all financial instruments mandatorily measured at fair value through profit and loss and interest rate risk hedging derivatives for the portion of income or expenses representative of the effective interest rate. Negative interest incomes on financial assets are recorded under *Interest and similar expense*; negative interest expenses on financial liabilities are recorded under *Interest and similar income*.

The effective interest rate is taken to be the rate used to net discount future cash inflows and outflows over the expected life of the instrument in order to establish the net book value of the financial asset or liability. The calculation of this rate considers the future cash flows estimated on the basis of the contractual provisions of the financial instrument without taking account of possible future credit losses and also includes commissions paid or received between the parties where these may be assimilated to interest, directly linked transaction costs, and all types of premiums and discounts.

Where a financial asset is classified in Stage 3 for impairment, subsequent interest income is recognised in profit or loss by applying the effective interest rate to the net carrying amount of the financial asset with an offsetting entry equal to the outstanding financial asset before impairment.

Moreover, except for those related to employee benefits, provisions recognised as balance sheet liabilities generate interest expenses that are calculated using the same risk-free interest rate as that used to discount the expected outflow of resources.

(In EURm)	2019			2018		
	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	14,907	(7,850)	7,057	14,030	(7,021)	7,009
Central banks	427	(181)	246	575	(151)	424
Bonds and other debt securities	318	(2,096)	(1,778)	257	(1,931)	(1,674)
Due from/to banks	1,010	(1,632)	(622)	1,077	(1,354)	(277)
Customer loans and deposits	12,053	(3,123)	8,930	11,435	(2,889)	8,546
Subordinated debt	-	(516)	(516)	-	(542)	(542)
Securities lending/borrowing	10	(6)	4	7	(5)	2
Repo transactions	1,089	(296)	793	679	(149)	530
Hedging derivatives	6,433	(4,632)	1,801	6,358	(4,638)	1,720
Financial instruments at fair value through other comprehensive income	752	(1)	751	622	-	622
Lease agreements ⁽¹⁾	1,178	(44)	1,134	1,126	-	1,126
Real estate lease agreements	189	(43)	146	194	-	194
Non-real estate lease agreements	989	(1)	988	932	-	932
Subtotal interest income/expense on financial instruments using the effective interest method	23,270	(12,527)	10,743	22,136	(11,659)	10,477
Financial instruments mandatorily at fair value through profit or loss	442	-	442	542	-	542
TOTAL INTEREST INCOME AND EXPENSE	23,712	(12,527)	11,185	22,678	(11,659)	11,019
o/w interest income from impaired financial assets	280	-	280	357	-	357

(1) Lease agreements include, in income, interests from finance lease receivables. As a result of the application of IFRS 16 "Leases" as from 1st January 2019, lease agreements also include interests on lease liabilities as expense.

These interest expenses include the refinancing cost of financial instruments at fair value through profit or loss, the results of which are classified in net gains or losses on these instruments (see Note 3.1). Given that income and expenses booked in the income statement are

classified by type of instrument rather than by purpose, the net income generated by activities in financial instruments at fair value through profit or loss must be assessed as a whole.

BREAKDOWN OF INCOME OF CUSTOMER LOANS AT AMORTISED COST

(In EURm)	2019	2018
Trade notes	511	479
Other customer loans	10,361	9,773
Short-term loans	4,572	4,153
Export loans	375	321
Equipment loans	1,529	1,396
Housing loans	2,985	3,182
Other customer loans	900	721
Overdrafts	909	835
Doubtful outstandings (Stage 3)	272	348
TOTAL	12,053	11,435

NOTE 3.8 Impairment and provisions**MAKE IT SIMPLE**

Some financial assets (loans, debt securities) involve credit risk which exposes the Group to a potential loss if the counterparty or the securities issuer were to be unable to respect their financial commitments. To bear this risk, a portion of the contractual interest received by the Bank on those assets, called credit margin, compensates it.

This potential loss, or expected credit loss, is recognised in profit or loss without waiting the occurrence of a default event on a specific counterparty.

For loans, receivables and debt securities measured at amortised cost or fair value through other comprehensive income, the expected credit loss, as assessed by the Group, is recognised in profit or loss together with interest income. On balance sheet, this potential loss is recognised as an impairment that reduces the carrying amount of assets measured at amortised cost. Impairment are written-back in case of a subsequent decrease of credit risk.

Potential losses recognised in profit or loss represent initially the credit losses expected by the Group over the year to come. Subsequently, the amount is increased by the expected loss at maturity of the instrument in case of significant increase of risk. The losses are then reassessed if the counterparty or issuer of the security is in default.

For financial assets measured at fair value through profit or loss (including instruments hold by global markets activities), their fair value includes already the expected credit loss, as assessed by the market participant, on the residual lifetime of the instrument.

ACCOUNTING PRINCIPLES**Recognition of expected credit losses**

Debt instruments classified as financial assets at amortised cost or as financial assets at fair value through other comprehensive income, operating lease receivables, customer receivables and income to be received included amongst *Other assets*, as well as loan commitments granted and guarantee commitments issued, are systematically subject to impairment or provisions for expected credit losses. These impairments and provisions are recognised as the loans are granted, the commitments undertaken, or the debt securities purchased, without waiting for the occurrence of an objective evidence of impairment.

To determine the amount of impairment or provision to be recorded at each reporting date, these exposures are split among three categories based on the increase in credit risk observed since initial recognition. An impairment or provision shall be recognised for the exposures in each category as follows:

Observed deterioration in credit risk since initial recognition of the financial asset			
Credit risk category	Stage 1 Performing assets	Stage 2 Under-performing or downgraded assets	Stage 3 Credit-impaired or defaulted assets
Transfer criteria	Initial recognition of the instrument in stage 1 ► Maintained if the credit risk has not increased significantly	Credit risk on the instrument has increased significantly since initial recognition / 30 days past due	Evidence that the instrument is become credit-impaired / 90 days past due
Measurement of credit risk	12-month expected credit losses	Lifetime expected credit losses	Lifetime expected credit losses
Interest income recognition basis	Gross carrying amount of the asset before impairment	Gross carrying amount of the asset before impairment	Net carrying amount of the asset after impairment

Exposures classified in Stage 1

At the initial recognition date, the exposures are systematically classified in Stage 1, unless they are purchased or originated credit-impaired instruments.

Exposures classified in Stage 2

To identify Stage 2 exposures, the significant increase in credit risk is assessed by the Group using all available past and forward-looking data (behavioural scores, loan to value indicators, macroeconomic forecast scenarios, etc.). This assessment of changes in credit risk takes into account the three following criteria:

THE COUNTERPARTY'S CREDIT RATING

The Group analyses changes in the counterparty's credit rating, as well as any changes in its operating sector, in macroeconomic conditions and in the behaviours of the counterparty that may, above and beyond the review of the credit rating, be a sign of deteriorating credit risk.

If, after a review, a counterparty is deemed "sensitive" (notion of watch list), all existing contracts between the Group and this counterparty are transferred into Stage 2 (to the extent that this approach does not lead to a distortion compared with an analysis of the change in credit risk since initial recognition on each financial instrument) and the related impairment and provisions are increased up to the lifetime expected credit losses. Once a counterparty has been placed on a watch list, all new transactions originated with that counterparty are recorded in Stage 1.

THE MAGNITUDE OF THE CHANGE IN A COUNTERPARTY'S CREDIT RATING

This magnitude is assessed from contract to contract, from the date of their initial recognition to the balance sheet date.

To determine whether a deterioration or improvement in the credit rating between the date of initial recognition and the balance sheet date is significant enough to prompt a change in the impairment Stage, thresholds are set once a year by the Risk Division. These transfer thresholds between Stage 1 and Stage 2 are determined for each homogeneous portfolio of contracts (notion of risk segment based on the customer typology and the credit quality) and are calculated based on their specific probability-of-default curves (thus, the threshold is different depending on whether it is a Sovereign portfolio or a Large Corporates portfolio, for instance). These thresholds may be expressed as an absolute or relative increase in the probability of default.

From 2019 the thresholds are differentiated based on the lifetime probability-of-default curves for the Group's main portfolios. The transition from one-year probability-of-default curves to lifetime probability-of-default curves is ongoing for the remaining portfolios, assuming that there is no distortion with respect to any comparison made with the lifetime probability-of-default curves.

THE EXISTENCE OF PAYMENTS MORE THAN THIRTY DAYS PAST DUE

There is a (rebuttable) presumption of a significant deterioration in credit risk when a payment on an asset is more than thirty days past due.

Once any one of these three criteria is met, the instrument is transferred from Stage 1 to Stage 2, and the related impairments or provisions are adjusted accordingly.

The first two criteria are symmetrical: a sufficient improvement in the credit rating, or removal from the watch list of sensitive counterparties, results in a return to Stage 1, without any probation period in Stage 2.

For exposures to counterparties for which a credit rating is not available (retail customers and a limited portion of the "small- and medium-sized companies" segment), the transfer into Stage 2 is based on:

- the Basel behavioural score or the existence of payments more than thirty days past due for retail customers;
- the classification into watch list and the existence of payments more than thirty days past due for small- and medium-sized companies.

Exposures classified in Stage 3

To identify Stage 3 exposures (doubtful exposures), the Group determines whether there is an objective evidence of impairment (default events):

- payments more than ninety days past due (with the exception of restructured loans during the two-year probation period which are retransferred into Stage 3 as of payments more than thirty days past due), whether or not a collection procedure is instigated. To assess this criteria, the Group does not apply any threshold, except if such threshold is requested by local authority. In addition, only missed payments related to business litigations, specific contractual features or IT failures cannot lead to a transfer into Stage 3;
- identification of other criteria that evidence, even in the absence of missed payments, that this is unlikely that the counterparty could meet all its financial obligations:
 - a significant deterioration in the counterparty's financial situation creates a strong probability that it will not be able to meet all of its commitments and thus represents a risk of loss for the Group,
 - concessions are granted to the clauses of the loan agreement, in light of the borrower's financial difficulties, that would not have been granted in other circumstances (restructured loans),
 - the existence of probable credit risk or litigious proceedings (ad hoc mandate, bankruptcy, court-ordered settlement or compulsory liquidation or other similar proceedings in local jurisdictions).

The Group applies the impairment contagion principle to all of the defaulting counterparty's exposures. When a debtor belongs to a group, the impairment contagion principle may also be applied to all of the Group's exposures.

In the case of a return in Stage 2, the exposures are kept in Stage 2 during a probation period before assessing whether they could be transferred in Stage 1. This probation period in Stage 2 is from six months to two years according to the nature of the risk portfolio to which the exposures belong.

Measurement of depreciation and provision

Stage 1 exposures are impaired for the amount of credit losses that the Group expects to incur within twelve months (12-month expected credit losses), based on past data and the current situation. Accordingly, the amount of impairment is the difference between the gross carrying amount of the asset and the present value of future cash flows deemed to be recoverable, taking into account the impact of collateral called up or liable to be called up and the probability of a default event occurring within the next twelve months.

Stage 2 and 3 exposures are impaired for the amount of credit losses that the Group expects to incur over the life of the exposures (lifetime expected credit losses), taking into consideration past data, the present situation and reasonable forecast changes in economic conditions, and relevant macroeconomic factors through to maturity. Accordingly, the amount of impairment is the difference between the gross carrying amount of the asset and the present value of future cash flows deemed to be recoverable, taking into account the impact of collateral called up or liable to be called up and the probability of a default event occurring through to the instrument's maturity.

Financial guarantees are taken into account in the estimation of the recoverable cash flows when they are integral part of the contractual characteristics of the related loans and they are not recognised separately.

If the financial guarantees don't meet these criteria and as a consequence their effects cannot be taken into account in the calculation of impairment (example: financial guarantee aimed at compensating the first losses suffered on a given portfolio of loans), a separate asset is recorded in the balance sheet under *Other Assets*. The book value of this asset is representative of the expected credit losses, recorded in the balance sheet within the impairment of assets, for which the Group is almost certain to receive a compensation. Changes in the carrying amount of this asset are recorded in the income statement under *Cost of risk*.

Calculation methods used to measure credit losses are disclosed in Chapter 4 of the present Universal Registration Document (Risk factors and capital adequacy).

Irrespective of the Stage in which the exposures are classified, cash flows are discounted using the initial effective interest rate of the financial asset. The amount of impairment is included in the net carrying amount of the credit impaired financial asset. Impairment allocations/reversals are recorded in profit or loss under *Cost of risk*.

For operating leases and trade receivables, the Group uses the "simplified" approach, under which impairments are calculated as lifetime expected credit losses since their initial recognition, regardless of any subsequent changes in the counterparty's credit risk. The assessment of depreciation is mainly based on historical data on default rates and incurred losses in the event of default. Adjustments to take into account forward-looking information on economic conditions and macro-economic factors are determined by an expert. The impairment is calculated using historical data related to default rates and losses on default. Adjustments made to take into account prospective data related to macro-economic forecasts are determined by an expert.

Restructured loans

Loans issued or acquired by the Group may be restructured due to financial difficulties. This takes the shape of a contractual modification of the initial terms of the loan (e.g. lower interest rates, rescheduled loan payments, partial debt forgiveness, or additional collateral). This adjustment of the contractual terms is strictly linked to the borrower's financial difficulties and/or insolvency (whether they have already become insolvent or are certain to do so if the loan is not restructured).

Where they still pass the SPPI test, restructured loans are still recognised in the balance sheet and their amortised cost before credit risk allowance is adjusted for a discount representing the restructuring loss. This discount is equal to the difference between the present value of the new contractual cash flows resulting from the restructuring of the loan and the amortised cost before credit risk allowance less any partial debt forgiveness; it is booked to *Cost of risk* in the income statement. As a result, the amount of interest income subsequently recognised into income is still computed using the initial effective interest rate of the loan and based on the net carrying amount of the asset after impairment during at least the first year following the restructuring.

Post-restructuring, these financial assets are systematically classified in Stage 3 for impairment (credit-impaired exposures), as the borrowers are deemed to be in default. Stage 3 classification is maintained for at least one year, or longer if the Group is uncertain that the borrowers will be able to meet their commitments. Once the loan is no longer classified in Stage 3, the assessment of the significant increase of credit risk will be performed by comparing the characteristics of the instrument at the closing date and the characteristics at the initial recognition date of the loan before restructuring, applying the transfer rules to Stage 1 and 2 previously mentioned in this note with specific conditions during the probation period (during the first two-years following the restructuring loans are retransferred into Stage 3 as of payments more than thirty days past due).

The criteria to return to Stage 1 for the restructured loans are similar to those of all the other exposures, after a probation period in Stage 3 of a minimum of one year.

Where they no longer pass the SPPI test, restructured loans are derecognised and replaced by new loans recognised according to the restructured terms and conditions. These new loans are then classified as Financial assets measured mandatorily at fair value through profit or loss.

Restructured loans do not include loans and receivables subject to commercial renegotiations that are loans to customers for which the Group has agreed to renegotiate the debt with the aim of maintaining or developing a commercial relationship, in accordance with the credit approval procedures in force and without relinquishing any principal or accrued interest.

OVERVIEW OF IMPAIRMENT AND PROVISIONS

(In EURm)	31.12.2019	31.12.2018
Impairment of financial assets at fair value through other comprehensive income	9	11
Impairment of financial assets at amortised cost	10,976	11,673
Loans and receivables at amortised cost	10,761	11,477
Other assets at amortised cost ⁽¹⁾	215	196
TOTAL IMPAIRMENT OF FINANCIAL ASSETS	10,985	11,684
Provisions on financing commitments	244	252
Provisions on guarantee commitments	396	386
TOTAL CREDIT RISK PROVISIONS	640	638

(1) o/w EUR 145 million of impairment on operating lease receivables as at 31st December 2019 (vs. EUR 131 million as at 31st December 2018); this impairment is calculated as lifetime expected credit losses since their initial recognition in compliance with the "simplified" approach permitted by the standard. Those receivables are presented under Miscellaneous receivables (see Note 4.4).

NOTE 3.8.1 IMPAIRMENT OF FINANCIAL ASSETS

BREAKDOWN OF FINANCIAL ASSETS IMPAIRMENT

(In EURm)	Amount at 31.12.2018	Allocations	Write-backs available	Net impairment losses	Write-backs used	Currency and scope effects	Amount at 31.12.2019
Financial assets at fair value through other comprehensive income							
Impairment on performing outstandings (Stage 1)	3	1	(3)	(2)	-	-	1
Impairment on underperforming outstandings (Stage 2)	-	-	-	-	-	-	-
Impairment on doubtful outstandings (Stage 3)	8	-	-	-	-	-	8
TOTAL	11	1	(3)	(2)	-	-	9
Financial assets measured at amortised cost							
Impairment on performing outstandings (Stage 1)	887	581	(552)	29	(14)	(14)	902
Impairment on underperforming outstandings (Stage 2)	1,038	885	(873)	12	(8)	(8)	1,042
Impairment on doubtful outstandings (Stage 3)	9,748	4,286	(3,123)	1,163	(1,858)	(21)	9,032
TOTAL	11,673	5,752	(4,548)	1,204	(1,858)	(43)	10,976
o/w lease financing and similar agreements	767	266	(181)	85	(64)	(46)	742
Impairment on performing outstandings (Stage 1)	83	38	(23)	15	(8)	(8)	90
Impairment on underperforming outstandings (Stage 2)	98	48	(49)	(1)	(6)	(6)	91
Impairment on doubtful outstandings (Stage 3)	586	180	(109)	71	(64)	(32)	561

VARIATION OF IMPAIRMENT ACCORDING TO CHANGES IN THE CARRYING AMOUNT OF FINANCIAL ASSETS

(In EURm)	Amount at 31.12.2018	Production & Acquisition	Derecognition ⁽¹⁾	Transfer between stages of impairment	Other variations	Amount at 31.12.2019
Financial assets at fair value through other comprehensive income						
Impairment on performing outstandings (Stage 1)	3	-	-	-	(2)	1
Impairment on underperforming outstandings (Stage 2)	-	-	-	-	-	-
Impairment on doubtful outstandings (Stage 3)	8	-	-	-	-	8
TOTAL	11	-	-	-	(2)	9
Financial assets at amortised cost						
Impairment on performing outstandings (Stage 1)	887	288	(228)	(156)	111	902
Impairment on underperforming outstandings (Stage 2)	1,038	204	(213)	164	(151)	1,042
Impairment on doubtful outstandings (Stage 3)	9,748	128	(1,976)	682	450	9,032
TOTAL⁽²⁾	11,673	620	(2,417)	690	410	10,976
o/w lease financing and similar agreements	767	44	(8)	24	(85)	742
Impairment on performing outstandings (Stage 1)	83	25	(13)	(9)	4	90
Impairment on underperforming outstandings (Stage 2)	98	10	(17)	14	(14)	91
Impairment on doubtful outstandings (Stage 3)	586	9	22	19	(75)	561

(1) Including repayments, disposals and debt waivers.

(2) The impairment decrease of EUR 697 million during the year is linked to :

- the reduce of the exposition amount in default (Stage 3). This is in line with the Group strategy to reduce his portfolio of expositions in default which is strongly impaired ;
- a slight increase of the impairment stock in Stage 1 and 2 due to an increase of the expositions and to a challenging economic environment.

NOTE 3.8.2 CREDIT RISK PROVISIONS

BREAKDOWN OF PROVISIONS ON FINANCING COMMITMENTS AND GUARANTEE COMMITMENTS

(In EURm)	Amount at 31.12.2018	Allocations	Write-backs available	Net impairment losses	Currency and scope effects	Amount at 31.12.2019
Financing commitments						
Provisions on performing outstandings (Stage 1)	98	78	(74)	4	-	102
Provisions on underperforming outstandings (Stage 2)	119	81	(95)	(14)	-	105
Provisions on doubtful outstandings (Stage 3)	35	96	(133)	(37)	39	37
TOTAL	252	255	(302)	(47)	39	244
Guarantee commitments						
Provisions on performing outstandings (Stage 1)	47	24	(37)	(13)	-	34
Provisions on underperforming outstandings (Stage 2)	68	53	(61)	(8)	20	80
Provisions on doubtful outstandings (Stage 3)	271	181	(125)	56	(45)	282
TOTAL	386	258	(223)	35	(25)	396

VARIATIONS OF PROVISIONS ACCORDING TO CHANGES IN THE AMOUNT OF FINANCING AND GUARANTEE COMMITMENTS

(In EURm)	Amount at 31.12.2018	Production & Acquisition	Dereco- gnition ⁽¹⁾	Transfer between stages of impairment	Other variations	Amount at 31.12.2019
Financing commitments						
Provisions on performing outstandings (Stage1)	98	40	(43)	(9)	16	102
Provisions on underperforming outstandings (Stage 2)	119	18	(32)	35	(35)	105
Provisions on doubtful outstandings (Stage 3)	35	13	(42)	10	21	37
TOTAL	252	71	(117)	36	2	244
Guarantee commitments						
Provisions on performing outstandings (Stage1)	47	13	(12)	(4)	(10)	34
Provisions on underperforming outstandings (Stage 2)	68	4	(16)	(2)	26	80
Provisions on doubtful outstandings (Stage 3)	271	21	(54)	64	(20)	282
TOTAL	386	38	(82)	58	(4)	396

(1) Including repayments, disposals and debt waivers.

NOTE 3.8.3 COST OF RISK

ACCOUNTING PRINCIPLES

Cost of risk only includes net reversals of impairments and loss allowances for credit risk, losses on irrecoverable loans and amounts recovered on amortised receivables.

The Group proceed to a write off by recognising a loss on the bad loan and a reversal of impairment in *Cost of risk* when a debt is forgiven or when there are no longer any hopes of future recovery. The lack of future hopes of recovery is documented when a certificate issued as proof that the debt is uncollectable is delivered by the relevant authority or when strong circumstantial evidences are identified (years in default, provisions at 100%, lack of recent recoveries, specificities of the case).

However, a write-off in accounting terms does not imply debt forgiveness in the legal sense as recovery actions on cash due by the counterparty are pursued particularly in case of return to better fortune. In case of recoveries on an exposure previously written-off, such recoveries are recognised as *Amounts recovered on irrecoverable loans* on the year of collection.

(In EURm)	2019	2018
Net allocation to impairment losses	(1,202)	(970)
<i>on financial assets at fair value through other comprehensive income</i>	2	-
<i>on financial assets at amortised cost</i>	(1,204)	(970)
Net allocations to provisions	12	59
<i>on financing commitments</i>	47	82
<i>on guarantee commitments</i>	(35)	(23)
Losses not covered on irrecoverable loans	(292)	(263)
Amounts recovered on irrecoverable loans	184	169
Income from guarantee not taken into account for the calculation of impairment ⁽¹⁾	20	
TOTAL	(1,278)	(1,005)

(1) The income from the guarantees not taken into account for the calculation of impairment corresponds for the year 2019 to the financial guarantees received by the Group in the context of credit risk transfer operations to entities external to the Group. These operations concerned two diversified portfolios of structured loans of EUR 4 billion and USD 3.4 billion granted by Wholesale Banking and two portfolios of capital loans of EUR 2.1 billion and EUR 1.4 billion granted by Retail Banking in France.

NOTE 3.9 Fair value of financial instruments measured at amortised cost**ACCOUNTING PRINCIPLES****Definition of fair value**

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In the absence of observable prices for identical assets or liabilities, the fair value of financial instruments is determined using another measurement technique that maximises the use of observable market inputs based on assumptions that market operators would use to set the price of the instrument in question.

For financial instruments that are not recognised at fair value on the balance sheet, the figures disclosed in this note and broken down according to the fair value hierarchy as described in Note 3.4, should not be taken as an estimate of the amount that would be realised if all such financial instruments were to be settled immediately.

The fair value of financial instruments includes accrued interest if applicable.

NOTE 3.9.1 FINANCIAL ASSETS MEASURED AT AMORTISED COST

	31.12.2019				
<i>(In EURm)</i>	Carrying amount	Fair value	Level 1	Level 2	Level 3
Due from banks	56,366	56,370	-	41,233	15,137
Customer loans	450,244	451,398	-	179,364	272,034
Debt securities	12,489	12,705	4,156	7,095	1,454
TOTAL	519,099	520,473	4,156	227,692	288,625

	31.12.2018				
<i>(In EURm)</i>	Carrying amount	Fair value	Level 1	Level 2	Level 3
Due from banks	60,588	60,674	-	43,844	16,830
Customer loans	447,229	451,366	-	187,421	263,945
Debt securities	12,026	12,113	4,007	7,312	794
TOTAL	519,843	524,153	4,007	238,577	281,569

NOTE 3.9.2 FINANCIAL LIABILITIES MEASURED AT AMORTISED COST

	31.12.2019				
(In EURm)	Carrying amount	Fair value	Level 1	Level 2	Level 3
Due to banks	107,929	107,976	356	104,028	3,592
Customer deposits	418,612	418,705	-	408,597	10,108
Debt securities issued	125,168	125,686	20,856	104,462	368
Subordinated debt	14,465	14,467	-	14,467	-
TOTAL	666,174	666,834	21,212	631,554	14,068

	31.12.2018				
(In EURm)	Carrying amount	Fair value	Level 1	Level 2	Level 3
Due to banks	94,706	94,564	244	90,037	4,283
Customer deposits	416,818	417,019	-	406,699	10,320
Debt securities issued	116,339	116,336	22,028	93,564	744
Subordinated debt	13,314	13,316	-	13,316	-
TOTAL	641,177	641,235	22,272	603,616	15,347

NOTE 3.9.3 VALUATION METHODS OF FINANCIAL INSTRUMENTS MEASURED AT AMORTISED COST

LOANS, RECEIVABLES AND LEASE FINANCING AGREEMENTS

The fair value of loans, receivables and lease financing transactions for large corporates and banks is calculated, in the absence of an actively traded market for these loans, by discounting expected cash flows to present value based on the market rates (the benchmark maturity yield published by the Banque de France and the zero-coupon yield) prevailing on the balance sheet date for loans with broadly similar terms and maturities. These discount rates are adjusted for borrower credit risk.

The fair value of loans, receivables and lease financing transactions for retail banking customers, essentially comprised of individuals and small or medium-sized companies, is determined, in the absence of an actively traded market for these loans, by discounting the associated expected cash flows to present value at the market rates prevailing on the balance sheet date for similar types of loans and similar maturities.

For all floating-rate loans, receivables and lease financing transactions and fixed-rate loans with an initial maturity of less than or equal to one year, fair value is taken to be the same as book value net of impairment, assuming there has been no significant change in credit spreads on the counterparties in question since they were recognised in the balance sheet.

DEBTS

The fair value of debts, in the absence of an actively traded market for these liabilities, is taken to be the same as the value of future cash flows discounted to present value at the market rates prevailing on the balance sheet date.

When the debt is a listed instrument, its fair value is its market value.

For floating-rate deposits, demand deposits and borrowings with an initial maturity of less than or equal to one year, fair value is taken to be the same as book value. Similarly, the individual fair value of demand deposit accounts is equal to their book value.

SECURITIES

Provided that the security is an instrument traded on an active market, its fair value is equal to the market price.

If no active market exists, the fair value of the securities is calculated by discounting estimated future net cash flows from the asset at the market rate on the balance sheet date. For variable-rate securities and fixed-rate securities with an agreed duration of up to one year, the fair value is assumed to be the carrying amount minus impairments provided there have been no significant fluctuations in credit spreads involving the counterparties concerned since they were recorded on the balance sheet.

NOTE 3.10 Commitments and assets pledged and received as securities**ACCOUNTING PRINCIPLES****Loan commitments**

Loan commitments that are not considered as financial derivatives or that are not measured at fair value through profit or loss for trading purpose are initially recognised at fair value. Thereafter, they are provisioned as necessary in accordance with the accounting principles for impairment and provisions (see Note 3.8).

Guarantee commitments

When considered as non-derivative financial instruments, financial guarantees issued by the Group are initially recognised in the balance sheet at fair value. Thereafter, they are measured at either the amount of the obligation or the amount initially recognised (whichever is higher) less, when appropriate, the cumulative amortisation of a guarantee commission. Where there is objective evidence of impairment, a provision for financial guarantees given is recognised on the liabilities side of the balance sheet (see Note 3.8).

Securities commitments

Securities bought and sold, which are booked to Financial assets at fair value through profit or loss, *Financial assets at fair value through other comprehensive income* and *Financial assets at amortised cost* are recognised on the balance sheet at the settlement-delivery date. Between the trade date and the settlement-delivery date, securities receivable or deliverable are not recognised on the balance sheet. Changes in the fair value of securities measured at fair value through profit or loss and securities measured at fair value through other comprehensive income between the trade date and the settlement-delivery date are booked to profit or loss or equity, depending on the accounting classification of the securities in question.

NOTE 3.10.1 COMMITMENTS**COMMITMENTS GRANTED**

(In EURm)	31.12.2019	31.12.2018
Loan commitments		
To banks	50,589	19,174
To customers	184,305	199,663
<i>Issuance facilities</i>	83	-
<i>Confirmed credit lines</i>	166,168	181,015
<i>Others</i>	18,054	18,648
Guarantee commitments		
On behalf of banks	10,572	5,020
On behalf of customers ⁽¹⁾	42,248	57,251
Securities commitments		
Securities to be delivered	31,121	38,066

(1) Including capital and performance guarantees given to the holders of UCITS managed by entities of the Group.

COMMITMENTS RECEIVED

(In EURm)	31.12.2019	31.12.2018
Loan commitments		
From banks	84,990	62,447
Guarantee commitments		
From banks	110,395	104,845
Other commitments ⁽¹⁾	125,771	136,702
Securities commitments		
Securities to be received	30,874	41,857

(1) Including guarantees granted by government and official agencies and other guarantees granted by customers for EUR 73,133 million at 31st December 2019 versus EUR 72,768 million at 31st December 2018.

NOTE 3.10.2 FINANCIAL ASSETS PLEDGED AND RECEIVED AS SECURITY

FINANCIAL ASSETS PLEDGED

(In EURm)	31.12.2019	31.12.2018
Book value of assets pledged as security for liabilities ⁽¹⁾	391,820	348,262
Book value of assets pledged as security for transactions in financial instruments ⁽²⁾	56,891	55,957
Book value of assets pledged as security for off-balance sheet commitments	2,195	2,117
TOTAL	450,906	406,336

(1) Assets pledged as security for liabilities mainly include loans given as guarantees for liabilities (guarantees notably provided to the central banks).

(2) Assets pledged as security for transactions in financial instruments mainly include security deposits.

FINANCIAL ASSETS RECEIVED AS SECURITY AND AVAILABLE FOR THE ENTITY

(In EURm)	31.12.2019	31.12.2018
Fair value of securities purchased under resale agreements	111,818	129,628

The Group generally purchases securities under resale agreements under normal market terms and conditions. It may re-use the securities received under resale agreement by selling them outright, selling them under repurchase agreements or pledging them as security, provided that it returns these or equivalent securities to the counterparty to the resale agreement at its term.

Securities purchased under resale agreements are not recognised on the balance sheet. Their fair value, as shown above, includes securities sold or pledged as collateral.

NOTE 3.11 Transferred financial assets

ACCOUNTING PRINCIPLES

Transferred financial assets that are not derecognised include securities lending transactions and repurchase agreements as well as certain loans transferred to consolidated securitization vehicles.

The tables below show securities lending and repurchase agreements that only concern securities recognised on the asset side of the balance sheet.

Securities involved in a repurchase agreement or securities lending transaction are held in their original position on the asset side of the Group's balance sheet. For repurchase agreements, the obligation to return the amounts deposited is recorded under *Liabilities* on the liabilities side of the balance sheet, with the exception of transactions initiated under trading activities, which are recorded under *Financial liabilities at fair value through profit or loss*.

Securities involved in a reverse repurchase agreement or securities borrowing transaction are not recorded in the Group's balance sheet. For securities received under a reverse repurchase agreement, the right to recover the amounts delivered by the Group is recorded under *Customer Loans and receivables* or *Due from banks* on the asset side of the balance sheet, with the exception of transactions initiated under trading activities, which are recorded under *Financial assets at fair value through profit or loss*. In the event the borrowed securities are subsequently sold, a debt representing the return of these securities to their lender is recorded on the liabilities side of the Group's balance sheet, under *Financial liabilities at fair value through profit or loss*.

Securities lending and securities borrowing transactions that are fully matched by cash are assimilated to repurchase and reverse repurchase agreements and are recorded and recognised as such in the balance sheet.

With securities lending and repurchase agreements, the Group remains exposed to issuer default (credit risk) and to increases or decreases of securities value (market risk). The underlying securities cannot simultaneously be used as collateral in other transactions.

NOTE 3.11.1 TRANSFERRED FINANCIAL ASSETS NOT DERECOGNISED

REPURCHASE AGREEMENTS

	31.12.2019		31.12.2018	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
(In EURm)				
Securities at fair value through profit or loss	23,691	20,486	19,515	15,371
Securities at fair value through other comprehensive income	13,057	10,476	11,903	9,743
TOTAL	36,748	30,962	31,418	25,114

SECURITIES LENDING

	31.12.2019		31.12.2018	
	Carrying amount of transferred assets	Carrying amount of associated liabilities	Carrying amount of transferred assets	Carrying amount of associated liabilities
(In EURm)				
Securities at fair value through profit or loss	13,297	54	11,347	51
Securities at fair value through other comprehensive income	132	-	368	-
TOTAL	13,429	54	11,715	51

SECURITISATION ASSETS FOR WHICH THE COUNTERPARTIES TO THE ASSOCIATED LIABILITIES HAVE RECOURSE ONLY TO THE TRANSFERRED ASSETS

	31.12.2019	31.12.2018
(In EURm)		
Customers loans		
Carrying amount of transferred assets	1,629	1,249
Carrying amount of associated liabilities	1,545	1,086
Fair value of transferred assets (A)	1,639	1,253
Fair value of associated liabilities (B)	1,555	1,090
NET POSITION (A)-(B)	84	163

The Group remains exposed to the majority of the risks and rewards associated with these receivables; furthermore, these receivables may not be used as collateral or sold outright as part of another transaction.

NOTE 3.11.2 TRANSFERRED FINANCIAL ASSETS PARTIALLY OR FULLY DERECOGNISED

At 31st December 2019, the Group carried out no material transactions resulting in the partial or full derecognition of financial assets leaving the Group with a continuing involvement in said assets.

NOTE 3.12 Offsetting of financial assets and financial liabilities**ACCOUNTING PRINCIPLES**

A financial asset and a financial liability are offset and the net amount presented on the balance sheet when the Group has a legally enforceable right to set off the recognised amounts and intends either to settle the asset and liability on a net basis, or to realise the asset and settle the liability simultaneously. The legal right to set off the recognised amounts must be enforceable in all circumstances, in both the normal course of business and in the event of default of one of the counterparties. In this respect, the Group recognises in its balance sheet the net amount of derivative financial instruments traded with certain clearing houses where they achieve net settlement through a daily cash margining process, or where their gross settlement system has features that eliminate or result in insignificant credit and liquidity risk, and that process receivables and payables in a single settlement process or cycle.

The following tables present the amounts of financial assets and financial liabilities set off on the Group's consolidated balance sheet. The gross outstanding amounts of these financial assets and financial liabilities are matched with the consolidated outstanding amounts presented in the balance sheet (net balance sheet amounts), after indicating the amounts set off on the balance sheet for these various instruments (amounts offset) and aggregating them with the outstanding amounts of other financial assets and financial liabilities not subject to a Master Netting Agreement or similar agreement (amounts of assets and liabilities not eligible for offsetting).

These tables also indicate the amounts which may be offset, as they are subject to a Master Netting Agreement or similar agreement, but whose characteristics make them ineligible for offsetting in the

consolidated financial statements under IFRS. This information is provided in comparison with the accounting treatment applied under US GAAP. This affects in particular financial instruments that may only be offset in the event of the default, insolvency or bankruptcy of one of the counterparties, as well as instruments pledged by cash or securities collateral. These mainly include over-the-counter interest rate options, interest rate swaps and securities purchased/sold under resale/repurchase agreements.

Net positions resulting from these various offsetting are not intended to represent the Group's actual exposure to counterparty risk through these financial instruments, insofar as counterparty risk management uses other risk mitigation strategies in addition to netting and collateral agreements.

NOTE 3.12.1 AT 31ST DECEMBER 2019**ASSETS**

(In EURm)	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				
	Amount of assets not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral received	Financial instruments received as collateral	Net amount
Derivative financial instruments (see Notes 3.1 and 3.2)	28,345	210,193	(85,852)	152,686	(100,225)	(16,360)	-	36,101
Securities lent (see Notes 3.1 and 3.3)	8,275	5,552	-	13,827	(2,171)	(5)	(487)	11,164
Securities purchased under resale agreements (see Notes 3.1 and 3.5)	44,054	196,583	(91,110)	149,527	(14,459)	(112)	(40,544)	94,412
Guarantee deposits pledged (see Note 4.4)	32,118	16,512	-	48,630	-	(16,512)	-	32,118
Other assets not subject to offsetting	991,633	-	-	991,633	-	-	-	991,633
TOTAL	1,104,425	428,840	(176,962)	1,356,303	(116,855)	(32,989)	(41,031)	1,165,428

LIABILITIES

(In EURm)	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				Net amount
	Amount of liabilities not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral pledged	Financial instruments pledged as collateral	
Derivative financial instruments (see Notes 3.1 and 3.2)	27,848	206,337	(85,852)	148,333	(100,225)	(16,512)	-	31,596
Amount payable on borrowed securities (see Note 3.1)	28,000	10,950	-	38,950	(2,171)	-	-	36,779
Securities sold under repurchase agreements (see Notes 3.1 and 3.6)	55,793	151,257	(91,110)	115,940	(14,459)	-	(35,880)	65,601
Guarantee deposits received (see Note 4.4)	32,844	16,477	-	49,321	-	(16,477)	-	32,844
Other liabilities not subject to offsetting	935,189	-	-	935,189	-	-	-	935,189
TOTAL	1,079,674	385,021	(176,962)	1,287,733	(116,855)	(32,989)	(35,880)	1,102,009

(1) Fair value of financial instruments and collateral, capped at the net book value of the balance sheet exposure, so as to avoid any overcollateralisation effect.

NOTE 3.12.2 AT 31ST DECEMBER 2018

ASSETS

(In EURm)	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				Net amount
	Amount of assets not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral received	Financial instruments received as collateral	
Derivative financial instruments (see Notes 3.1 and 3.2)	25,601	166,618	(57,337)	134,882	(81,559)	(13,720)	(31)	39,572
Securities lent (see Notes 3.1 and 3.3)	9,367	3,527	-	12,894	(1,745)	(2)	(732)	10,415
Securities purchased under resale agreements (see Notes 3.1 and 3.5)	46,526	224,992	(97,812)	173,706	(21,581)	(304)	(51,925)	99,896
Guarantee deposits pledged (see Note 4.4)	33,099	13,595	-	46,694	-	(13,595)	-	33,099
Other assets not subject to offsetting	941,252	-	-	941,252	-	-	-	941,252
TOTAL	1,055,845	408,732	(155,149)	1,309,428	(104,885)	(27,621)	(52,688)	1,124,234

LIABILITIES

(In EURm)	Impact of offsetting on the balance sheet			Impact of Master Netting Agreements (MNA) and similar agreements ⁽¹⁾				Net amount
	Amount of liabilities not subject to offsetting	Gross amount	Amount offset	Net amount presented on the balance sheet	Financial instruments recognised in the balance sheet	Cash collateral pledged	Financial instruments pledged as collateral	
Derivative financial instruments (see Notes 3.1 and 3.2)	27,918	162,357	(57,337)	132,938	(81,559)	(13,595)	-	37,784
Amount payable on borrowed securities (see Note 3.1)	33,731	17,533	-	51,264	(1,745)	-	-	49,519
Securities sold under repurchase agreements (see Notes 3.1 and 3.6)	45,391	174,062	(97,812)	121,641	(21,581)	-	(22,956)	77,104
Guarantee deposits received (See Note 4.4)	29,417	14,026	-	43,443	-	(14,026)	-	29,417
Other liabilities not subject to offsetting	894,333	-	-	894,333	-	-	-	894,333
TOTAL	1,030,790	367,978	(155,149)	1,243,619	(104,885)	(27,621)	(22,956)	1,088,157

(1) Fair value of financial instruments and collateral, capped at the net book value of the balance sheet exposure, so as to avoid any overcollateralisation effect.

NOTE 3.13 Contractual maturities of financial liabilities

<i>(In EURm)</i>	Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	31.12.2019
Due to central banks	4,097	-	-	-	4,097
Financial liabilities at fair value through profit or loss	249,776	28,702	37,998	47,653	364,129
Due to banks	69,156	20,306	17,267	1,200	107,929
Customer deposits	372,573	20,385	16,319	9,335	418,612
Debt securities issued	28,142	24,948	56,099	15,979	125,168
Subordinated debt	5	2	2,746	11,712	14,465
Other liabilities	74,712	2,479	5,264	2,607	85,062
TOTAL LIABILITIES	798,461	96,822	135,693	88,486	1,119,462
Loan commitment granted	104,243	24,848	88,188	17,615	234,894
Guarantee commitments granted	25,906	8,772	10,101	8,041	52,820
TOTAL COMMITMENTS GRANTED	130,149	33,620	98,289	25,656	287,714

The flows presented in this note are based on contractual maturities. However, for certain elements of the balance sheet, assumptions could be applied.

When there is no contractual terms, as well as for trading financial instruments (e.g.: derivatives), maturities are presented in the first column (up to 3 months).

The guarantee commitments given are scheduled on the basis of the best possible estimate of disposal; if not available, they are presented in the first column (up to 3 months).

NOTE 4 OTHER ACTIVITIES

NOTE 4.1 Fee income and expense

ACCOUNTING PRINCIPLES

Fee income and *Fee expense* combine fees on services rendered and received, as well as fees on commitments, that cannot be assimilated to interest. Fees that can be assimilated to interest are integrated into the effective interest rate on the associated financial instrument and are recorded under *Interest and similar income* and *Interest and similar expense* (see Note 3.7).

Transactions with customers include the fees from retail customers from the Group retail banking activities (in particular credit card fees, account management fees or application fees outside the effective interest rate).

Sundry services provided include the fees from customers from the other Group activities (in particular, interchange fees, funds management fees or fees on insurance products sold within the network).

The Group recognises fee income or expense for an amount equivalent to the remuneration for the service provided and depending on the progress transferring control of these services:

- fees for ongoing services, such as some payment services, custody fees, or digital service subscriptions are recognised as income over the life of the service;
- fees for one-off services, such as fund activity, finder's fees received, arbitrage fees, or penalties on payment incidents are recognised as income when the service is provided.

The amount equivalent to the remuneration for the service provided is composed of fixed and variable contractual compensation whether they are paid in kind or in cash, less any payments due to customers (for example, in case of promotional offers). The variable compensation (for example, discounts based on the provided services volume over a period of time or fees payable subject to the achievement of a performance target, etc.) are included in the amount equivalent to the remuneration for the service provided if and only if this compensation is highly probable not to be subsequently reduced significantly.

The possible mismatch between the payment date of the service provided and the date of execution of the service gives assets and liabilities depending on the type of contract and mismatch which are recognised under *Other Assets* and *Other Liabilities* (see Note 4.4):

- customer contracts generate trade receivables, accrued income or prepaid income;
- supplier contracts generate trade payables, accrued expenses or prepaid expenses.

In syndication deals, the effective interest rate for the share of the issuance retained on the Group's balance sheet is comparable to that applied to the other members of the syndicate including, when needed, a share of the underwriting fees and participation fees; the balance of these fees for services rendered is then recorded under *Fee income* at the end of the syndication period. Arrangement fees are recorded as income when the placement is legally complete.

(In EURm)	2019			2018		
	Income	Expense	Net	Income	Expense	Net
Transactions with banks	157	(149)	8	148	(182)	(34)
Transactions with customers	3,072	-	3,072	3,187	-	3,187
Financial instruments operations	2,261	(2,351)	(90)	2,308	(2,334)	(26)
Securities transactions	523	(1,019)	(496)	539	(1,030)	(491)
Primary market transactions	126	-	126	136	-	136
Foreign exchange transactions and financial derivatives	1,612	(1,332)	280	1,633	(1,304)	329
Loan and guarantee commitments	772	(213)	559	711	(78)	633
Various services	2,806	(1,098)	1,708	2,770	(1,006)	1,764
Asset management fees	610	-	610	634	-	634
Means of payment fees	914	-	914	847	-	847
Insurance product fees	241	-	241	228	-	228
Underwriting fees of UCITS	80	-	80	85	-	85
Other fees	961	(1,098)	(137)	976	(1,006)	(30)
TOTAL	9,068	(3,811)	5,257	9,124	(3,600)	5,524

NOTE 4.2 Income and expense from other activities**ACCOUNTING PRINCIPLES****Leasing activities**

Leases granted by the Group which do not transfer to the lessee virtually all the risks and benefits associated with ownership of the leased asset are classified as operating leases.

Assets held under operating leases, including investment property, are recorded on the balance sheet under *Tangible and intangible fixed assets* at their acquisition cost, less depreciation and impairment (see Note 8.4).

Leased assets are depreciated, excluding residual value, over the life of the lease. Lease payments are recognised as income according to the straight-line method over the term of the lease. Meanwhile, the purpose of the accounting treatment of income invoiced in respect of maintenance services related to operating lease activities is to reflect a constant margin between this income and the expenses incurred in providing the service over the term of the service agreement.

Income and expenses, and capital gains or losses on investment properties and leased assets, are recorded under *Income and expenses from other activities* on the *Real estate leasing* and *Equipment leasing* lines, as well as income and expense on maintenance services related to operating lease activities.

These lines also include losses incurred in the event of a decline in the unguaranteed residual value of finance-lease transactions, and capital gains or losses on disposal related to unleased assets once the lease finance agreements are terminated.

Leases granted by the Group entities may include maintenance service for the leased equipment. In this case, the portion of rentals corresponding to this maintenance service is spread over the duration of the service (generally the lease contract duration) and, when necessary, considers the progress of the service provided when it is not linear.

Real estate development activities

As the sale of real estate off plan (housing, office property, retail areas, etc.) is an ongoing service, the margin of this activity is progressively recognised over the construction programme's duration until the delivery date to the customer. It is recognised under income when this margin is positive and under expenses when this margin is negative.

The margin recognised at each closing period reflects the programme's estimated margin forecast and its stage of completion at the end of the period which depends on the progress in terms of marketing and the project.

(In EURm)	2019			2018		
	Income	Expense	Net	Income	Expense	Net
Real estate development	96	-	96	76	(2)	74
Real estate leasing	48	(34)	14	34	(40)	(6)
Equipment leasing ⁽¹⁾	10,889	(7,758)	3,131	10,102	(7,156)	2,946
Other activities	596	(1,993)	(1,397)	549	(1,814)	(1,265)
TOTAL	11,629	(9,785)	1,844	10,761	(9,012)	1,749

(1) The amount recorded under this heading is mainly due to income and expenses related to long-term leasing and car fleet management businesses.

NOTE 4.3 Insurance activities**MAKE
IT SIMPLE**

Insurance activities (life insurance, personal protection and non-life insurance) add to the range of products included in the banking services offered to Group customers.

These activities are carried out by dedicated subsidiaries, subject to regulations specific to the insurance sector.

The rules for measuring and accounting for risks associated with insurance contracts are specific to the Insurance sector as well as the presentation of income and expenses on the Group's insurance activities that are disclosed in this note and which are classified on the basis of their function.

DEFERRED APPLICATION OF IFRS 9 BY INSURANCE SUBSIDIARIES

The amendments to IFRS 4 (Applying IFRS 9, "Financial Instruments", with IFRS 4, "Insurance Contracts") allow entities having insurance as their primary activity to delay the application of IFRS 9 until 1st January 2021, meaning they may continue applying the current standard, IAS 39. The European Regulation 2017/1988 also extended the deferral option to allow financial conglomerates falling within the scope of Directive 2002/87/EC to elect that all their entities operating in the insurance sector within the meaning of that Directive will defer the effective date of IFRS 9 until 1st January 2021.

The Group has elected that all its insurance subsidiaries will defer the effective date of IFRS 9 and will continue to apply IAS 39 as adopted by the European Union. The Group has made the necessary arrangements to forbid all transfers of financial instruments between its insurance sector and any other sector in the Group that would lead to a derecognition of the instrument by the seller, except for transfers of financial instruments measured at fair value through profit or loss by both sectors involved in such transfers.

Insurance activities are presented on separate lines in the consolidated financial statements for clarification purposes: *Investments of insurance activities* under balance sheet assets, *Insurance contracts related liabilities* under balance sheet liabilities and *Net income from insurance activities* under *Net banking income* in the income statement.

The main subsidiaries concerned are Sogecap, Antarius, Sogelife, Oradea Vie, Komerční Pojistovna A.S. and Sogessur.

NOTE 4.3.1 INSURANCE CONTRACTS RELATED LIABILITIES**ACCOUNTING PRINCIPLES****Underwriting reserves of insurance companies**

Underwriting reserves correspond to the commitments of insurance companies with respect to policyholders and the beneficiaries of policies.

In accordance with IFRS 4 on insurance policies, life and non-life underwriting reserves continue to be measured under the same local regulations, with the exception of certain prudential provisions that are cancelled (liquidity risk provision) or recalculated economically (mainly, overall management reserve).

Risks covered by non-life insurance policies are principally linked to home, car and accident protection guarantees. Underwriting reserves comprise reserves for unearned premiums (share of premium income relating to subsequent financial years) and for outstanding claims.

Risks covered by life insurance policies are principally death, invalidity and incapacity for work. Life insurance underwriting reserves mainly comprise actuarial reserves, which correspond to the difference between the present value of commitments falling to the insurer and those falling to the policyholder, and the reserve for claims incurred but not settled.

In saving-life insurance products:

- underwriting reserves of saving-life insurance contracts invested in EUR-denominated policies with profit sharing clauses consist primarily of mathematical provisions and provisions for profit-sharing;
- underwriting reserves of saving-life insurance contracts invested in unit-linked policies or with a significant insurance clause (mortality, invalidity, etc.) are measured at the inventory date according to the realisation value of the assets underlying these contracts.

Under the principles defined in IFRS 4, and in compliance with local regulations applicable with respect thereto, life insurance policies with discretionary profit-sharing features are subject to "mirror accounting", whereby any changes in the value of financial assets liable to affect policyholders are recorded in *Deferred profit-sharing*. This reserve is calculated to reflect the potential rights of policyholders to unrealised gains on financial instruments measured at fair value or their potential share of unrealised losses.

To demonstrate the recoverability of the deferred profit-sharing asset in the event of an unrealised net loss, two approaches are verified by the Group in order to show that the liquidity requirements caused by an unfavourable economic environment would not require assets to be sold in the event of unrealised losses:

- the first approach consists in simulating deterministic ("standardised" or extreme) stress scenarios. This is used to show that in these scenarios no significant losses would be realised on the assets existing at the balance sheet date for the scenarios tested;
- the aim of the second approach is to ensure that in the long or medium term, the sale of assets to meet liquidity needs would not generate any significant losses. The approach is verified considering projections based on extreme scenarios.

Moreover, a Liability Adequacy Test (LAT) is also carried out quarterly at the level of each consolidated entities operating in the insurance. This test involves comparing the carrying amount of insurance liabilities with the average economic value using a stochastic model of future cash flows. This test takes into account all of the future cash flows from policies, including benefits, management charges, fees, policy options and guarantees related to the contracts; It does not include future premiums. If the test concludes that the book value is insufficient, the value of insurance liabilities will be adjusted with a corresponding entry in the income statement.

Classification of financial liabilities

At initial recognition, financial liabilities resulting from the Group's insurance activities are classified in the following accounting categories:

- financial liabilities measured at fair value through profit or loss: these are derivative financial liabilities;
- financial liabilities measured at fair value option through profit or loss: these are non-derivative financial liabilities that were initially designated by the Group to be measured at fair value through profit or loss (using the option). These include investment contracts without both discretionary profit-sharing clauses and insurance component, that do not meet the definition of an insurance contract under IFRS 4 (unit-linked insurance contracts only) and are thus governed by IAS 39.

BREAKDOWN OF INSURANCE CONTRACTS RELATED LIABILITIES

(In EURm)	31.12.2019	31.12.2018 *
Underwriting reserves of insurance companies	140,155	127,386
Financial liabilities of insurance companies	4,104	2,157
Financial liabilities at fair value through profit or loss	834	774
Financial liabilities at fair value through profit or loss (fair value option)	3,270	1,383
TOTAL	144,259	129,543

* The amounts have been restated following the reclassification of investment contracts to Financial liabilities of insurance companies.

UNDERWRITING RESERVES OF INSURANCE COMPANIES

(In EURm)	31.12.2019	31.12.2018*
Life insurance underwriting reserves for unit-linked policies	32,611	27,467
Other life insurance underwriting reserves	94,714	90,992
Non-life insurance underwriting reserves	1,556	1,418
Deferred profit-sharing booked in liabilities	11,274	7,509
Total	140,155	127,386
Attributable to reinsurers	(750)	(703)
UNDERWRITING RESERVES OF INSURANCE NET OF THE SHARE ATTRIBUTABLE TO REINSURERS	139,405	126,683

* The amounts have been restated following the reclassification of investment contracts to Financial liabilities of insurance companies.

STATEMENT OF CHANGES IN UNDERWRITING RESERVES

<i>(In EURm)</i>	Life insurance underwriting reserves for unit-linked policies	Other life insurance underwriting reserves	Non-life insurance underwriting reserves
Reserves at 1st January 2019	27,467	90,992	1,418
Allocation to insurance reserves	1,770	2,067	161
Revaluation of unit-linked policies	4,268	-	-
Charges deducted from unit-linked policies	(193)	-	-
Transfers and allocation adjustments	(637)	630	-
New customers	26	(1)	9
Profit-sharing	(95)	957	-
Others	5	69	(32)
Reserves at 31st December 2019	32,611	94,714	1,556

In accordance with IFRS 4 and Group accounting standards, the Liability Adequacy Test (LAT) was performed at 31st December 2019. This test assesses whether recognised insurance liabilities are

adequate, using current estimates of future cash flows under insurance policies. The result of the test at 31st December 2019 does not show any insufficiency of technical liabilities.

UNDERWRITING RESERVES OF INSURANCE COMPANIES BY REMAINING MATURITY

<i>(In EURm)</i>	Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	31.12.2019
Underwriting reserves of insurance companies	15,288	9,291	37,018	78,558	140,155

NOTE 4.3.2 INVESTMENTS OF INSURANCE ACTIVITIES

ACCOUNTING PRINCIPLES**Classification of financial instruments**

When initially recognised, financial assets from Group insurance activities are classified into one of the following categories:

- *Financial assets at fair value through profit or loss*: these are financial assets held for trading purposes (see definition in Note 3.1), which by default include derivative financial assets not qualifying as hedging instruments and non-derivative financial assets designated by the insurance entity upon initial recognition to be carried at fair value through profit or loss (using the option). In particular, insurance entities measure at fair value using the option the financial assets representing unit-linked contracts in order to eliminate the accounting mismatch with the related insurance liabilities, as well as interests in UCITS over which a significant influence exists;
- *available-for-sale financial assets*: these are non-derivative financial assets held for an indeterminate period, which the insurance entity may sell at any time. By default, they are assets that do not fall into one of the other categories. These instruments are measured at fair value against *Unrealised or deferred gains and losses*. Interests accrued or paid on debt securities are recognised in the income statement using the effective interest rate method while dividend income earned on equity securities is recorded in the income statement under *Net gains and losses on available-for-sale financial assets*. If there is an objective evidence on an individual basis, the total accumulated unrealised loss previously recorded in shareholders' equity is reclassified in the income statement under *Net income from insurance activities*;
- *loans and receivables*: these include non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are not held for trading purposes, not held for sale from the time they are originated or acquired, and not designated upon initial recognition to be carried at fair value through profit or loss (in accordance with the fair value option). They are measured at amortised cost, and impairment, determined on an individual or a collective basis, may be recorded if appropriate;
- *held-to-maturity financial assets*: these are non-derivative financial assets with fixed or determinable payments and a fixed maturity, that are quoted in an active market and which the Group has the intention and ability to hold to maturity. They are measured at their amortised cost and may be subject to impairment as appropriate whether objective evidence of impairment exists individually.

All these categories are presented on the insurance entity's balance sheet under *the Investments of insurance companies*, which also includes investment properties held by insurance entities and hedge derivatives assessed in accordance with the accounting principles presented in Note 3.2.

Reclassification of financial assets

After their initial recognition, financial assets may not be later reclassified as *Financial assets at fair value through profit or loss*.

A non-derivative financial asset initially recognised under *Financial assets at fair value through profit or loss* as an asset held for trading purposes may only be reclassified out of this category under specific conditions framed by IAS 39 standard.

IMPAIRMENT**Impairment of financial assets measured at amortised cost**

For debt instruments not measured at fair value through net income, the criteria used by the insurance entities to assess individually objective evidence of impairment include the following conditions:

- a significant decline in the counterparty's financial situation leads to a high probability of said counterparty being unable to fulfil its overall commitments, implying then a risk of loss for the insurance entity (the appreciation of this deterioration can be based on the evolution of the rating of the issuers or the variations of the credit spreads changes observed on these markets);
- the occurrence of late payment of coupons and more generally of arrears of more than 90 days;
- or, regardless of whether or not any past-due payments are recorded, there is objective evidence of impairment or legal proceedings have been initiated (bankruptcy, legal settlement, compulsory liquidation).

If there is objective evidence that loans or other receivables, or financial assets classified as held-to-maturity financial assets, are impaired, an impairment is recognised for the difference between the carrying amount and the present value of estimated future recoverable cash flows, taking into account any guarantees. This discount is calculated using the financial assets' original effective interest rate. The amount of this impairment is deducted from the carrying value of the impaired financial asset.

The allocations and reversals of impairments are recorded in the income statement under net income from investments in the *Net income from insurance activities*. The impaired loans or receivables are remunerated for accounting purposes by the reversal over time of the discounting to present value, which is recorded under interest income in the *Net income from insurance activities*.

Where there is no objective evidence that an impairment loss has been incurred on a financial asset considered individually, be it significant or not, insurance entity includes that financial asset in a group of financial assets having similar characteristics in terms of credit risk and tests the whole group for impairment. In a homogeneous portfolio, as soon as a credit risk is incurred on a group of financial instruments, impairment is recognised without waiting for the risk to individually affect one or more receivables.

Impairment of available-for-sale financial assets

An available-for-sale financial asset is impaired if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of this asset.

For listed equity instruments, a significant or prolonged decline in their price below their acquisition cost constitutes objective evidence of impairment. For this purpose, insurance entities consider as impaired listed shares showing an unrealised loss greater than 50% of their acquisition price on the balance sheet date, as well as listed shares for which the quoted prices have been below their acquisition price on every trading day for at least the last 24 months before the balance sheet date. Further factors, such as the financial situation of the issuer or its development outlook, can lead the insurance entities to consider that the cost of its investment may not be recovered even if the abovementioned criteria are not met. An impairment loss is then recorded through net income equal to the difference between the last quoted price of the security on the balance sheet date and its acquisition price.

For unlisted equity instruments, the criteria used to assess the evidence of impairment are identical to those mentioned above. The value of these instruments at the balance sheet date is determined using the valuation methods described in Note 3.4.

The criteria for the impairment of debt instruments are similar to those for the impairment of financial assets measured at amortised cost.

When a decline in the fair value of an available-for-sale financial asset has been recognised directly in shareholders' equity under *Unrealised or deferred gains and losses* and subsequent objective evidence of impairment emerges, insurance entities recognise the total accumulated unrealised loss previously recorded in shareholders' equity in the income statement among under net income from investments in the *Net income from insurance activities* as far as debt instruments and equity instruments are concerned.

This cumulative loss is measured as the difference between the acquisition cost (net of any repayments of principal and amortisation) and the present fair value, less any impairment of the financial asset that has already been recorded through profit or loss.

Impairment losses recognised through profit or loss on an equity instrument classified as available-for-sale are only reversed through profit or loss when the instrument is sold. Once an equity instrument has been recognised as impaired, any further loss of value is recorded as an additional impairment loss. For debt instruments, however, an impairment loss is reversed through profit or loss if they subsequently recover in value following an improvement in the issuer's credit risk.

OTHER ACCOUNTING PRINCIPLES

Accounting principles relative to fair value, initial recognition of financial instruments, derecognition of financial instruments, derivative financial instruments, interest income and expense, transferred financial assets and offsetting of financial instruments are similar to those described in Note 3 (Financial instruments).

OVERVIEW OF INVESTMENTS OF INSURANCE ACTIVITIES

(In EURm)	31.12.2019	31.12.2018 *
Financial assets at fair value through profit or loss (trading portfolio)	268	462
<i>Shares and other equity instruments</i>	37	29
<i>Trading derivatives</i>	231	433
Financial assets at fair value through profit or loss (fair value option)	65,718	54,715
<i>Bonds and other debt instruments</i>	31,719	26,356
<i>Shares and other equity instruments</i>	33,694	28,085
<i>Loans, receivables and repo transactions</i>	305	274
Hedging derivatives	438	401
Available for sale financial assets	91,899	84,668
<i>Debt instruments</i>	75,839	70,982
<i>Equity instruments</i>	16,060	13,686
Due from banks ⁽²⁾	5,867	5,794
Customer loans	92	119
Held to maturity financial assets	80	-
Real estate investments	576	609
TOTAL INVESTMENTS OF INSURANCE ACTIVITIES⁽¹⁾⁽²⁾	164,938	146,768

* Amounts restated in order to present the amounts of investments of insurance activities after elimination of intercompany transactions.

(1) Investments in other Group companies that are made in representation of unit-linked liabilities are kept in the Group's consolidated balance sheet without any significant impact thereon.

(2) o/w EUR 1,126 million of current accounts at 31st December 2019 vs. EUR 710 million at 31st December 2018.

ANALYSIS OF FINANCIAL ASSETS DEPENDING ON THEIR CONTRACTUAL CHARACTERISTICS

The following table shows the carrying value of the financial assets included in *Net investments from insurance activities*, whereby those assets whose contractual conditions give rise to cash-flows on set dates which are solely payments of principal and interest (basic instruments).

(In EURm)	31.12.2019					
	Carrying amount			Fair value		
	Basic instruments	Other instruments	Total	Basic instruments	Other instruments	Total
Financial assets at fair value through profit or loss	-	65,986	65,986	-	65,986	65,986
Hedging derivatives	-	438	438	-	438	438
Available-for-sale financial assets	72,349	19,550	91,899	72,349	19,550	91,899
Due from banks	2,805	3,062	5,867	3,012	3,178	6,190
Customer loans	92	-	92	90	-	90
Held-to-maturity financial assets	-	80	80	-	80	80
TOTAL FINANCIAL INVESTMENTS	75,246	89,116	164,362	75,451	89,232	164,683

31.12.2018

	Carrying amount			Fair value		
	Basic instruments	Other instruments	Total	Basic instruments	Other instruments	Total
(In EURm)						
Financial assets at fair value through profit or loss	-	55,177	55,177	-	55,177	55,177
Hedging derivatives	-	401	401	-	401	401
Available-for-sale financial assets	68,261	16,407	84,668	68,261	16,407	84,668
Due from banks	2,122	3,672	5,794	2,259	3,880	6,139
Customer loans	119	-	119	117	-	117
Held-to-maturity financial assets	-	-	-	-	-	-
TOTAL FINANCIAL INVESTMENTS	70,502	75,657	146,159	70,637	75,865	146,502

FAIR VALUE OF FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

31.12.2019

(In EURm)	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss (trading portfolio)	37	190	41	268
Financial assets at fair value through profit or loss using the fair value option	58,874	6,483	361	65,718
Hedging derivatives	-	438	-	438
Available-for-sale financial assets	84,435	7,252	212	91,899
TOTAL	143,346	14,363	614	158,323

31.12.2018

(In EURm)	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss (trading portfolio)	29	384	49	462
Financial assets at fair value through profit or loss using the fair value option	48,821	5,516	378	54,715
Hedging derivatives	-	401	-	401
Available-for-sale financial assets	79,104	5,466	98	84,668
TOTAL	127,954	11,767	525	140,246

CHANGES IN AVAILABLE FOR SALE FINANCIAL ASSETS

2019

(In EURm)	
Balance as of 1st January	84,668
Acquisitions	15,602
Disposals/redemptions	(11,393)
Transfers to held-to-maturity financial assets	(80)
Change in scope and others	154
Gains and losses on changes in fair value recognised directly in equity during the period	2,984
Impairment losses on equity instruments recognised in profit or loss	(91)
Translation differences	55
Balance as of 31st December	91,899

UNREALISED GAINS AND LOSSES ON AVAILABLE FOR SALE FINANCIAL ASSETS RECOGNISED IN OTHER COMPREHENSIVE INCOME

(In EURm)	31.12.2019		
	Capital gains	Capital losses	Net revaluation
Unrealised gains and losses of insurance companies	556	(30)	526
On equity instruments available-for-sale	2,047	(75)	1,972
On debt instruments available-for-sale and assets reclassified as loans and receivables	7,921	(240)	7,681
Deferred profit-sharing	(9,412)	285	(9,127)

(In EURm)	31.12.2018		
	Capital gains	Capital losses	Net revaluation
Unrealised gains and losses of insurance companies	384	(47)	337
On available-for-sale equity instruments	1,114	(391)	723
On available-for-sale debt instruments and assets reclassified as loans and receivables	6,338	(477)	5,861
Deferred profit-sharing	(7,068)	821	(6,247)

FINANCIAL ASSETS RECEIVED AS SECURITY AND AVAILABLE FOR THE ENTITY

(In EURm)	31.12.2019	31.12.2018
Fair value of securities purchased under resale agreements	7	8

The Group generally purchases securities under resale agreements under normal market terms and conditions. It may re-use the securities received under resale agreement by selling them outright, selling them under repurchase agreements or pledging them as security, provided that it returns these or equivalent securities to the counterparty to the resale agreement at its term.

Securities purchased under resale agreements are not recognised on the balance sheet. Their fair value, as shown above, includes securities sold or pledged as collateral.

NOTE 4.3.3 NET INCOME FROM INSURANCE ACTIVITIES

ACCOUNTING PRINCIPLES

Income and expense related to insurance contracts

Income and expense related to insurance contracts issued by Group insurance companies, associated fee income and expense, and income and expense related to investments of insurance companies are recorded under *Net income from insurance activities* in the income statement.

Other income and expense are recorded under the appropriate headings.

Changes in the provision for deferred profit-sharing are recorded under *Net income from insurance activities* in the income statement or under *Unrealised or deferred gains and losses* under the appropriate headings for the underlying assets in question.

The following table shows the breakdown of income and expense from insurance activities and associated investments on a separate line under *Net banking income: Net income from insurance activities* (after eliminating intercompany transactions).

(In EURm)	2019	2018*
Net premiums	14,188	12,562
Net income from investments	3,655	1,928
Cost of benefits (including changes in reserves) ⁽¹⁾	(15,736)	(12,429)
Other net technical income (expense)	(182)	(337)
Net income from insurance activities	1,925	1,724
Funding costs	(5)	(7)
Net banking income of insurance companies	1,920	1,717

* The amounts have been restated following the reclassification of investment contracts to Financial liabilities of insurance companies.

(1) o/w: EUR -3,557 million in respect of deferred profit-sharing at 31st December 2019.

NET INCOME FROM INVESTMENTS

(In EURm)	2019	2018
Dividend income on equity instruments	719	617
Interest income	1,912	2,011
On available-for-sale financial assets	1,675	1,706
On loans and receivables	194	293
Other net interest income	43	12
Net gains or losses on financial instruments at fair value through profit or loss	764	(776)
Net gains or losses on available-for-sale financial instruments	237	62
Capital gain or loss on sale of debt instruments	141	(5)
Capital gain or loss on sale of equity instruments	187	174
Impairment values on equity instruments	(91)	(107)
Net gains or losses on real estate investments	23	14
TOTAL	3,655	1,928

NOTE 4.3.4 MANAGEMENT OF INSURANCE RISKS

The Group carries out its insurance activities through the distribution and reinsurance acceptance of a wide range of life insurance, protection and health insurance, and non-life insurance policies. Since the life insurance business is predominant on the French market in the Group's insurance activities, the market risks of financial assets in terms of technical liabilities constitute the most significant exposure. Within market risks, the insurance business line is sensitive to shocks in interest rates, equity markets and credit spreads. In connection with the life insurance savings activity, the risk of withdrawals is also significant.

Managing these risks is key to the Insurance business line's activity. It is carried out by qualified and experienced teams, with major bespoke IT resources. Risks undergo regular monitoring and are reported to the General Management of both the entities concerned and the business lines.

Risk management techniques are based on the following:

- heightened security for the risk acceptance process, with the aim of guaranteeing that the price schedule matches the policyholder's risk profile and the guarantees provided;

- regular monitoring of indicators on product claims rates in order to adjust certain product parameters, such as pricing or the level of guarantee, if necessary;
- implementation of a reinsurance plan to protect the business line from major/serial claims;
- application of policies on risk, provisioning and reinsurance.

Management of risks linked to the financial markets and to ALM is an integral part of the investment strategy just like objectives on long-term performance. The optimisation of these two factors is highly influenced by the asset/liability balance. Liability commitments (guarantees offered to customers, maturity of policies), as well as the amounts booked under the major items on the balance sheet (shareholders' equity, income, provisions, reserves, etc.) are analysed by the Finance and Risk Department of the insurance business line.

Risk management related to financial markets (interest rates, credit and shares) and to ALM is based on the following:

- monitoring short and long-term cash flows (match between the term of a liability and the term of an asset, liquidity risk management);

- particular monitoring of policyholder behaviour (redemption);
- close monitoring of financial markets;
- hedging of exchange rate risks (both rising and falling);
- defining thresholds and limits per counterparty, per rating issuer and per category of assets;
- stress tests, the results of which are presented annually at entities' Board of Directors' meetings, as part of the ORSA report (Own Risk and Solvency Assessment), transferred to the ACPR after approval by the Board;
- application of policies related to ALM and investment risks.

BREAKDOWN OF NET INVESTMENTS BY RATING OF BASIC INSTRUMENTS

The following table shows the gross carrying amounts after eliminating intercompany transactions.

	31.12.2019			
(In EURm)	Available-for-sale financial assets	Due from banks	Customer loans	Total
AAA	4,064	1,033	-	5,097
AA+/AA/AA-	38,016	370	-	38,386
A+/A/A-	14,863	1,051	-	15,914
BBB+/BBB/BBB-	14,789	265	-	15,054
BB+/BB/BB-	289	-	-	289
B+/B/B-	5	-	-	5
CCC+/CCC/CCC-	-	-	-	-
CC+/CC/CC-	-	-	-	-
Lower than CC-	-	-	-	-
Without rating	323	86	92	501
TOTAL BEFORE IMPAIRMENT	72,349	2,805	92	75,246
Impairment	-	-	-	-
CARRYING AMOUNT	72,349	2,805	92	75,246

The rating scale is the scale used for Solvency 2 purposes, which calls for the second highest rating determined by the rating agencies (Standard & Poor's, Moody's Investors Service and Fitch Ratings) to be used. The ratings in question apply to issues or, where these are not available, to issuers.

NOTE 4.4 Other assets and liabilities**NOTE 4.4.1 OTHER ASSETS**

(In EURm)	31.12.2019	31.12.2018
Guarantee deposits paid ⁽¹⁾	48,630	46,694
Settlement accounts on securities transactions	6,915	6,645
Prepaid expenses	1,084	1,057
Miscellaneous receivables ⁽²⁾	10,065	11,817
Miscellaneous receivables - insurance	1,653	1,511
GROSS AMOUNT	68,347	67,724
Impairments ⁽³⁾	(302)	(278)
NET AMOUNT	68,045	67,446

(1) Mainly relates to guarantee deposits paid on financial instruments, the fair value of which is taken to be the same as their book value net of impairment for credit risk.

(2) Miscellaneous receivables primarily include trade receivables, fee income and income from other activities to be received. The operating leases receivables equal to EUR 918 million as of 31st December 2019.

(3) Impairments on other assets are related to:

- credit risk on operating lease receivables for an amount of EUR 145 million as of 31st December 2019 and EUR 131 million as of 31st December 2018;
- credit risk on assets acquired by adjudication and sundry debtors for an amount of EUR 123 million as of 31st December 2019 and EUR 110 million as of 31st December 2018;
- other risks for an amount of EUR 34 million as of 31st December 2019 and EUR 37 million as of 31st December 2018.

NOTE 4.4.2 OTHER LIABILITIES

(In EURm)	31.12.2019	31.12.2018
Guarantee deposits received ⁽¹⁾	49,321	43,443
Settlement accounts on securities transactions	7,356	6,904
Expenses payable on employee benefits	2,364	2,396
Lease liability ⁽²⁾	2,251	
Deferred income	1,596	1,620
Miscellaneous payables ⁽³⁾	13,194	15,609
Miscellaneous payables - insurance	8,980	6,657
TOTAL	85,062	76,629

(1) Mainly relates to guarantee deposits received on financial instruments, their fair value is taken to be the same as their book value.

(2) Lease liability recorded as a result of the application of IFRS 16 "Leases" as from 1st January 2019 (see Note 1).

(3) Miscellaneous payables primarily include trade payables, fee expense and expense from other activities to be paid.

NOTE 5 PERSONNEL EXPENSES AND EMPLOYEE BENEFITS



MAKE IT SIMPLE

Employee benefits correspond to the compensation granted by the Group to its employees in exchange for work carried out during the annual reporting period.

All forms of compensation for work rendered are recorded in the expenses:

- whether it is paid to employees or to outside social security agencies;
- whether it is paid during the annual reporting period or to be paid by the Group in the future as entitlements to employees (pension plans, retirement benefits...);
- whether it is paid in cash or in Societe Generale shares (free share plans, stock options).

ACCOUNTING PRINCIPLES

Employee benefits are divided into four categories:

- short-term employee benefits which are employee benefits expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service, such as fixed and variable compensation, annual leave, taxes and social security contributions, mandatory employer contributions and profit-sharing;
- post-employment benefits, including defined contributions plans and defined benefit plans such as pension plans and retirement benefits;
- long-term employee benefits which are employee benefits not expected to be settled wholly before twelve months, such as defined variable compensation paid in cash and not indexed to the Societe Generale share, long service awards and time saving accounts;
- termination benefits.

Information related to the Group headcount is presented in the Chapter 5 of the Universal Registration Document (Corporate Social Responsibility).

NOTE 5.1 Personnel expenses and related party transactions**ACCOUNTING PRINCIPLES**

Personnel expenses include all expenses related to personnel, including employee benefits and expenses related to payments based on Societe Generale shares.

Short-term employee benefits are recorded under *Personnel expenses* during the period according to the services provided by the employee.

The accounting principles relating to post-employment benefits and other long-term benefits are described in Note 5.2. Those related to share-based payments are described in Note 5.3.

Personnel expenses include related party transactions, within the meaning of IAS 24.

The Group's related parties include the members of the Board of Directors, corporate officers (the Chairman, the Chief Executive Officer and the four Deputy Chief Executive Officers), their respective spouses and any children residing in the family home, subsidiaries which are either controlled exclusively or jointly by the Group, and companies over which Societe Generale exercises significant influence.

NOTE 5.1.1 PERSONNEL EXPENSES

(In EURm)	2019	2018
Employee compensation	(7,240)	(6,925)
Social security charges and payroll taxes	(1,660)	(1,648)
Net pension expenses - defined contribution plans	(759)	(724)
Net pension expenses - defined benefit plans	(10)	78
Employee profit-sharing and incentives	(286)	(342)
TOTAL	(9,955)	(9,561)
<i>Including net expenses from share-based payments</i>	<i>(171)</i>	<i>(171)</i>

NOTE 5.1.2 RELATED PARTY TRANSACTIONS**REMUNERATION OF THE GROUP'S MANAGERS**

This includes amounts effectively paid by the Group to Directors and corporate officers as remuneration (including employer contributions) and other benefits as indicated below.

(In EURm)	2019	2018
Short-term benefits	13.6	17.9
Post-employment benefits	0.7	0.7
Long-term benefits	-	-
Termination benefits	-	1.6
Share-based payments	3.0	2.8
TOTAL	17.4	23.0

RELATED PARTY TRANSACTIONS

The transactions with members of the Board of Directors, Chief Executive Officers and members of their families included in this note only comprise loans and guarantees outstanding at 31st December 2019 for a total amount of EUR 3.9 million. All other transactions with these individuals are insignificant.

TOTAL AMOUNTS PROVISIONED OR BOOKED BY THE SOCIETE GENERALE GROUP FOR THE PAYMENT OF PENSIONS AND OTHER BENEFITS

The total amount provisioned or booked by the Societe Generale Group at 31st December 2019 under IAS 19 for the payment of pensions and other benefits to Societe Generale's Chief Executive Officers (Ms Lebot and Mr. Aymerich, Mr. Cabannes, and Mr. Heim and the two staff-elected Directors) is EUR 11.5 million.

NOTE 5.2 Employee benefits

Group entities in France and abroad, may award their employees:

- post-employment benefits, such as pension plans or retirement benefits;
- other long-term benefits: these benefits include deferred compensation programs settled in cash and not indexed to the Societe Generale share, such as long-term deferred variable remuneration, CET (*Comptes Épargne Temps*) flexible working provisions, or long service awards;
- termination benefits.

DETAIL OF PROVISIONS FOR EMPLOYEE BENEFITS

(In EURm)	Provisions at 31.12.2018	Allocations	Write-backs available	Net allocation	Write-backs used	Actuarial gains and losses	Currency and scope effects	Provisions at 31.12.2019
Post-employment benefits ⁽¹⁾	1,574	92	(89)	3	(76)	34	85	1,620
Other long-term benefits	435	93	(57)	36	(39)	-	8	440
Termination benefits	332	331	(62)	269	(260)	-	15	356
TOTAL	2,341	516	(208)	308	(375)	34	108	2,416

(1) The write-backs available of post-employment benefits include the freezing of rights under the additional plan for the supplementary retirement allowance for executives, implemented in France in 1991.

On 9th April 2019, Societe Generale announced two transformation projects including a strategic adjustment of its Global Banking and Investor Solutions activities and a more operational project aimed at adapting the organisation of the Retail Banking and International Financial Services headquarters.

These projects led to an adjustment of the restructuring provisions with an allocation of EUR 243 million, of which EUR 236 million were recorded under *Personnel expenses* and EUR 7 million were recorded

under *Other operating expenses*. Most of these provisions were used during the second half of 2019.

Provisions also include a restructuring provision related to planned changes that could concern part of French Retail Banking's head office, the platforms for processing customer transactions (back offices) and certain network support functions. This project resulted in an allocation of EUR 55 million, of which EUR 44 million were recorded under *Personnel expenses* and EUR 11 million were recorded under *Other operating expenses*.

ACCOUNTING PRINCIPLES

Post-employment benefits

Post-employment benefits can be broken down into two categories: defined contribution pension plans or defined benefit pension plans.

DEFINED CONTRIBUTION PLANS

Defined contribution plans limit the Group's liability to the subscriptions paid into the plan but do not commit the Group to a specific level of future benefits. Contributions paid are recorded as an expense for the current year.

DEFINED BENEFIT PLANS

Defined benefit plans commit the Group, either formally or constructively, to pay a certain amount or level of future benefits and therefore bear the associated medium or long-term risk.

Provisions are recognised on the liabilities side of the balance sheet under *Provisions*, to cover the whole of these retirement obligations. These provisions are assessed regularly by independent actuaries using the projected unit credit method. This valuation technique incorporates assumptions about demographics, early retirement, salary rises and discount and inflation rates.

Group can choose to finance defined benefit plans by assets held by a long-term employee benefit fund or by qualifying insurance policies.

Funding assets, made by funds or insurance policies, are classified as plan assets if assets are held by an entity (fund) that is legally separate from the reporting entity and are available to be used only to pay employee benefits.

When these plans are financed from external funds classified as plan assets, the fair value of these funds is subtracted from the provision to cover the obligations.

When these plans are financed from funds not classified as plan assets, these funds, classified as separate assets, are displayed separately in the assets of the balance sheet under *Financial assets at fair value through profit or loss*.

Differences arising from changes in calculation assumptions (early retirements, discount rates, etc.) and differences between actuarial assumptions and real performance are recognised as actuarial gains and losses. Actuarial gains and losses, as well as the return on plan assets excluding amounts expensed as net interest on the net defined benefit liability (or asset) and any change in the effect of the asset ceiling are components used to remeasure the net defined benefit liability (or asset). These components are immediately and fully recognised in shareholder's equity among *Unrealised or deferred gains and losses* and they cannot be subsequently reclassified as income.

In the Group consolidated financial statements, these items that cannot be subsequently reclassified as income are displayed separately in the Statement of net income and unrealised or deferred gain and losses, but are transferred immediately to retained earnings in the Statement of changes in shareholder's equity so that they are presented directly under *Retained earnings* on the liabilities side of the balance sheet.

When a new or amended plan comes into force, past service cost is immediately recognised in profit or loss.

An annual charge is recorded under *Personnel expenses* for defined benefit plans consisting of:

- the additional entitlements vested by each employee (current service cost);
- past service cost resulting from a plan amendment or a curtailment;
- the financial expense resulting from the discount rate and the interest income on plan assets (net interest on the net defined benefit liability or asset);
- plan settlements.

OTHER LONG-TERM BENEFITS

Other long-term employee benefits are benefits other than post-employment and termination benefits, that are paid to employees more than twelve months after the end of the annual period in which they provided the related services.

Other long-term benefits are measured and recognised in the same way as post-employment benefits, with the exception of actuarial gains and losses, which are immediately recognised as profit or loss.

DEFINED CONTRIBUTION PLANS

The main defined contribution plans provided to employees of the Group are located in France, in the United Kingdom and in the United States.

In France, they include state pension plans and other national pension plans such as AGIRC-ARRCO, as well as pension schemes put in place by certain Group entities whose only commitment is to pay annual contributions (PERCO).

In the United Kingdom, the employer pays contributions according to the age of the employees (from 2.5 to 10% of the salary) and can make extra contributions up to 4.5% for the voluntary additional employee contributions.

In the United States, employers fully match the first 8% of employee contributions, within the limit of USD 10,000.

POST-EMPLOYMENT DEFINED BENEFIT PLANS

Post-employment pension plans include schemes offering annuities, plans offering retirement bonuses and mixed plans (cash balance). Benefits paid out in annuities supplement the pensions paid by the mandatory basic plans.

The main defined benefit plans are located in France, Switzerland, the United Kingdom and the United States.

In France, the supplementary pension plan for executive managers, set up in 1991, allocates an annual allowance to beneficiaries covered by Societe Generale as described in the Chapter 3 (Corporate

Governance) of the present Universal Registration Document. This allowance depends in particular on the beneficiary's seniority within Societe Generale.

This allowance depends in particular on the beneficiary's seniority within Societe Generale. Since 4th July 2019, date of publication of the ordinance ending the so-called "random rights" defined benefit pension plans in application of the Loi Pacte, this plan is closed to new employees and the rights of beneficiaries were frozen on 31st December 2019.

In Switzerland, the plan is managed by a personal protection insurance institution (the Foundation), comprised of employer and employee representatives. The employer and its employees pay contributions to the Foundation. Pension benefits are revalued at a guaranteed rate of return and converted to annuities (or lump-sum payment) also at a guaranteed conversion rate (cash balance scheme). Because of this minimum guaranteed return, the plan is considered similar to a defined benefit plan.

In recent years, the Societe Generale Group has actively implemented a policy of converting defined benefit plans to defined contribution plans.

In the United Kingdom, the defined benefit plan has been closed to new employees for nearly twenty years, and the benefits of the last beneficiaries were frozen in 2015. The plan is managed by an independent institution (Trustee).

Similarly, in the United States, defined benefit plans were closed to new employees in 2015 and the vesting of new benefits was frozen.

RECONCILIATION OF ASSETS AND LIABILITIES RECORDED IN THE BALANCE SHEET

	31.12.2019				
(In EURm)	France	United Kingdom	United States	Others	Total
A - Present value of defined benefit obligations	1,226	891	300	805	3,221
B - Fair value of plan assets	188	976	280	279	1,723
C - Fair value of separate assets	963	-	-	-	963
D - Change in asset ceiling	-	-	-	-	-
A - B - C + D = Net balance	75	(85)	20	526	535
ON THE LIABILITIES SIDE OF THE BALANCE SHEET	1,070	-	20	529	1,619
ON THE ASSETS SIDE⁽¹⁾ OF THE BALANCE SHEET	995	85	-	3	1,084

(1) o/w EUR 963 million of separate assets recorded under Financial assets at fair value through profit or loss and EUR 121 million linked to surplus assets under Other assets.

	31.12.2018				
(In EURm)	France	United Kingdom	United States	Others	Total
A - Present value of defined benefit obligations	1,244	792	251	742	3,029
B - Fair value of plan assets	196	843	223	272	1,534
C - Fair value of separate assets	902	-	-	-	902
D - Change in asset ceiling	-	-	-	-	-
A - B - C + D = Net balance	146	(51)	28	470	593
ON THE LIABILITIES SIDE OF THE BALANCE SHEET	1,076	-	28	473	1,577
ON THE ASSETS SIDE⁽¹⁾ OF THE BALANCE SHEET	930	51	-	3	984

(1) o/w EUR 902 million of separate assets recorded under Financial assets at fair value through profit or loss and EUR 82 million linked to surplus assets under Other assets.

COMPONENTS OF THE COST OF DEFINED BENEFITS

(In EURm)	2019	2018
Current service cost including social security contributions	79	106
Employee contributions	(5)	(5)
Past service cost/curtailments ⁽¹⁾	(80)	(212)
Transfer via the expense	-	(3)
Net interest	8	11
A - Components recognised in income statement	2	(103)
Actuarial gains and losses on assets	(257)	119
Actuarial gains and losses due to changes in demographic assumptions	(2)	1
Actuarial gains and losses due to changes in economic and financial assumptions	295	(148)
Actuarial gains and losses due to experience	(32)	(3)
Change in asset ceiling	-	0
B - Components recognised in unrealised or deferred gains and losses	4	(31)
C = A + B TOTAL COMPONENTS OF THE COST OF DEFINED BENEFITS	6	(134)

(1) Mainly due to the publication of the ordinance ending the "random rights" defined benefit pension plans under the Loi Pacte.

CHANGES IN THE PRESENT VALUE OF DEFINED BENEFIT OBLIGATIONS

(In EURm)	2019	2018
Balance at 1st January	3,029	3,381
Current service cost including social security contributions	79	106
Past service cost/curtailments	(80)	(212)
Settlements	-	(3)
Net interest	57	60
Actuarial gains and losses due to changes in demographic assumptions	(2)	1
Actuarial gains and losses due to changes in economic and financial assumptions	295	(148)
Actuarial gains and losses due to experience	(32)	(3)
Foreign exchange adjustment	58	12
Benefit payments	(149)	(165)
Change in consolidation scope	(29)	-
Transfers and others	(6)	-
Balance at 31st December	3,221	3,029

CHANGES IN THE FAIR VALUE OF FUNDING ASSETS

(In EURm)	Plan assets		Separate assets	
	2019	2018	2019	2018
Balance at 1st January	1,534	2,212	902	398
Interest expenses on assets	37	44	12	6
Actuarial gains and losses on assets ⁽¹⁾	164	(86)	93	(33)
Foreign exchange adjustment	58	11	-	-
Employee contributions	5	5	-	-
Employer contributions to plan assets	23	22	-	-
Benefit payments	(76)	(112)	(45)	(23)
Change in consolidation scope	(21)	-	-	-
Transfers and others	-	(562)	-	554
Change in asset ceiling	-	-	-	-
Balance at 31st December	1,723	1,534	963	902

GENERAL INFORMATION REGARDING FUNDING ASSETS (FOR ALL BENEFITS AND FUTURE CONTRIBUTIONS)

Funding assets include plan assets and separate assets.

Funding assets represent around 83% of Group obligations, with different rates depending on the country.

Accordingly defined benefit plan obligations in the United Kingdom are fully hedged, those in the United States and in France hedged 94%, while they are not funded in Germany.

The breakdown of the fair value of plan assets is as follows: 77% bonds, 11% equities and 12% other investments. Directly held Societe Generale shares are not significant.

Funding assets excess is EUR 200 million.

Employer contributions to be paid to post-employment defined benefit plans for 2020 are estimated at EUR 15 million.

Plan hedging strategies are defined locally in connection with the Finance and Human Resources Departments of the entities, by ad hoc structures (Trustees, Foundations, Joint structures etc.) if necessary. Besides, liability investment or financing strategies are monitored at Group level through a global governance system. Committee meetings, with the participation of representatives of the Human Resources Department, the Finance Department and the Risk Division, are organised in order to define Group guidelines for employee benefits investment and management, to validate decisions and to follow up the associated risks for the Group.

Depending on the duration of each plan and local regulations, funding assets are invested in equities and/or in fixed income products, whether guaranteed or not.

The actual returns on plan and separate assets can be broken down as follows:

(In EURm)	2019	2018
Plan assets	201	(42)
Separate assets	106	(27)

MAIN ASSUMPTIONS DETAILED BY GEOGRAPHICAL AREA

	31.12.2019	31.12.2018
Discount rate		
France	0.82%	1.50%
United Kingdom	2.00%	2.70%
United States	3.19%	4.29%
Others	0.73%	1.39%
Long-term inflation		
France	1.28%	1.44%
United Kingdom	2.92%	3.14%
United States	N/A	N/A
Others	1.22%	1.38%
Future salary increase		
France	0.82%	0.78%
United Kingdom	N/A	N/A
United States	N/A	N/A
Others	1.20%	1.12%
Average remaining working lifetime of employees (in years)		
France	9.24	9.11
United Kingdom	5.17	6.00
United States	7.87	7.85
Others	9.97	10.24
Duration (in years)		
France	13.79	14.01
United Kingdom	16.28	16.28
United States	15.28	15.59
Others	14.69	13.99

Assumptions by geographical area are weighted average by the defined benefit obligations (DBO).

The discount yield curves used are AA corporate bonds yield curves (source: Merrill Lynch) observed at the end of October for USD, GBP and EUR, and corrected at the end of December if the change in discount rates had a significant impact.

Inflation rates used for EUR and GBP monetary areas are market rates observed at the end of October, and corrected at the end of December

if the change had a significant impact. Inflation rates used for the other monetary areas are the long-term targets of the central banks.

The average remaining working lifetime of employees is calculated taking into account turnover assumptions.

The assumptions described above have been applied to post-employment benefit plans.

SENSITIVITIES OF DEFINED BENEFIT OBLIGATIONS TO MAIN ASSUMPTION RANGES

(Percentage of item measured)	31.12.2019	31.12.2018
Variation in discount rate		
Impact on the present value of defined benefit obligations at 31 st December N	+0.5%	+0.5%
Variation in long-term inflation		
Impact on the present value of defined benefit obligations at 31 st December N	-7%	-7%
Variation in future salary increase		
Impact on the present value of defined benefit obligations at 31 st December N	+0.5%	+0.5%
	5%	5%
	+0.5%	+0.5%
	2%	2%

Disclosed sensitivities are averages of the variations weighted by the present value of the defined benefit obligations.

BREAKDOWN OF FUTURE PAYMENTS OF BENEFITS

(In EURm)	2019	2018
N+1	160	160
N+2	148	143
N+3	154	154
N+4	163	164
N+	169	168
N+6 à N+10	851	871

NOTE 5.3 Share-based payment plans

ACCOUNTING PRINCIPLES

Societe Generale, and its subsidiaries, share-based payments include:

- payments in equity instruments;
- cash payments whose amount depends on the performance of equity instruments.

Share-based payments systematically give rise to an operating expense recognised as *Personnel expenses* in the amount of the fair value of the share-based payments granted to employees and according to their terms of settlement.

For equity-settled share-based payments (free shares, stock purchase or subscription options), the fair value of these instruments, measured at the vesting date, is spread over the vesting period and recorded in shareholders' equity under *Issued common stocks* and *capital reserves*. At each accounting date, the number of these instruments is revised in order to take into account performance and service conditions and adjust the overall cost of the plan as originally determined. Expenses recognised under *Personnel expenses* from the start of the plan are then adjusted accordingly.

For cash-settled share-based payments (stock-options granted by unlisted companies or compensation indexed on Societe Generale, or one of its subsidiary, shares), the fair value of the amounts payable is recorded under *Personnel expenses* as an expense over the vesting period against a corresponding liabilities entry recognised in the balance sheet under *Other liabilities – Expenses payable on employee benefits*. This payables item is then remeasured to take into account performance and presence conditions, as well as changes in the value of the underlying shares. When the expense is hedged by an equity derivative instrument, the effective portion of the change in the fair value of the hedging derivative is recorded in profit or loss under *Personnel expenses*, as well.

The Group may award some of its employees stock purchase or subscription options, free shares or rights to a future cash payment indexed to the Societe Generale, or one of its subsidiary, share price.

The options are measured at their fair value when the employees are first notified, without waiting for the conditions that trigger the award to be met, or for the beneficiaries to exercise their options.

Group stock-option plans are measured using a binomial formula when the Group has adequate statistics to take into account the behaviour of the option beneficiaries. When such data are not available, the Black & Scholes model or *Monte Carlo* model is used. Valuations are performed by independent actuaries.

EXPENSES RECORDED IN THE INCOME STATEMENT

(In EURm)	2019			2018		
	Cash settled plans	Equity settled plans	Total plans	Cash settled plans	Equity settled plans	Total plans
Net expenses from purchase plans, stock-option and free share plans	111	60	171	112	59	171

The description of Societe Generale stock-options plans and free share plans, which supplements this note, is presented in Chapter 3 of the present Universal Registration Document.

NOTE 6 INCOME TAX



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Income tax expenses are presented separately from other taxes which are classified among *Other operating expenses*. They are calculated according to the rates and tax regulations applicable in the countries where each consolidated entity is located.

Income tax presented in the income statement includes current taxes and deferred taxes:

- current taxes correspond to the amount of taxes due (or refundable) as calculated according to the taxable profit base for the reporting period.
- deferred taxes correspond to the amount of taxes resulting from past transactions and that will be payable (or refundable) in a future reporting period.

ACCOUNTING PRINCIPLES

Current taxes

Current tax is based on the taxable profits of each consolidated taxable entity and determined in accordance with the rules established by the local taxation authorities, upon which income taxes are payable. This tax expense also includes net allowances for tax adjustments pertaining to income tax.

Tax credits arising in respect of interest from loans and income from securities are recorded in the relevant interest account as they are applied in settlement of income taxes for the year. The related tax charge is included under *Income tax* in the consolidated income statement.

Deferred taxes

Deferred taxes are recognised whenever the Group identifies a temporary difference between the book value and tax value of balance sheet assets and liabilities that will affect future tax payments.

Deferred tax assets and liabilities are measured in each consolidated taxable entity and in accordance with the rules established by the local taxation authorities, upon which their income taxes are payable. This amount is based on the tax rate enacted or substantively enacted which is expected to apply when the asset is realised or the liability settled. These deferred taxes are adjusted in the event of changes to tax rates. This amount is not discounted to present value.

Deferred tax assets can result from deductible temporary differences or from tax loss carry-forwards. These deferred tax assets are recorded only if the entity concerned is likely to recover these assets within a set time. These temporary differences or tax loss carry-forwards can also be used against future taxable profit.

Tax loss carry-forwards are subject to an annual review taking into account the tax system applicable to each relevant tax entity and a realistic projection of their tax income or expense: any previously unrecognised deferred tax assets are recorded in the balance sheet to the extent it has become probable that future taxable profit will allow the deferred tax asset to be recovered; however, the carrying value of deferred tax assets already recognised in the balance sheet is reduced where a risk of total or partial non-recovery occurs.

Current and deferred taxes are recognised in the consolidated income statement under *Income tax*. However, deferred taxes related to gains and losses recorded under *Unrealised or deferred gains and losses* are also recognised under the same heading in shareholders' equity.

Provisions for tax adjustments

Provisions represent liabilities whose timing or amount cannot be precisely determined.

Provisions may be recorded:

- where, by virtue of a commitment to a third-party, the Group will probably or certainly incur an outflow of resources to this third-party without receiving at least the equivalent value in exchange; and
- when the amount of probable outflow of resources can be reliably estimated.

The expected outflows are then discounted to present value to determine the amount of the provision, where this discounting has a significant impact. Allocations to and reversals of provisions for tax adjustments are booked to *Current taxes* in the income statement under *Income tax*.

Information on the nature and the amount of the associated risks is not disclosed when the Group considers that such disclosure could seriously undermine its position in a dispute with other parties on the object of the provision.

NOTE 6.1 Income tax

(In EURm)	2019	2018
Current taxes*	(968)	(947)
Deferred taxes	(296)	(357)
TOTAL*	(1,264)	(1,304)

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

RECONCILIATION OF THE DIFFERENCE BETWEEN THE GROUP'S STANDARD TAX RATE AND ITS EFFECTIVE TAX RATE

(In EURm)	2019	2018
Income before tax, excluding net income from companies accounted for using the equity method and impairment losses on goodwill	5,339	6,061
Normal tax rate applicable to French companies (including 3.3% national contribution)	34.43%	34.43%
Permanent differences*	(4.34)%	(2.66)%
Differential on securities with tax exemption or taxed at reduced rate	2.74%	(0.10)%
Tax rate differential on profits taxed outside France	(9.13)%	(10.11)%
Impact of non-deductible losses and use of tax losses carried forward	(0.03)%	(0.04)%
GROUP EFFECTIVE TAX RATE*	23.67%	21.52%

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

In France, the standard corporate income tax rate is 33.33%. A national contribution payment based on pre-tax earnings (contribution sociale) was introduced in 2000 equal to 3.3% (after a deduction of EUR 0.76 million from basic taxable income).

Long-term capital gains on equity investments are exempt, subject to taxation of a portion of fees and expenses at the full statutory tax rate. In accordance with the 2013 French Finance Act, this portion of fees and expenses is 12% of gross capital gains.

Furthermore, under the parent-subsidiary regime, dividends from companies in which Societe Generale's equity interest is at least 5% are tax exempt, subject to taxation of a portion of fees and expenses at the full statutory tax rate.

The 2018 French Finance Act, adopted on 21st December 2017, includes a gradual reduction in French tax rate (amended by the Law 2019-759

of 24th July 2019 regarding 2019 tax rate, and by the 2020 French Finance Act concerning 2020 and 2021 tax rates).

Between now and 2022, the standard Corporate Income Tax of 33.33% will be brought down to 25%, plus the existing national contribution of 3.3%.

Deferred taxes on French companies are determined by applying the tax rate in effect at the reversal of the temporary difference. Regarding the gradual reduction in French tax rate until 2022:

- for income taxed at the ordinary tax rate, the rate is between 34.43% or 32.02% in 2019 and 25.83% from 2022;
- for income taxed at reduced rate, the rate is between 4.13% or 3.84% in 2019 and 3.10% from 2022.

NOTE 6.2 Tax assets and liabilities**TAX ASSETS**

(In EURm)	31.12.2019	31.12.2018
Current tax assets	1,038	1,066
Deferred tax assets	4,741	4,753
o/w deferred tax assets on tax loss carry-forwards	2,659	2,895
o/w deferred tax assets on temporary differences	2,082	1,858
TOTAL	5,779	5,819

TAX LIABILITIES

(In EURm)	31.12.2019	31.12.2018
Current tax liabilities	602	552
Provisions for tax adjustments ⁽¹⁾	101	
Deferred tax liabilities	706	605
TOTAL	1,409	1,157

(1) Since 1st January 2019, provisions for income tax adjustments are presented under "Tax liabilities" as a consequence of the application of IFRIC 23 "Uncertainty over income tax treatments" (see Note 1).

Each year, the Group performs a review of tax loss carry-forwards, according to the tax system applicable for each relevant tax entity and a realistic forecast of its tax results. For this purpose, tax results are determined based on the forecast of the performance of each business line entering in the Group budgetary path and/or on the strategic review of countries, after being approved by authorising management bodies. In addition, they include accounting and tax adjustments (of which the reversal of deferred tax assets and liabilities bases on temporary differences) applicable to concerned entities and jurisdictions. These adjustments are determined based on historical tax results and on the Group's tax expertise. Beyond the Group budgetary path and/or the strategic review, extrapolations are performed particularly from macro-economic assumptions (for example, the evolution of interest rates).

By nature, the appreciation of the selected macro-economic factors and the internal estimations used to determine the tax results contain risks and uncertainties on their realisation over the estimated horizon of the absorption of losses. These risks and uncertainties concern the possible changes in applicable tax rules (tax result computation, as well as rules of imputation of tax losses carried forward) or the achievement of the strategic assumptions.

To ensure the robustness of the tax result projections, the Group realises sensitivity analyses on the achievement of budgetary and strategic assumptions.

At 31st December 2019, these analyses confirm the probability for the Group of using tax loss carry-forwards subject to deferred tax assets against future taxable profit.

NOTE 6.3 Deferred tax assets recognised on tax loss carry-forwards

At 31st December 2019, based on the tax system of each entity and a realistic projection of their tax income, the projected period for deferred tax asset recovery is indicated in the table below:

(In EURm)	31.12.2019	Statutory time limit on carry-forwards	Expected recovery period
Total deferred tax assets relating to tax loss carry-forwards	2,659	-	-
<i>o/w French tax group</i>	2,168	Unlimited ⁽¹⁾	8 years
<i>o/w US tax group</i>	418	20 years ⁽²⁾	7 years
<i>others</i>	73	-	-

(1) In accordance with the 2013 French Finance Act, the deduction of previous losses is limited to EUR 1 million plus 50% of the fraction of the taxable income for the fiscal year exceeding this limit. The non-deductible portion of losses may be carried forward to the following fiscal years with no time limit and under the same conditions.

(2) Tax losses generated before 31st December 2011.

At 31 December 2019, the main unrecognised deferred tax assets represent a total of EUR 467 million (compared to EUR 558 million at 31 December 2018). They are mostly related to the US tax group, with EUR 413 million (compared to EUR 500 million at 31 December 2018), and SG Singapore with EUR 35 million (compared to EUR 29 million at 31 December 2018).

With regard to the tax treatment of the loss caused by the actions of Jérôme Kerviel, Societe Generale considers that the judgment of the Versailles Court of Appeal of 23rd September 2016 is not likely to call into question its validity in light of the 2011 opinion of the French Supreme Administrative Court (Conseil d'État) and its established case law which was recently confirmed again in this regard. Consequently, Societe Generale considers there is no need to provision the corresponding deferred tax assets.

However, as indicated by the Minister of the Economy and Finance in September 2016, the tax authorities have examined the tax consequences of this book loss and recently confirmed that they intended to call into question the deductibility of the loss caused by the actions of Jérôme Kerviel, amounting to EUR 4.9 billion. This proposed tax rectification has no immediate effect and will possibly have to be confirmed by a tax adjustment notice sent by the tax authorities when Societe Generale is in a position to deduct the tax loss carry-forwards arising from the loss from its taxable income. Such a situation will not occur for several years according to the bank's forecasts. In the event that the authorities decide, in due course, to confirm their current position, the Societe Generale group will not fail to assert its rights before the competent courts.

NOTE 7 SHAREHOLDERS' EQUITY



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Equity are the resources contributed to the Group by external shareholders as capital, as well as the cumulative and undistributed results (retained earnings). It also includes resources received when financial instruments are issued and for which the issuer has no contractual obligation to deliver cash to the holders of these instruments.

Equity has no contractual maturity, and when compensation is awarded to shareholders or holders of other equity instruments, it does not affect the income statement but directly reduces the retained earnings in the equity.

The statement "Changes in Shareholders' Equity" presents the various changes that affect the components of equity over the reporting period.

NOTE 7.1 Treasury shares and shareholders' equity issued by the Group

ACCOUNTING PRINCIPLES

Treasury shares

Societe Generale shares held by the Group are deducted from consolidated equity irrespective of the purpose for which they are held. Income on these shares is eliminated from the consolidated income statement.

Recognition of shares issued by Group subsidiaries, which are bought and sold by the Group, is described in Note 2.

Shareholders' equity issued by the Group

Financial instruments issued by the Group are booked in whole or in part to debt or to equity depending on whether or not they contractually oblige the issuer to deliver cash to the holders of the securities.

When they are classified as equity, securities issued by Societe Generale are recorded under *Other equity instruments*. If they are issued by Group subsidiaries, these securities are recognised under *Non-controlling interests*. External costs associated with issuing equity instruments are deducted directly from equity at their after-tax amount.

When they are classified as debt instruments, securities issued by the Group are recorded under *Debt securities issued* or *Subordinated debt* depending on their characteristics. They are accounted for in the same way as other financial liabilities measured at amortised cost (see Note 3.6).

NOTE 7.1.1 ORDINARY SHARES AND CAPITAL RESERVES

(In EURm)	31.12.2019	31.12.2018
Issued capital	1,067	1,010
Issuing premiums and capital reserves	21,417	20,403
Elimination of treasury stock	(515)	(667)
TOTAL	21,969	20,746

ORDINARY SHARES ISSUED BY SOCIETE GENERALE S.A.

(Number of shares)	31.12.2019	31.12.2018
Ordinary shares	853,371,494	807,917,739
Including treasury stock with voting rights ⁽¹⁾	3,706,880	5,975,497
Including shares held by employees	57,369,330	51,668,863

(1) Excluding Societe Generale shares held for trading purposes or in respect of the liquidity contract.

During the first half of 2019, Societe Generale S.A. carried out a capital increase relating to the exercise by the shareholders of the option to pay dividends in Societe Generale shares, amounting to EUR 50 million with additional paid-in capital of EUR 839 million.

During the third quarter of 2019, Societe Generale S.A. carried out a capital increase reserved to the employees, amounting to EUR 7 million with additional paid-in capital of EUR 115 million.

At 31st December 2019, Societe Generale S.A.'s fully paid up capital amounted to EUR 1,066,714,367.50 and was made up of 853,371,494 shares with a nominal value of EUR 1.25.

TREASURY STOCK

At 31st December 2019, the Group held 8,231,355 of its own shares as treasury stock, for trading purposes or for the active management of shareholders' equity, representing 0.96% of the capital of Societe Generale S.A.

The amount deducted by the Group from its equity for treasury shares (and related derivatives) came to EUR 515 million, including EUR 375 million in shares held for trading purposes. The change in treasury stock over 2019 breaks down as follows:

(In EURm)	Liquidity contract	Trading activities	Treasury stock and active management of shareholders' equity	Total
Disposals net of purchases	4	49	99	152
Capital gains net of tax on treasury stock and treasury share derivatives, booked under shareholders' equity	-	18	(95)	(77)

NOTE 7.1.2 EQUITY INSTRUMENTS ISSUED

PERPETUAL SUBORDINATED NOTES

Perpetual subordinated notes issued by the Group, with some discretionary features governing the payment of interest, are classified as equity.

At 31st December 2019, perpetual subordinated notes issued by the Group and recognised under Group shareholders' equity in *Other equity instruments* totalled EUR 244 million, valued at historical rate.

Issuance Date	Amount in local currency at 31 st December 2018	Repurchases and redemptions in 2019	Amount in local currency at 31 st December 2019	Amount in millions of euros at historical rate	Remuneration
1 st July 1985	EUR 62m	-	EUR 62m	62	BAR (Bond Average Rate) -0.25% for the period from 1 st June to 31 st May before each due date
24 th November 1986	USD 248m	-	USD 248m	182	Average 6-month Euro/Dollar deposit rates communicated by reference banks +0.075%

PERPETUAL DEEPLY SUBORDINATED NOTES

Given the discretionary nature of the decision to pay dividends to shareholders, perpetual deeply subordinated notes have been classified as equity and recognised under *Other equity instruments*.

At 31st December 2019, perpetual deeply subordinated notes issued by the Group and recognised under Group shareholders' equity in *Other equity instruments* totalled EUR 8,889 million, valued at historical rate.

The change in the amount of perpetual deeply subordinated notes issued by the Group is explained by two issuances and one redemption at pair made over the year.

Issuance Date	Amount in local currency at 31 st December 2018	Repurchases and redemptions in 2019	Amount in local currency at 31 st December 2019	Amount in millions of euros at historical rate	Remuneration
4 th September 2009	EUR 905m	EUR 905 M	-	-	9.375%, from 2019 3-month Euribor +8.901% annually
18 th December 2013	USD 1,750m		USD 1,750m	1,273	7.875%, from 18 th December 2023 USD 5-year Mid Swap Rate +4.979%
25 th June 2014	USD 1,500m		USD 1,500m	1,102	6%, from 27 th January 2020 USD 5-year Mid Swap Rate +4.067%
7 th April 2014	EUR 1,000m		EUR 1,000m	1,000	6.75%, from 7 th April 2021 EUR 5-year Mid Swap Rate +5.538%
29 th September 2015	USD 1,250m		USD 1,250m	1,111	8%, from 29 th September 2025 5-year Mid Swap rate +5.873%
13 th September 2016	USD 1,500m		USD 1,500m	1,335	7.375%, from 13 th September 2021 USD 5-year Mid Swap rate +6.238%
6 th April 2018	USD 1,250m		USD 1,250m	1,035	6.750%, from 6 th April 2028 5-year Mid Swap rate +3.929%
4 th October 2018	USD 1,250m		USD 1,250m	1,105	7.375%, from 4 th October 2023 5-year Mid Swap rate +4.302%
16 th April 2019			SGD 750m	490	6.125%, from 16 th April 2024 5-year Mid Swap rate +4.207%
12 th September 2019			AUD 700m	439	4.875%, from 12 th September 2024 5-year Mid Swap rate +4.036%

OTHER EQUITY INSTRUMENTS ISSUED BY SUBSIDIARIES

Given the discretionary nature of the decision to pay dividends to shareholders, perpetual subordinated notes issued by the Group's subsidiaries are classified as equity.

At 31st December 2019, other equity instruments issued by the Group's subsidiaries and recognised under *Non-controlling interests* totalled EUR 800 million.

Issuance Date	Amount	Remuneration
18 th December 2014 (step-up clause after 12 years)	EUR 800m	4.125%, from 2026 5-year Mid-Swap rate +4.150% annually

SUMMARY OF CHANGES IN EQUITY INSTRUMENTS ISSUED

Changes related to the perpetual subordinated notes and deeply subordinated notes included in *Shareholder's equity*, *Group share* are detailed below:

	2019			2018		
	Deeply subordinated notes	Perpetual subordinated notes	Total	Deeply subordinated notes	Perpetual subordinated notes	Total
(In EURm)						
Remuneration paid booked under reserves	(717)	(7)	(724)	(700)	(5)	(705)
Changes in nominal values	23	-	23	544	-	544
Tax savings on remuneration payable to shareholders and recorded under profit or loss ⁽¹⁾	257	2	259	255	2	257
Issuance fees relating to subordinated notes	(4)	-	(4)	(10)	-	(10)

(1) Since 1st January 2019, tax savings on remuneration payable to shareholders has been restated and is recorded under profit or loss following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

NOTE 7.2 Earnings per share and dividends**ACCOUNTING PRINCIPLES**

Earnings per share are measured by dividing net income attributable to ordinary shareholders by the weighted average number of shares outstanding over the period, excluding treasury shares. Net income attributable to ordinary shareholders takes account of remuneration rights of preferred shareholders, such as holders of preferred shares, subordinated securities or deeply subordinated notes classified in equity. Diluted earnings per share take into account the potential dilution of shareholders' interests in the event dilutive instruments (stock options or free share plans) are converted into ordinary shares. This dilutive effect is determined using the share buyback method.

NOTE 7.2.1 EARNINGS PER SHARE

(In EURm)	2019	2018
Net income, Group share *	3,248	4,121
Attributable remuneration to subordinated and deeply subordinated notes *	(708)	(709)
Issuance fees related to subordinated and deeply subordinated notes	(4)	(10)
Net income attributable to ordinary shareholders	2,536	3,402
Weighted average number of ordinary shares outstanding ⁽¹⁾	829,901,725	801,909,473
Earnings per ordinary share (in euros)	3.05	4.24
Average number of ordinary shares used in the dilution calculation	-	-
Weighted average number of ordinary shares used in the calculation of diluted net earnings per share	829,901,725	801,909,473
Diluted earnings per ordinary share (in euros)	3.05	4.24

* The amounts have been restated following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

(1) Excluding treasury shares.

NOTE 7.2.2 DIVIDENDS PAID

Dividends paid by the Group in 2019 amounted to EUR 2,149 million and are detailed in the following table:

	2019			2018		
(In EURm)	Group Share	Non-controlling interests	Total	Group Share	Non-controlling interests	Total
Paid in shares	(889)	-	(889)	-	-	-
Paid in cash	(881)	(379)	(1,260)	(1,764)	(368)	(2,132)

The dividend per share paid in 2019 out of the 2018 net income amounted to EUR 2.20, compared with EUR 2.20 paid in 2018 out of the 2017 net income.

NOTE 7.3 Unrealised or deferred gains and losses**BREAKDOWN OF CHANGES OF UNREALISED OR DEFERRED GAINS AND LOSSES**

(In EURm)	31.12.2019				
	Gross value	Tax	Net value	o/w	
				Net Group share	Non-controlling interests
Translation differences	(811)	(3)	(814)	(753)	(61)
Revaluation of debt instruments at fair value through other comprehensive income	205	(44)	161	136	25
Revaluation of available-for-sale financial assets ⁽¹⁾	525	(144)	381	383	(2)
Revaluation of hedging derivatives	30	22	52	56	(4)
Unrealised gains and losses of entities accounted for using the equity method	-	-	-	-	-
Subtotal of unrealised gains and losses with subsequent recycling in the income statement	(51)	(169)	(220)	(178)	(42)
Actuarial gains and losses on defined benefit plans ⁽²⁾	(2)	(2)	(4)	2	(6)
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	(317)	81	(236)	(241)	5
Revaluation of equity instruments at fair value through other comprehensive income	33	(2)	31	36	(5)
Unrealised gains and losses of entities accounted for using the equity method	-	-	-	-	-
Subtotal of unrealised gains and losses without subsequent recycling in the income statement	(286)	77	(209)	(203)	(6)
TOTAL	(337)	(92)	(429)	(381)	(48)

(In EURm)	Changes 2018 - 2019				
	Gross value	Tax	Net value	o/w	
				Net Group share	Non-controlling interests
Translation differences	563	(2)	561	545	16
Revaluation of debt instruments at fair value through other comprehensive income	(28)	13	(15)	(33)	18
Revaluation of available-for-sale financial assets ⁽¹⁾	188	(48)	140	140	-
Revaluation of hedging derivatives	153	4	157	156	1
Unrealised gains and losses of entities accounted for using the equity method	1	-	1	-	1
Subtotal of unrealised gains and losses with subsequent recycling in the income statement	877	(33)	844	808	36
Actuarial gains and losses on defined benefit plans ⁽²⁾	(32)	2	(30)	(22)	(8)
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	(121)	32	(89)	(85)	(4)
Revaluation of equity instruments at fair value through other comprehensive income	(48)	4	(44)	(49)	5
Unrealised gains and losses of entities accounted for using the equity method	3	-	3	3	-
Subtotal of unrealised gains and losses without subsequent recycling in the income statement	(198)	38	(160)	(153)	(7)
TOTAL	679	5	684	655	29

31.12.2018

(In EURm)	Gross value	Tax	Net value	o/w	
				Net Group share	Non-controlling interests
Translation differences	(1,374)	(1)	(1,375)	(1,298)	(77)
Revaluation of debt instruments at fair value through other comprehensive income	233	(57)	176	169	7
Revaluation of available-for-sale financial assets ⁽¹⁾	337	(96)	241	243	(2)
Revaluation of hedging derivatives	(123)	18	(105)	(100)	(5)
Unrealised gains and losses of entities accounted for using the equity method	(1)	-	(1)	-	(1)
Subtotal of unrealised gains and losses with subsequent recycling in the income statement	(928)	(136)	(1,064)	(986)	(78)
Actuarial gains and losses on defined benefit plans ⁽²⁾	30	(4)	26	24	2
Revaluation of own credit risk of financial liabilities at fair value through profit or loss ⁽³⁾	(196)	49	(147)	(156)	9
Revaluation of equity instruments at fair value through other comprehensive income	81	(6)	75	85	(10)
Unrealised gains and losses of entities accounted for using the equity method	(3)	-	(3)	(3)	-
Subtotal of unrealised gains and losses without subsequent recycling in the income statement	(88)	39	(49)	(50)	1
TOTAL	(1,016)	(97)	(1,113)	(1,036)	(77)

(1) Unrealised gains and losses on available-for-sale financial assets are related exclusively to insurance activities from the 2018 financial year.

(2) Gains and losses presented in these items are transferred into Retained earnings for the next financial year opening.

(3) During the derecognition of a financial liability, potential realised gains and losses attributable to Group own credit risk are subject to transfer into Retained earnings, Group share for the next financial year opening (see Note 3.1).

NOTE 8 ADDITIONAL DISCLOSURES

NOTE 8.1 Segment reporting

NOTE 8.1.1 DEFINITION OF SEGMENT REPORTING

The Group is managed on a matrix basis that takes into account its different business lines and the geographical breakdown of its activities. Segment reporting information is therefore presented under both criteria.

The Group includes in the results of each sub-division all operating income and expenses directly related to its activity. Income for each sub-division, except for the Corporate Centre, also includes the return on equity allocated to it, based on the estimated rate of return on Group equity. The return on the sub-division's book equity is then reallocated to the Corporate Centre. Transactions between sub-divisions are carried out under the same terms and conditions as those applying to non-Group customers.

The Group's core businesses are managed through three strategic pillars:

- French Retail Banking, which includes the domestic networks Societe Generale, Cr dit du Nord and Boursorama;
- International Retail Banking & Financial Services, which consists of:
 - International Retail Banking, including consumer finance activities;
 - Financial Services to Corporates (operational vehicle leasing and fleet management, equipment and vendor finance);
 - Insurance activities;

- Global Banking and Investor Solutions which comprises:

- Global Markets and Investors Services;
- Financing and Advisory;
- Asset and Wealth Management.

In addition to the strategic pillars, the Corporate Centre acts as the Group's Central Funding Department. As such, it recognises the carrying cost of equity investments in subsidiaries and related dividend payments, as well as income and expenses stemming from the Group's Asset and Liability Management (ALM) and income from the Group's management of its assets (management of its industrial and bank equity portfolio and of its real estate assets). Income or expenses that do not relate directly to the activity of the core businesses are also allocated to the Corporate Centre.

Segment income take intra-group transactions into account, while these transactions are eliminated from segment assets and liabilities. The tax rate levied on each business line is based on the standard tax rate applicable in each country where the division makes profits. Any difference with respect to the Group's tax rate is allocated to the Corporate Centre.

For the purpose of segment reporting by geographical region, segment profit or loss and assets and liabilities are presented based on the location of the booking entities.

The amounts presented under Income tax, *Net income* and *Net income, Group share* have been restated compared with the 2018 published consolidated financial statements following the first-time application of an amendment to IAS 12 "Income taxes" (see Note 1).

NOTE 8.1.2 SEGMENT REPORTING BY DIVISION AND SUB-DIVISION

	Societe Generale Group		French Retail Banking		Corporate Centre ⁽¹⁾	
(In EURm)	2019	2018	2019	2018	2019	2018
Net banking income	24,671	25,205	7,746	7,860	(152)	182
Operating expenses ⁽²⁾	(17,727)	(17,931)	(5,700)	(5,629)	(94)	(535)
Gross operating income	6,944	7,274	2,046	2,231	(246)	(353)
Cost of risk	(1,278)	(1,005)	(467)	(489)	(17)	(19)
Operating income	5,666	6,269	1,579	1,742	(263)	(372)
Net income from investments accounted for using the equity method	(129)	56	8	28	(152)	7
Net income/expense from other assets	(327)	(208)	58	74	(394)	(274)
Earnings before tax	5,210	6,117	1,645	1,844	(809)	(639)
Income tax	(1,264)	(1,304)	(514)	(607)	184	425
Consolidated net income	3,946	4,813	1,131	1,237	(625)	(214)
Non-controlling interests	698	692	-	-	171	164
Net income, Group share	3,248	4,121	1,131	1,237	(796)	(378)

International Retail Banking & Financial Services

(In EURm)	International Retail Banking		Financial Services to Corporates		Insurance		Total	
	2019 ⁽³⁾	2018	2019	2018	2019	2018	2019 ⁽³⁾	2018
Net banking income	5,592	5,608	1,872	1,822	909	887	8,373	8,317
Operating expenses ⁽²⁾	(3,252)	(3,238)	(980)	(955)	(349)	(333)	(4,581)	(4,526)
Gross operating income	2,340	2,370	892	867	560	554	3,792	3,791
Cost of risk	(504)	(335)	(84)	(69)	-	-	(588)	(404)
Operating income	1,836	2,035	808	798	560	554	3,204	3,387
Net income from investments accounted for using the equity method	11	14	1	1	-	-	12	15
Net income/expense from other assets	3	7	-	1	-	-	3	8
Earnings before tax	1,850	2,056	809	800	560	554	3,219	3,410
Income tax	(410)	(474)	(176)	(184)	(174)	(183)	(760)	(841)
Consolidated net income	1,440	1,582	633	616	386	371	2,459	2,569
Non-controlling interests	394	395	107	106	3	3	504	504
Net income, Group share	1,046	1,187	526	510	383	368	1,955	2,065

Global Banking and Investor Solutions

(In EURm)	Global Markets and Investors Services		Financing and Advisory		Asset and Wealth Management		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
Net banking income	5,210	5,414	2,547	2,466	947	966	8,704	8,846
Operating expenses ⁽²⁾	(4,788)	(4,706)	(1,676)	(1,630)	(888)	(905)	(7,352)	(7,241)
Gross operating income	422	708	871	836	59	61	1,352	1,605
Cost of risk	(13)	(25)	(195)	(49)	2	(19)	(206)	(93)
Operating income	409	683	676	787	61	42	1,146	1,512
Net income from investments accounted for using the equity method	4	9	(1)	(2)	-	(1)	3	6
Net income/expense from other assets	4	(1)	-	(1)	2	(14)	6	(16)
Earnings before tax	417	691	675	784	63	27	1,155	1,502
Income tax	(89)	(180)	(70)	(93)	(15)	(8)	(174)	(281)
Consolidated net income	328	511	605	691	48	19	981	1,221
Non-controlling interests	20	20	-	1	3	3	23	24
Net income, Group share	308	491	605	690	45	16	958	1,197

(1) Income and expense not directly related to business line activities are recorded in the Corporate Centre income. The operating expenses include an income related to an operating tax adjustment of EUR 241 million for the second quarter 2019.

(2) These amounts include Personnel expenses, Other operating expenses and Amortisation, depreciation and impairment of tangible and intangible fixed assets.

(3) The International Retail Banking & Financial Services division includes also EUR -34 million of restructuring costs in operating expenses (and EUR +11 million of related income tax) not allocated to the business lines. These costs are added to the results of the International Retail Banking sub-division whose Net income, Groupe share 2019 is, without these costs, EUR 1,069 million.

(In EURm)	Societe Generale Group		French Retail Banking		Corporate Centre ⁽²⁾	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018
Segment assets	1,356,303	1,309,428	232,648	222,086	115,555	106,392
Segment liabilities ⁽¹⁾	1,287,733	1,243,619	225,848	216,934	107,558	91,819

International Retail Banking & Financial Services							
(In EURm)	International Retail Banking		Financial Services to Corporates		Insurance		Total
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2018
Segment assets	122,695	128,303	43,730	42,868	167,249	148,999	320,170
Segment liabilities ⁽¹⁾	89,754	94,454	13,980	13,641	156,212	138,959	247,054

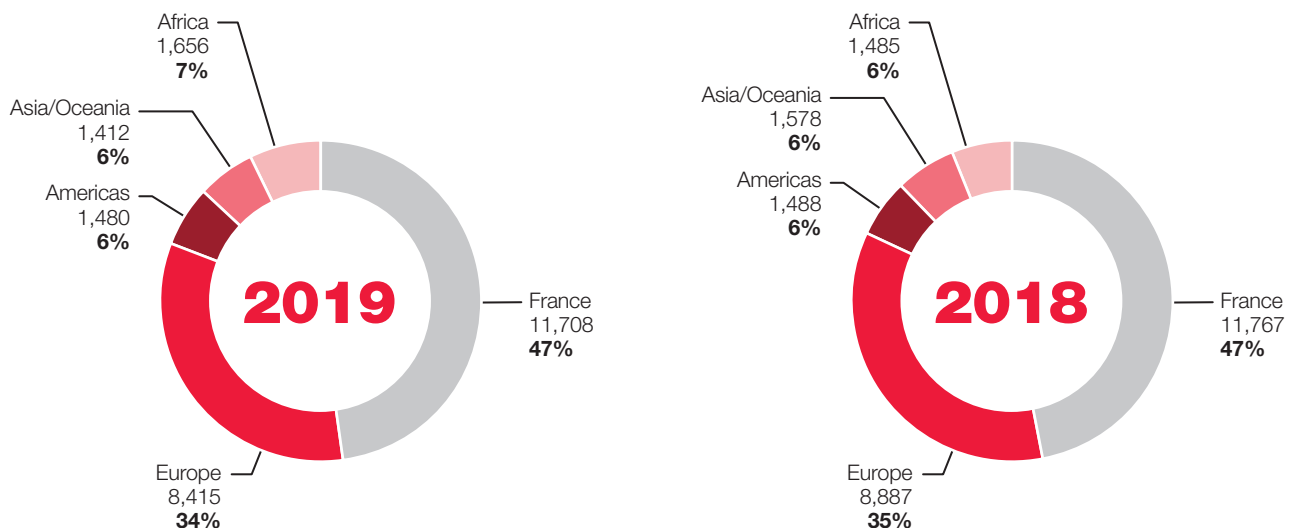
Global Banking and Investor Solutions							
(In EURm)	Global Markets and Investors Services		Financing and Advisory		Asset and Wealth Management		Total
	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2018
Segment assets	505,413	489,757	133,132	137,064	35,881	33,959	660,780
Segment liabilities ⁽¹⁾	623,512	616,282	46,133	47,502	24,736	24,028	687,812

(1) Segment liabilities correspond to debts (i.e. total liabilities excluding equity).

(2) Assets and liabilities not directly related to the business line activities are recorded on the Corporate Centre's balance sheet.

NOTE 8.1.3 SEGMENT REPORTING BY GEOGRAPHICAL REGION

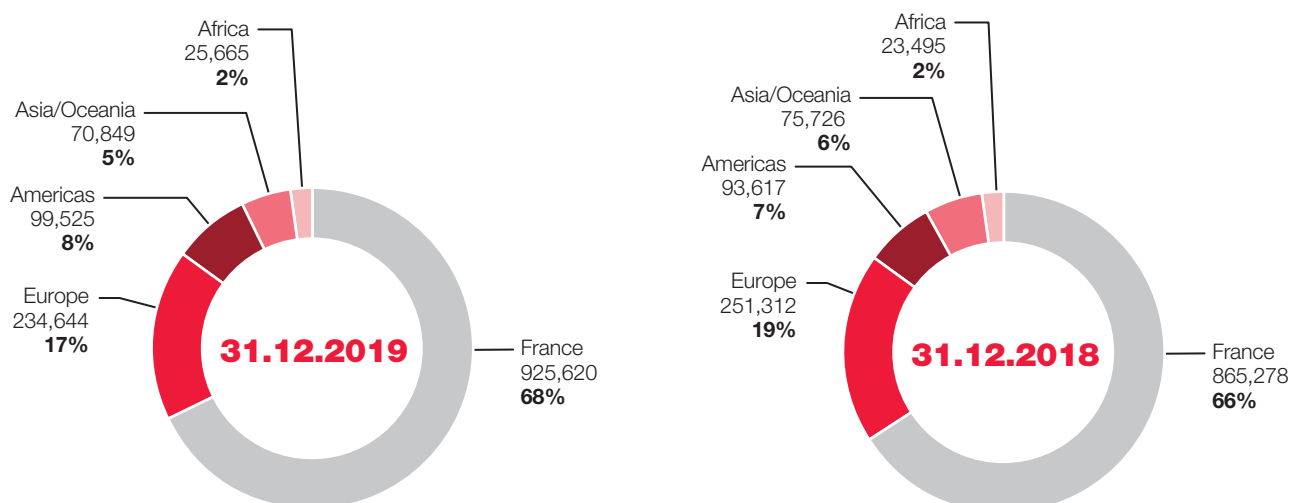
GEOGRAPHICAL BREAKDOWN OF NET BANKING INCOME (IN EURM)



At 31st December 2019, the amount of Net banking income was EUR 24,671 million compared to EUR 25,205 million at 31st December 2018.

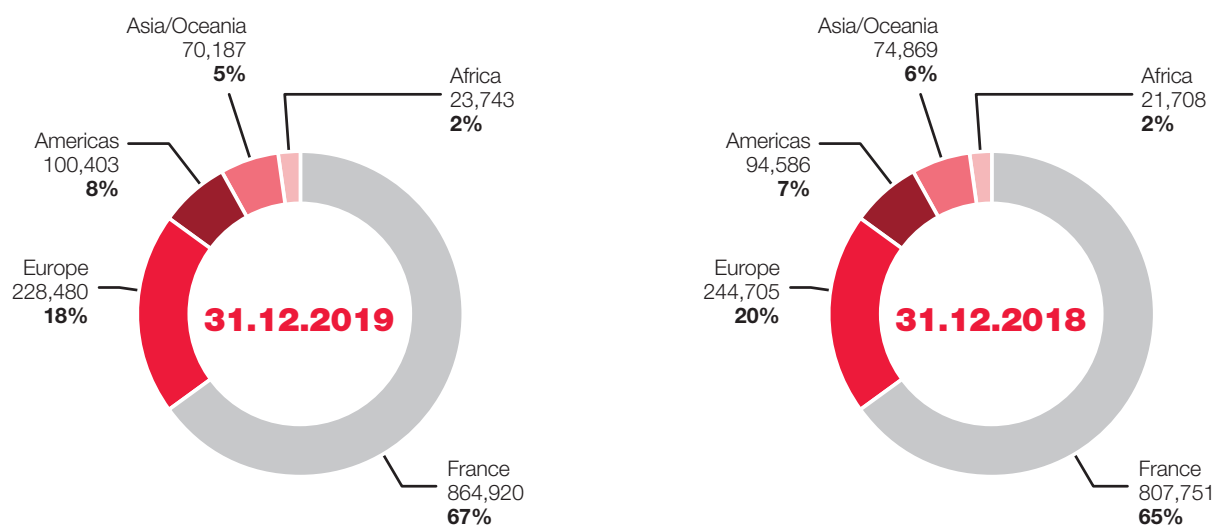
GEOGRAPHICAL BREAKDOWN OF BALANCE SHEET ITEMS (IN EURM)

ASSETS



At 31st December 2019, the amount of Assets was EUR 1,356,303 million compared to EUR 1,309,428 million at 31st December 2018.

LIABILITIES



At 31st December 2019, the amount of Liabilities (except shareholder equity) was EUR 1,287,733 million compared to EUR 1,243,619 million at 31st December 2018.

Segment liabilities correspond to debts (i.e. total liabilities excluding equity).

NOTE 8.2 Other operating expenses**ACCOUNTING PRINCIPLES**

The Group records operating expenses under expenses, according to the type of services to which they refer and the rate of use of said services.

Rentals include real estate and equipment leasing expenses, which do not result in a recognition of a lease liability and right-of-use asset (see Note 8.4)

Taxes and levies are only booked when the triggering event provided for by law occurs. If the obligation to pay the tax arises from the gradual operation of an activity, the expense must be spread out over the same period. Finally, if the obligation to pay is generated when a threshold is reached, the expense is only recorded once the threshold is reached.

Taxes and levies cover all contributions levied by a public authority and include the contributions paid to the Single Resolution Fund and the Deposit Insurance and Resolution Fund, the systemic risk tax, and contributions for ACPR control costs, which are recognised on the income statement at the start of the financial year. The company social solidarity contribution (C3S), based on income generated in previous financial year, is fully recognised on the income statement at 1st January of the current financial year.

Other mainly includes building maintenance and other costs, travel and business expenses, and advertising expenses.

(In EURm)	2019	2018
Rentals ⁽¹⁾	(353)	(752)
Taxes and levies	(887)	(901)
Data & telecom (excluding rentals)	(2,328)	(2,400)
Consulting fees	(1,370)	(1,338)
Other	(1,347)	(1,975)
TOTAL	(6,285)	(7,366)

(1) Decrease related to the first-time application of IFRS 16 "Leases" (see Note 1).

CONTRIBUTION TO BANK RESOLUTION MECHANISMS

The European regulatory framework designed to enhance financial stability was updated by the Directive 2014/49/UE of 16th April 2014 on deposit guarantee schemes and the Directive 2014/59/UE of 15th May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms (Bank Recovery and Resolution Directive).

The European Regulation UE n° 806/2014 of 15th July 2014 then determined the financing means of resolution mechanisms within the European Banking Union through the establishment of a Single Resolution Fund (SRF). In addition to this instrument, the National Resolution Fund (NRF) exists for institutions subject to this resolution mechanisms, but that have no SRF.

The Single Resolution Fund, established in January 2016, shall receive annual contributions from the participating European financial institutions. By the end of 2023, the available financial means of the Fund shall reach at least 1% of the amount of covered deposits of all these participating financial institutions. A share of the annual contributions can be provided through irrevocable payment commitments.

For the year 2019, the Group's contributions to the SRF and the NRF were as follows:

- cash contributions (85%) for a total of EUR 340 million non-tax-deductible in France recorded in the income statement in *Other administrative expenses*, among Taxes and levies;
- irrevocable payment commitments (15%) backed by a cash collateral for EUR 60 million related to the SRF, recorded as an asset in the balance sheet, among *Other assets*.

NOTE 8.3 Provisions**ACCOUNTING PRINCIPLES**

Under balance sheet liabilities, *Provisions* are comprised of provisions for financial instruments, disputes and employee benefits.

BREAKDOWN OF PROVISIONS

(In EURm)	Provisions at 31.12.2018	Allocations	Write-backs available	Net allocation	Write- backs used	Currency and others	Provisions at 31.12.2019
Provisions for credit of risk on off balance sheet commitments (see Note 3.8)	638	513	(525)	(12)	-	14	640
Provisions for employee benefits (see Note 5.2)	2,341	516	(208)	308	(375)	142	2,416
Provisions for tax adjustments (see Note 6) ⁽¹⁾	135					(135)	
Provisions for mortgage savings plans and accounts commitments	171	122	(3)	119	(1)	-	289
Other provisions	1,320	261	(440)	(179)	(80)	(19)	1,042
TOTAL	4,605	1,412	(1,176)	236	(456)	2	4,387

(1) Since 1st January 2019, provisions for tax adjustments related to income tax are presented under "Tax liabilities" as a consequence of the application of IFRIC 23 "Uncertainty over income tax treatments" (see Note 1).

NOTE 8.3.1 COMMITMENTS UNDER MORTGAGE SAVINGS AGREEMENTS**ACCOUNTING PRINCIPLES**

In France, *Comptes d'épargne-logement* (CEL or mortgage savings accounts) and *Plans d'épargne-logement* (PEL or mortgage savings plans) are special savings schemes for individual customers which are governed by Law 65-554 of 10th July 1965. These products combine an initial deposit phase in the form of an interest-earning savings account, followed by a lending phase where the deposits are used to provide mortgage loans. The lending phase is subject to the prior existence of the savings phase and is therefore inseparable from it. The savings deposits collected and loans granted are measured at amortised cost.

These instruments create two types of commitments for the Group: the obligation to pay interest on customer savings for an indeterminate future period at an interest rate established at the inception of the mortgage savings agreement, and the obligation to subsequently lend to the customer at an interest rate also established at the inception of the savings agreement.

If it is clear that commitments under the PEL/CEL agreements will have negative consequences for the Group, a provision is recorded on the liabilities side of the balance sheet. Any changes in these provisions are recognised as *Net banking income* under net interest income. These provisions only relate to commitments arising from PEL/CEL that are outstanding at the date of calculation.

Provisions are calculated for each generation of mortgage savings plans (PEL), with no netting between different PEL generations, and for all mortgage saving accounts (CEL) making up a single generation.

During the deposit phase, the underlying commitment used to determine the amount to be provisioned is calculated as the difference between the average expected amount of deposits and the minimum expected amount. These two amounts are determined statistically on the basis of the historical observations of past customer behaviour.

During the lending phase, the underlying commitment to be provisioned includes loans already granted but not yet drawn at the date of calculation, and future loans that are considered statistically probable on the basis of deposits that are currently recognised in the balance sheet at the date of calculation and on the basis of historical observations of past customer behaviour.

A provision is recognised if the discounted value of expected future earnings for a given generation of PEL/CEL is negative. Earnings are estimated on the basis of interest rates available to individual customers for equivalent savings and loan products, with a similar estimated life and date of inception.

OUTSTANDING DEPOSITS IN PEL/CEL ACCOUNTS

(In EURm)	31.12.2019	31.12.2018
PEL accounts	19,195	19,186
<i>Less than 4 years old</i>	1,596	3,466
<i>Between 4 and 10 years old</i>	11,581	10,555
<i>More than 10 years old</i>	6,018	5,165
CEL accounts	1,333	1,346
TOTAL	20,528	20,532

OUTSTANDING HOUSING LOANS GRANTED WITH RESPECT TO PEL/CEL ACCOUNTS

(In EURm)	31.12.2019	31.12.2018
Less than 4 years old	1	1
Between 4 and 10 years old	13	26
More than 10 years old	12	11
TOTAL	26	38

PROVISIONS FOR COMMITMENTS LINKED TO PEL/CEL ACCOUNTS

(In EURm)	31.12.2018	Allocations	Write-backs	31.12.2019
PEL accounts	158	122	(1)	279
<i>Less than 4 years old</i>	3	0	(1)	2
<i>Between 4 and 10 years old</i>	20	11	-	31
<i>More than 10 years old</i>	135	111	-	246
CEL accounts	13	0	(3)	10
TOTAL	171	122	(4)	289

The level of provisions is sensitive to long-term interest rates. Since long-term rates were low during 2019, the provisions for PEL and CEL mortgage savings accounts were mainly linked to the risks attached to the commitment to pay interest on the deposits. Provisioning for PEL/CEL savings amounted to 1.41% of total outstandings at 31st December 2019.

METHODS USED TO ESTABLISH PROVISION VALUATION INPUTS

The inputs used to estimate future customer behaviour are derived from historical observations of customer behaviour patterns over a long period (more than ten years). The values of these inputs can be

adjusted whenever changes are made to regulations that may undermine the effectiveness of past data as an indicator of future customer behaviour.

The values of the different market inputs used, notably interest rates and margins, are calculated on the basis of observable data and constitute a best estimate, at the date of valuation, of the future value of these items for the period in question, in line with the Retail Banking division's policy of interest rate risk management.

The discount rates used are derived from the zero coupon swaps vs. Euribor yield curve at the valuation date, averaged over a twelve month period.

NOTE 8.3.2 OTHER PROVISIONS

Other provisions include provisions for restructuring (except staff costs), provisions for commercial litigation and provisions for future repayment of funds in connection with customer financing transactions.

The Group is subject to an extensive legal and regulatory framework in the countries where it operates. In this complex legal context, the Group and some of its former and current representatives may be involved in various legal actions, including civil, administrative and criminal proceedings. The vast majority of these proceedings are part of the Group's current business. In recent years, litigation with investors and the number of disputes involving financial intermediaries such as banks and investment advisors has increased, partly due to a difficult financial environment.

It is by nature difficult to foresee the outcome of disputes, regulatory proceedings and acts involving Group entities, particularly if they are initiated by various categories of complainants, if the amount of claims for damages is not specified or is indeterminate or if the proceedings have no precedent.

In preparing its financial statements, the Group assesses the consequences of the legal, regulatory or arbitration proceedings in which it is involved. A provision is booked when losses from these proceedings become probable and the amount can be estimated reliably.

To assess the probability of losses and the amount of these losses, and thus to determine the amount of provisions to book, estimations are important. Management makes these estimates by exercising its judgment and taking into account all information available when financial statements are prepared. In particular, the Group takes into account the nature of the dispute, the underlying facts, ongoing proceedings and court decisions already taken, as well as its experience and the experiences of other companies dealing with similar cases (assuming that the Group has knowledge thereof) and, where appropriate, the opinion and reports of experts and independent legal advisers.

Each quarter the Group carries out a detailed examination of outstanding disputes that present a significant risk. The description of those disputes is presented in Note 9, Information on risks and litigation.

NOTE 8.4 Tangible and intangible fixed assets

As a result of the first application of IFRS 16 “Leases” as from 1st January 2019, the Group recognises right-of-use assets that represent its right to use the underlying leased assets under *Tangible and intangible fixed assets*.

ACCOUNTING PRINCIPLES

Tangible and intangible fixed assets

Tangible and intangible fixed assets include operating and investment fixed assets. Equipment assets held for operating leases purpose are included in operating tangible assets, while buildings held for leasing purposes are included in investment property.

Tangible and intangible fixed assets are carried at their purchase price on the asset side of the balance sheet, less depreciation, amortisation and impairment.

The purchase price of fixed assets includes borrowing costs incurred to fund a lengthy construction period for the fixed assets, along with all other directly attributable expenses. Investment subsidies received are deducted from the cost of the relevant assets. Software developed internally is recorded on the asset side of the balance sheet in the amount of the direct cost of development.

As soon as they are fit for use, fixed assets are depreciated or amortised using the component-based approach. Each component is depreciated or amortised over its own useful life. The Group has applied this approach to its operating properties, breaking down its assets into components with depreciation periods of 10 to 50 years. Depreciation periods for fixed assets other than buildings depend on their useful life, which is usually estimated at 3 to 20 years.

Any residual value of the asset is deducted from its depreciable amount. If there is a subsequent decrease or increase in this initial residual value, the depreciable amount of the asset is adjusted, leading to a prospective modification of the depreciation schedule.

Depreciation and amortisation are recorded in the income statement under *Amortisation, depreciation and impairment of tangible and intangible fixed assets*.

Fixed assets grouped into Cash Generating Units are tested for impairment whenever there is any indication that their value may have diminished. Allocations and reversals of provisions for impairment are recorded in the income statement under *Amortisation, depreciation and impairment of tangible and intangible fixed assets*.

Realised capital gains and losses on operating fixed assets are recognised under *Net income from other assets*.

Investment properties are depreciated using the component based-method. Each component is depreciated over its own useful life, ranging from 10 to 50 years.

Profits or losses on operating lease assets and on investment property, including amortisation and depreciation, are recognised under *Income from other activities* and *Expense from other activities* (see Note 4.2).

Rights-of-use for assets leased by the Group

LEASE

Definition of the lease

A contract is, or contains, a lease if it conveys to the lessor the right to control the use of an identified asset for a period of time in exchange for consideration:

- control is conveyed when the customer has both the right to direct the identified asset's use, and to obtain substantially all the economic benefits from that use throughout the lease period;
- the existence of an identified asset will depend on the absence, for the lessor, of substantive substitution rights for the leased asset; this condition is measured with regard to the facts and circumstances existing at the commencement of the contract. If the lessor has the option of freely substituting the leased asset, the contract can not be qualified as a lease, since its purpose is the provision of a capacity and not an asset;
- a capacity portion of an asset is still an identified asset if it is physically distinct (e.g. a floor of a building). Conversely, a portion of the capacity or of an asset that is not physically distinct does not constitute an identified asset (e.g. the lease of co-working area within a unit with no predefined location inside that unit).

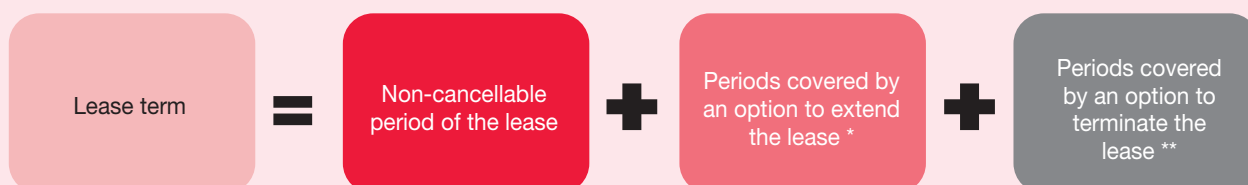
Separation of lease and non-lease components

A contract may cover the lease of an asset by the lessor as well as the supply of additional services by that lessor. In this scenario, the lessee can separate the lease components from the non-lease components of the contract and treat them separately. The rental payments stipulated in the contract must be separated between the lease components and the non-lease components based on their individual prices (as directly indicated in the contract or estimated on the basis on all of the observable information). If the lessee cannot separate the lease components from the non-lease components (or services), the entire contract is treated as a lease.

LEASE TERM**Definition of the lease term**

The lease period to be applied in determining the rental payments to be discounted matches the non-cancellable period of the lease adjusted for:

- options to extend the contract that the lessee is reasonably certain to exercise;
- and early termination options that the lessee is reasonably certain not to exercise.



* if the lessee is reasonably certain to exercise that option

** if the lessee is reasonably certain not to exercise that option

The measurement of the reasonable certainty of exercising or not exercising the extension or early termination options shall take into account all the facts and circumstances that may create an economic incentive to exercise or not these options, specifically:

- the conditions for exercising these options (including measurement of the amount of the rental payments in case of an extension, or of the amount of penalties that may be imposed for early termination);
- substantial changes made to the leased premises (specific layouts, such as a bank vault);
- the costs associated with terminating the contract (negotiation costs, moving costs, research costs for a new asset that meets the lessee's requirements, etc.);
- the importance of the leased asset for the lessee, in view of its specific nature, its location, or the availability of substitute assets (specifically for branches located in commercially strategic sites, given their accessibility, expected traffic, or the prestige of the location);
- the history of renewals of similar contracts, as well as the strategy for the future use of the assets (based on the prospect of redeployment or rearrangement of a commercial branch network, for example).

When the lessee and the lessor each have the right to terminate the lease without the prior agreement of the other party and with no penalty other than a negligible one, the contract is no longer binding, and thus it no longer creates a lease liability.

In France, the majority of property leases contracted are nine-year commercial leases with early termination options at three and six years (so-called "3/6/9" leases). If a new contract is not signed by the end of that nine-year period, the initial lease is automatically extended. These "3/6/9" commercial leases are generally enforceable for a term of nine years, with an initial three-year non-cancellation period.

Changing the lease term

The term must be modified in case of a change of circumstances which lead the lessee to revise the exercise of the options included in the lease contract or in case of events which contractually oblige the lessee to exercise (or not) an option that had not been included (or is included) in the lease contract.

Following a change in the lease term, the lease obligation must be reassessed to reflect those changes by using a revised discount rate for the remaining estimated term of the contract.

ACCOUNTING TREATMENT BY THE GROUP AS A LESSEE

On the commencement date (on which the leased asset is made available for use), the lessee must record a lease liability on the liabilities side of the balance sheet and a right-of-use asset on the assets side of the balance sheet except for the exemptions described below.

In the income statement, the lessee must recognise an interest expense calculated on the lease liability under net banking income and a depreciation of the right-of-use under *Amortisation, depreciation and impairment of tangible and intangible fixed assets*.

The rental payments will partly reduce the lease liability and partly remunerate this liability in the form of interest expense.

Exemptions and exclusions

The Group does not apply the new lease treatment to contracts with a term of less than one year (including renewal options), nor to contracts on low-value items by applying the exemption threshold of USD 5,000 as indicated in the standard's Basis for Conclusions (the threshold should be measured against the replacement cost per unit of the leased asset).

Rental payment amounts

The payments to be considered for the measurement of the lease liability include fixed and variable rental payments based on an index (e.g. consumer price index or construction cost index), plus, where applicable, the funds that the lessee expects to pay the lessor for residual value guarantees, purchase options, or early termination penalties.

However, variable lease payments that are indexed on the use of the leased asset (indexed on revenue or mileage, for example) are excluded from the measurement of lease liability. This variable portion of the rental payments is recorded in the net income over time according to fluctuations in contractual indexes fluctuations.

Rental payments have to be considered based on their amount net of value-added tax. In addition, for building leases, occupancy taxes and property taxes passed on by lessors will be excluded from lease liabilities because their amount, as set by the competent public authorities, is variable.

Recognition of the lease liability

The liability initial amount is equal to the discounted value of the rental payments that will be payable over the lease period.

This lease liability is then measured at the amortised cost using the effective interest rate method: part of each rental payment will then be booked as interest expenses in the income statement, and part will be gradually deducted from the lease liability on the balance sheet.

After the commencement date, the amount of the lease liability may be adjusted if the lease is amended, the lease period is re-estimated, or to account for contractual changes in the rental payments related to the application of indices or rates.

As applicable, the lessee must also recognise a provision in its liabilities to cover the costs of restoring the leased asset that would be assumed when the lease ends.

Recognition of the right-of-use

On the availability date of the leased asset, the lessee must enter a right-of-use asset, on the assets side of the balance sheet, for an amount equal to the initial value of the lease liability, plus, as applicable, initial direct costs (e.g. issuance of an authenticated lease, registration fees, negotiation fees, front-end fee, leasehold right, lease premium, etc.), advance payments, and restoration costs.

This asset is then depreciated on a straight-line basis over the lease period that is applied for measuring the lease liability.

After the commencement date, the asset's value may be adjusted if the lease is amended, as it is the case for the lease liability.

Rights-of-use are presented on the lessee's balance sheet under the items of fixed assets where properties of the same type that are held in full ownership are entered. If the lease stipulates the initial payment of a leasehold right to the former tenant of the premises, the amount of that right is stated as a separate component of the right of use and presented under the same heading as the latter.

Lease discount rates

The Group uses the lessees' incremental borrowing rate to discount the rental payments as well as the amount of lease liabilities. For the entities which can directly refinance themselves on their local markets, the incremental borrowing rate is set at the lessee entity level, not at the Group level, in consideration of the borrowing terms and that entity's credit risk. For the entities which refinance themselves through the Group, the incremental borrowing rate is set by the Group.

The discount rates are set according to the currency, the country of the lessee entities and the maturity estimated of the contracts.

CHANGES IN TANGIBLE AND INTANGIBLE FIXED ASSETS

(In EURm)	31.12.2018	Impacts of the first application of IFRS 16	Increases/ allowances	Disposals/ reversals	Other movements	31.12.2019
Intangible Assets						
Gross value	6,763	(107)	922	(91)	(247)	7,240
Amortisation and impairment	(4,565)	-	(496)	34	150	(4,877)
SUB-TOTAL	2,198	(107)	426	(57)	(97)	2,363
Tangible Assets (excluding assets under operating leases)						
Gross value	11,051	(11)	791	(403)	13	11,441
Depreciation and impairment	(6,113)	4	(563)	234	87	(6,351)
SUB-TOTAL	4,938	(7)	228	(169)	100	5,090
Assets under operating leases						
Gross value	26,781	-	10,224	(7,967)	(462)	28,576
Depreciation and impairment	(7,183)	-	(3,819)	3,113	362	(7,527)
SUB-TOTAL	19,598	-	6,405	(4,854)	(100)	21,049
Investment Property						
Gross value	40	-	1	(1)	(7)	33
Depreciation and impairment	(23)	-	(1)	1	3	(20)
SUB-TOTAL	17	-	-	-	(4)	13
Rights-of-use						
Gross value		2,129	513	(40)	(65)	2,537
Depreciation and impairment		(4)	(404)	10	(2)	(400)
SUB-TOTAL		2,125	109	(30)	(67)	2,137
TOTAL TANGIBLE AND INTANGIBLE FIXED ASSETS	26,751	2,011	7,168	(5,110)	(168)	30,652

BREAKDOWN OF MINIMUM PAYMENTS RECEIVABLE ON OPERATING LEASE ASSETS

(In EURm)	31.12.2019	31.12.2018
Payments due in less than one year	3,976	3,625
Payments due in 1-5 years	16,230	17,077
Payments due in more than five years	120	787
TOTAL	20,326	21,489

INFORMATION RELATIVE TO LEASES ON TANGIBLE ASSETS USED BY THE GROUP



Property Leases

Most of the leases (>90%) involve building leases contracted for the lease of commercial and office space:

- the commercial spaces are branches in the Group's French and international retail banking networks;
- the office buildings are leased for certain departments reporting to the Group's French headquarters or the local head offices of the main foreign subsidiaries, and for certain locations in the main international financial centres: London, New York, Hong Kong...

Outside France, residual lease periods are generally below 10 years. In some countries, such as Russia, leases can be annual, with optional automatic renewal. In other locations, specifically London and New York, lease periods can be as long as 25 years.

Equipment Leases

Other leases (<10%) are mainly computer equipment leases and a very small percentage of vehicle leases.

OVERVIEW TABLE OF LEASE TRANSACTION COSTS AND SUBLEASE INCOME

31.12.2019

(In EURm)	Real estate	IT	Others	Total
Lease	(522)	(33)	(11)	(566)
Interest expenses on lease liabilities	(43)	-	-	(43)
Allocation to depreciation for rights-of-use	(369)	(29)	(6)	(404)
Expense relating to short-term leases	(106)	-	(4)	(110)
Expense relating to leases of low-value assets	(3)	(4)	(1)	(8)
Expense relating to variable lease payments	(1)	-	-	(1)
Sublease income	16	-	-	16

NOTE 8.5 Foreign exchange transactions**ACCOUNTING PRINCIPLES**

At the balance sheet date, monetary assets and liabilities denominated in foreign currencies are translated into the entity's functional currency at the prevailing spot exchange rate. Realised or unrealised foreign exchange losses or gains are recognised in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss* (see Note 3.1).

Forward foreign exchange transactions are recognised at fair value based on the forward exchange rate for the remaining maturity. Spot foreign exchange positions are valued using the official spot rates prevailing at the end of the period. Unrealised gains and losses are recognised in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss* (see Note 3.1), except when hedge accounting is applied to a cash-flow hedge transaction or to a hedge of a net investment in a foreign currency operation (see Note 3.2).

At the balance sheet date, non-monetary assets and liabilities denominated in foreign currencies measured at fair value (in particular, shares and other equity instruments) are translated into the entity's functional currency at the prevailing spot exchange rate. Foreign exchanges losses or gains are recognised either in the income statement under *Net gains and losses on financial instruments at fair value through profit or loss*, or under other comprehensive income (*Unrealised and deferred gains and losses*), depending on the accounting of the gains or losses relative to these assets/liabilities.

At the balance sheet date, non-monetary assets and liabilities denominated in foreign currencies measured at historical cost are translated into the entity's functional currency at the historical exchange rate on initial recognition.

	31.12.2019				31.12.2018*			
	Assets	Liabilities	Currencies to be received	Currencies to be delivered	Assets	Liabilities	Currencies to be received	Currencies to be delivered
(In EURm)								
EUR	830,196	840,597	24,494	29,622	764,581	793,962	28,393	32,198
USD	261,475	261,060	32,327	30,016	267,706	267,972	40,478	41,614
GBP	48,726	49,993	27,307	13,249	41,622	38,302	28,709	10,159
JPY	56,708	55,511	19,896	25,732	63,491	57,288	24,519	33,531
AUD	3,968	5,418	6,564	5,676	5,228	6,763	7,797	6,707
CZK	36,283	35,829	340	485	35,517	35,069	208	783
RUB	13,726	10,771	186	340	11,604	7,446	113	90
RON	5,984	8,070	122	87	8,156	7,859	56	49
Other currencies	99,237	89,054	18,000	18,938	111,523	94,767	24,179	18,479
TOTAL	1,356,303	1,356,303	129,236	124,145	1,309,428	1,309,428	154,452	143,610

* Amounts restated compared with the published consolidated statements for the year-ended 31st December 2018.

NOTE 8.6 Companies included in the consolidation scope

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
South Africa							
	(1)	SG JOHANNESBURG	Bank	FULL	100	100	100
Albania							
	(4)	BANKA SOCIETE GENERALE ALBANIA SH.A.	Bank	FULL	0	88.89	0
Algeria							
		ALD AUTOMOTIVE ALGÉRIE SPA	Specialist Financing	FULL	79.81	79.81	99.99
		SOCIÉTÉ GÉNÉRALE ALGÉRIE	Bank	FULL	100	100	100
Germany							
	(2)	AKRUN EINS GRUNDSTUCKS-VERMIETUNGSGESELLSCHAFT MBH & CO. OBJEKT SEREN 1 KG	Real Estate and Real Estate Financing	FULL	0	100	0
		ALD AUTOLEASING D GMBH	Specialist Financing	FULL	79.82	79.82	100
		ALD INTERNATIONAL GMBH	Specialist Financing	FULL	79.82	79.82	100
		ALD INTERNATIONAL GROUP HOLDINGS GMBH	Specialist Financing	FULL	79.82	79.82	100
		ALD LEASE FINANZ GMBH	Specialist Financing	FULL	100	100	100
		BANK DEUTSCHES KRAFTFAHRZEUGGEWERBE GMBH	Specialist Financing	FULL	99.94	99.93	51
		BDK LEASING UND SERVICE GMBH	Specialist Financing	FULL	100	100	100
		CAR PROFESSIONAL FUHRPARKMANAGEMENT UND BERATUNGSGESELLSCHAFT MBH & CO. KG	Specialist Financing	FULL	79.82	79.82	100
		CARPOOL GMBH	Broker	FULL	79.82	79.82	100
	(2)	EUROPARC DREILINDEN GMBH	Group Real Estate Management Company	FULL	0	100	0
	(2)	EUROPARC GMBH	Real Estate and Real Estate Financing	FULL	0	100	0
	(2)	EUROPARC KERPEN GMBH	Group Real Estate Management Company	FULL	0	100	0
		GEFA BANK GMBH	Specialist Financing	FULL	100	100	100
		GEFA VERSICHERUNGSDIENST GMBH	Specialist Financing	EFS	100	100	100
		HANSEATIC BANK GMBH & CO KG	Specialist Financing	FULL	75	75	75
		HANSEATIC GESELLSCHAFT FUR BANKBETEILIGUNGEN MBH	Portfolio Management	FULL	75	75	100
		HSCE HANSEATIC SERVICE CENTER GMBH	Services	FULL	75	75	100
		INTERLEASING DELLO HAMBURG GMBH	Specialist Financing	FULL	79.82	79.82	100
	(1)(6)	LYXOR INTERNATIONAL ASSET MANAGEMENT GERMANY	Financial Company	FULL	100	0	100
	(4)	PEMA GMBH	Specialist Financing	FULL	0	100	0
	(2)	PODES DREI GRUNDSTUCKS-VERMIETUNGSGESELLSCHAFT MBH &CO OBJEKTE WEL 4 KG	Real Estate and Real Estate Financing	FULL	0	100	0
	(2)	PODES GRUNDSTUCKS - VERMIETUNGSGESELLSCHAFT MBH & CO OBJEKTE WEL 3 KG	Real Estate and Real Estate Financing	FULL	0	100	0
	(2)	PODES ZWEI GRUNDSTUCKS-VERMIETUNGSGESELLSCHAFT MBH &CO OBJEKTE WEL 3 KG	Real Estate and Real Estate Financing	FULL	0	100	0
	(2)	RED & BLACK AUTO GERMANY 3 UG (HAFTUNGSBESCHRANKT)	Financial Company	FULL	0	99.93	0
		RED & BLACK AUTO GERMANY 4 UG (HAFTUNGSBESCHRANKT)	Financial Company	FULL	100	100	100
		RED & BLACK AUTO GERMANY 5 UG (HAFTUNGSBESCHRANKT)	Specialist Financing	FULL	100	100	100
	(6)	RED & BLACK AUTO GERMANY 6 UG	Financial Company	FULL	100	0	100

Country	Activity	Method *	Group ownership interest		Group voting interest	
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SG EQUIPMENT FINANCE GMBH	Specialist Financing	FULL	100	100	100
(5)	SG EQUIPMENT FINANCE INTERNATIONAL GMBH	Specialist Financing	FULL	0	100	0
(1)	SG FRANCFORT	Bank	FULL	100	100	100
	SOCIETE GENERALE EFFEKTEN GMBH	Financial Company	FULL	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES GMBH	Specialist Financing	FULL	100	100	100
(1)	SOGEAP DEUTSCHE NIEDERLASSUNG	Insurance	FULL	100	100	100
(1)	SOGESSUR DEUTSCHE NIEDERLASSUNG	Insurance	FULL	100	100	100
Australia						
	SOCIETE GENERALE SECURITIES AUSTRALIA PTY LTD	Broker	FULL	100	100	100
(1)(6)	SOCIETE GENERALE SYDNEY BRANCH	Bank	FULL	100	0	100
Austria						
	ALD AUTOMOTIVE FUHRPARKMANAGEMENT UND LEASING GMBH	Specialist Financing	FULL	79.82	79.82	100
(1)	SG VIENNE	Bank	FULL	100	100	100
Belgium						
	AXUS FINANCE SPRL	Specialist Financing	FULL	79.82	79.82	100
	AXUS SA/NV	Specialist Financing	FULL	79.82	79.82	100
	BASTION EUROPEAN INVESTMENTS S.A.	Financial Company	FULL	60.74	60.74	100
	PARCOURS BELGIUM	Specialist Financing	FULL	79.82	79.82	100
(4)	PEMA TRUCK TRAILER VERHUUR	Specialist Financing	FULL	0	100	0
(1)	SG BRUXELLES	Bank	FULL	100	100	100
(1)	SG EQUIPMENT FINANCE BENELUX B.V. BELGIAN BRANCH	Specialist Financing	FULL	100	100	100
(2)	SOCIÉTÉ GÉNÉRALE DE FINANCEMENT	Financial Company	FULL	0	100	0
	SOCIÉTÉ GÉNÉRALE IMMOBEL	Financial Company	FULL	100	100	100
(4)	SOCIÉTÉ GÉNÉRALE PRIVATE BANKING NV/SA	Bank	FULL	0	100	0
Benin						
	SOCIETE GENERALE BENIN	Bank	FULL	93.43	90.98	94.1
Bermuda						
	CATALYST RE INTERNATIONAL LTD.	Insurance	FULL	100	100	100
Brazil						
	ALD AUTOMOTIVE S.A.	Specialist Financing	FULL	79.82	79.82	100
	BANCO SOCIETE GENERALE BRASIL S.A.	Bank	FULL	100	100	100
(2)	MORDENO SOCIEDADES ANONIMAS	Financial Company	FULL	0	100	0
	SG EQUIPMENT FINANCE S.A. ARRENDAMENTO MERCANTIL	Specialist Financing	FULL	100	100	100
Bulgaria						
(4)	REGIONAL URBAN DEVELOPMENT FUND	Specialist Financing	FULL	0	51.86	0
(4)	SG EXPRESS BANK	Bank	FULL	0	99.74	0
(4)	SOCIETE GENERALE FACTORING EOOD	Specialist Financing	FULL	0	99.74	0
(4)	SOGELEASE BULGARIA	Specialist Financing	FULL	0	99.74	0
Burkina Faso						
	SOCIETE GENERALE BURKINA FASO	Bank	FULL	51.27	51.27	52.61
Cayman Islands						
	AEGIS HOLDINGS (OFFSHORE) LTD.	Financial Company	FULL	100	100	100
	SOCIETE GENERALE (NORTH PACIFIC) LTD	Bank	FULL	100	100	100
Cameroon						
	SOCIETE GENERALE CAMEROUN	Bank	FULL	58.08	58.08	58.08

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
Canada							
		KLEINWORT BENSON INTERNATIONAL TRUSTEES LIMITED	Bank	FULL	100	100	100
		SG CONSTELLATION CANADA LTD.	Specialist Financing	FULL	100	100	100
	(1)	SOCIETE GENERALE (CANADA BRANCH)	Bank	FULL	100	100	100
		SOCIETE GENERALE (CANADA)	Bank	FULL	100	100	100
		SOCIETE GENERALE CAPITAL CANADA INC	Broker	FULL	100	100	100
China							
		ALD FORTUNE AUTO LEASING & RENTING SHANGHAI CO. LTD	Specialist Financing	ESI	39.91	39.91	50
		SOCIETE GENERALE (CHINA) LIMITED	Bank	FULL	100	100	100
		SOCIETE GENERALE LEASING AND RENTING CO. LTD	Specialist Financing	FULL	100	100	100
Congo							
	(6)	SOCIETE GENERALE CONGO	Bank	FULL	93.47	0	93.47
South Korea							
		SG SECURITIES KOREA CO. LTD	Broker	FULL	100	100	100
	(1)	SG SEOUL	Bank	FULL	100	100	100
Ivory Coast							
		SOCIETE GENERALE CAPITAL SECURITIES WEST AFRICA	Portfolio Management	FULL	71.25	71.25	99.98
		SOCIETE GENERALE COTE D'IVOIRE	Bank	FULL	73.25	73.25	73.25
Croatia							
		ALD AUTOMOTIVE D.O.O. ZA. OPERATIVNI I FINANCIJSKI LEASING	Specialist Financing	FULL	79.82	79.82	100
		ALD FLEET SERVICES D.O.O ZA TRGOVINU I USLUGE	Specialist Financing	FULL	79.82	79.82	100
Curaçao							
		SGA SOCIETE GENERALE ACCEPTANCE N.V	Financial Company	FULL	100	100	100
Denmark							
		ALD AUTOMOTIVE A/S	Specialist Financing	FULL	79.82	79.82	100
		NF FLEET A/S	Specialist Financing	FULL	63.85	63.85	80
	(4)	PEMA LAST OG- TRAILERUDLEJNING A/S	Specialist Financing	FULL	0	100	0
	(1)	SG FINANS AS DANISH BRANCH	Specialist Financing	FULL	100	100	100
United Arab Emirates							
	(1)	SOCIETE GENERALE DUBAI	Bank	FULL	100	100	100
Spain							
		ALD AUTOMOTIVE S.A.U	Specialist Financing	FULL	79.82	79.82	100
		ALTURA MARKETS. SOCIEDAD DE VALORES. SA	Broker	EJV	50	50	50
	(1)	GENEFIM SUCURSAL EN ESPANA	Real Estate and Real Estate Financing	FULL	100	100	100
		REFLEX ALQUILER FLEXIBLE DE VEHICULOS	Specialist Financing	FULL	79.82	79.82	100
	(4)	SELF TRADE BANK SA	Broker	FULL	0	100	0
		SG EQUIPMENT FINANCE IBERIA. E.F.C. S.A.	Specialist Financing	FULL	100	100	100
	(6)	SOCGEN FINANCIACIONES IBERIA. S.L.	Bank	FULL	100	0	100
		SOCGEN INVERSIONES FINANCIERAS SA	Financial Company	FULL	100	100	100
	(1)	SOCIETE GENERALE SUCCURSAL EN ESPANA	Bank	FULL	100	100	100
		SODEPROM	Real Estate and Real Estate Financing	FULL	100	100	100
Estonia							
		ALD AUTOMOTIVE EESTI AS	Specialist Financing	FULL	59.87	59.87	75.01

Country	Activity	Method *	Group ownership interest		Group voting interest		
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
United States of America							
	AEGIS HOLDINGS (ONSHORE) INC.	Financial Company	FULL	100	100	100	100
(2)	CGI FINANCE INC	Financial Company	FULL	0	99.89	0	100
(8)	CGI NORTH AMERICA INC.	Specialist Financing	FULL	99.78	99.89	100	100
(2)	CLASSIC YACHT DOCUMENTATION. INC.	Services	FULL	0	99.89	0	100
	LYXOR ASSET MANAGEMENT HOLDING CORP.	Portfolio Management	FULL	100	100	100	100
	LYXOR ASSET MANAGEMENT INC.	Financial Company	FULL	100	100	100	100
	SG AMERICAS EQUITIES CORP.	Financial Company	FULL	100	100	100	100
	SG AMERICAS OPERATIONAL SERVICES. INC.	Services	FULL	100	100	100	100
	SG AMERICAS SECURITIES HOLDINGS. LLC	Bank	FULL	100	100	100	100
	SG AMERICAS SECURITIES. LLC	Broker	FULL	100	100	100	100
	SG AMERICAS. INC.	Financial Company	FULL	100	100	100	100
	SG CONSTELLATION. INC.	Financial Company	FULL	100	100	100	100
	SG EQUIPMENT FINANCE USA CORP.	Specialist Financing	FULL	100	100	100	100
	SG MORTGAGE FINANCE CORP.	Financial Company	FULL	100	100	100	100
	SG MORTGAGE SECURITIES. LLC	Portfolio Management	FULL	100	100	100	100
(2)	SG REINSURANCE INTERMEDIARY BROKERAGE. LLC	Insurance	FULL	0	100	0	100
	SG STRUCTURED PRODUCTS. INC.	Specialist Financing	FULL	100	100	100	100
(5)	SGAIF. LLC	Financial Company	FULL	0	100	0	100
	SGAIH. INC.	Financial Company	FULL	100	100	100	100
(8)	SGB FINANCE NORTH AMERICA INC.	Specialist Financing	FULL	50.94	50.94	100	100
(1)	SOCIETE GENERALE (NEW YORK)	Bank	FULL	100	100	100	100
(5)	SOCIETE GENERALE ENERGY LLC	Financial Company	FULL	0	100	0	100
	SOCIETE GENERALE FINANCIAL CORPORATION	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE INVESTMENT CORPORATION	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE LIQUIDITY FUNDING. LLC	Financial Company	FULL	100	100	100	100
(2)	TENDER OPTION BOND PROGRAM (TAXABLE AND TAX-EXEMPT)	Financial Company	FULL	0	100	0	100
Finland							
	AXUS FINLAND OY	Specialist Financing	FULL	79.82	79.82	100	100
	NF FLEET OY	Specialist Financing	FULL	63.85	63.85	80	80
France							
	29 HAUSSMANN ÉQUILIBRE	Portfolio Management	FULL	87.1	87.1	87.1	87.1
	29 HAUSSMANN EURO RDT	Portfolio Management	FULL	58.1	58.1	58.1	58.1
	29 HAUSSMANN SÉLECTION MONDE	Portfolio Management	FULL	68.7	68.7	68.7	68.7
(2)	9 RUE DES BIENVENUS	Real Estate and Real Estate Financing	FULL	0	95.5	0	100
	AIR BAIL	Specialist Financing	FULL	100	100	100	100
	AIX - BORD DU LAC - 3	Real Estate and Real Estate Financing	EJV	50	50	50	50
	AIX - BORD DU LAC - 4	Real Estate and Real Estate Financing	EJV	50	50	50	50
	ALD	Specialist Financing	FULL	79.82	79.82	79.82	79.82
	ALD AUTOMOTIVE RUSSIE SAS	Specialist Financing	FULL	79.82	79.82	100	100
(6)	ALFORTVILLE BAIGNADE	Real Estate and Real Estate Financing	ESI	40	0	40	0

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(5)	ALPRIM	Real Estate and Real Estate Financing	FULL	0	100	0	100
	AMPERIM	Real Estate and Real Estate Financing	EJV	50	50	50	50
(6)	ANNEMASSE-ILOT BERNARD	Real Estate and Real Estate Financing	ESI	40	0	40	0
	ANTALIS SA	Financial Company	FULL	100	100	100	100
	ANTARES	Real Estate and Real Estate Financing	ESI	45	45	45	45
	ANTARIUS	Insurance	FULL	100	100	100	100
	ARTISTIK	Real Estate and Real Estate Financing	ESI	30	30	30	30
	AVIVA INVESTORS RÉSERVE EUROPE	Financial Company	FULL	69.35	69.35	69.35	69.35
	BANQUE COURTOIS	Bank	FULL	100	100	100	100
	BANQUE FRANÇAISE COMMERCIALE OCÉANE INDIEN	Bank	FULL	50	50	50	50
	BANQUE KOLB	Bank	FULL	99.97	99.97	99.97	99.97
	BANQUE LAYDERNIER	Bank	FULL	100	100	100	100
	BANQUE NUGER	Bank	FULL	100	100	100	100
	BANQUE POUYANNE	Bank	ESI	35	35	35	35
	BANQUE RHÔNE ALPES	Bank	FULL	99.99	99.99	99.99	99.99
	BANQUE TARNEAUD	Bank	FULL	100	100	100	100
(6)	BAUME LOUBIÈRE	Real Estate and Real Estate Financing	ESI	40	0	40	0
(6)	BERLIOZ	Insurance	FULL	84.05	0	84.05	0
	BOURSORAMA INVESTISSEMENT	Services	FULL	100	100	100	100
	BOURSORAMA SA	Broker	FULL	100	100	100	100
	BREMANY LEASE SAS	Specialist Financing	FULL	79.82	79.82	100	100
	CARBURAUTO	Group Real Estate Management Company	EJV	50	50	50	50
	CARRERA	Group Real Estate Management Company	EJV	50	50	50	50
	CENTRE IMMO PROMOTION	Real Estate and Real Estate Financing	FULL	60	60	60	60
	CHARTREUX LOT A1	Real Estate and Real Estate Financing	FULL	100	100	100	100
	CHEMIN DES COMBES	Real Estate and Real Estate Financing	FULL	100	95.5	100	100
	COMPAGNIE FINANCIÈRE DE BOURBON	Specialist Financing	FULL	99.99	99.99	100	100
	COMPAGNIE FONCIÈRE DE LA MÉDITERRANÉE (CFM)	Group Real Estate Management Company	FULL	100	100	100	100
	COMPAGNIE GÉNÉRALE DE LOCATION D'ÉQUIPEMENTS	Specialist Financing	FULL	99.89	99.89	99.89	99.89
	CONTE	Group Real Estate Management Company	EJV	50	50	50	50
	CRÉDIT DU NORD	Bank	FULL	100	100	100	100
	DARWIN DIVERSIFIÉ 0-20	Portfolio Management	FULL	89.94	89.94	89.94	89.94
	DARWIN DIVERSIFIÉ 40-60	Portfolio Management	FULL	79.78	79.78	79.78	79.78
	DARWIN DIVERSIFIÉ 80-100	Portfolio Management	FULL	78.34	78.34	78.34	78.34
	DESCARTES TRADING	Financial Company	FULL	100	100	100	100
(2)	DESSUARD	Real Estate and Real Estate Financing	ESI	0	40	0	40

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	DISPONIS	Specialist Financing	FULL	99.99	99.99	100	100
	ESNI - COMPARTIMENT SG-CREDIT CLAIMS -1	Financial Company	FULL	100	100	100	100
	ÉTOILE CLIQUET 90	Financial Company	FULL	73.52	73.52	73.52	73.52
	ÉTOILE ID	Financial Company	FULL	100	100	100	100
	ÉTOILE MULTI GESTION EUROPE-C	Insurance	FULL	51.59	51.59	51.59	51.59
	ÉTOILE VALEURS MOYENNES-C	Insurance	FULL	61.09	61.09	61.09	61.09
	F.E.P. INVESTISSEMENTS	Real Estate and Real Estate Financing	FULL	80	80	100	100
	FCC ALBATROS	Portfolio Management	FULL	100	100	51	51
	FEEDER LYX E ST50 D5	Portfolio Management	FULL	100	100	100	100
	FEEDER LYX E ST50 D6	Portfolio Management	FULL	100	100	100	100
	(6) FEEDER LYX E ST50 D9	Financial Company	FULL	99.98	0	99.98	0
	FEEDER LYXOR CAC 40	Financial Company	FULL	99.77	99.77	99.77	99.77
	FEEDER LYXOR CAC40 D2-EUR	Portfolio Management	FULL	100	100	100	100
	FEEDER LYXOR STOXX 50	Financial Company	FULL	100	100	100	100
	FENWICK LEASE	Specialist Financing	FULL	99.99	99.99	100	100
	FINANCIÈRE PARCOURS	Specialist Financing	FULL	79.82	79.82	100	100
	FINANCIÈRE UC	Real Estate and Real Estate Financing	FULL	100	100	100	100
	FINASSURANCE SNC	Insurance	FULL	98.89	98.89	99	99
	FRANFINANCE	Specialist Financing	FULL	99.99	99.99	99.99	99.99
	FRANFINANCE LOCATION	Specialist Financing	FULL	99.99	99.99	100	100
	GALYBET	Real Estate and Real Estate Financing	FULL	100	100	100	100
	GENEBANQUE	Bank	FULL	100	100	100	100
	GENECAL FRANCE	Specialist Financing	FULL	100	100	100	100
	GENECAR - SOCIETE GENERALE DE COURTAGE D'ASSURANCE ET DE REASSURANCE	Insurance	FULL	100	100	100	100
	GENECOMI FRANCE	Specialist Financing	FULL	99.64	99.64	99.64	99.64
	GENEFIM	Real Estate and Real Estate Financing	FULL	100	100	100	100
	GENEFINANCE	Portfolio Management	FULL	100	100	100	100
	GENEGIS I	Group Real Estate Management Company	FULL	100	100	100	100
	GENEGIS II	Group Real Estate Management Company	FULL	100	100	100	100
	GENEPIERRE	Real Estate and Real Estate Financing	FULL	49.49	45.08	49.49	45.08
	GENEVALMY	Group Real Estate Management Company	FULL	100	100	100	100
	(6) ÎLOT AB	Real Estate and Real Estate Financing	ESI	40	0	40	0
	IMAPRIM AMÉNAGEMENT	Real Estate and Real Estate Financing	FULL	70	70	70	70
	IMMOBILIÈRE PROMEX	Real Estate and Real Estate Financing	ESI	35	35	35	35

Country	Activity	Method*	Group ownership interested		Group voting interested	
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(1)(4) INORA LIFE FRANCE	Insurance	FULL	0	100	0	100
(5) INTER EUROPE CONSEIL	Financial Company	FULL	0	100	0	100
INVESTIR IMMOBILIER NORMANDIE	Real Estate and Real Estate Financing	FULL	100	100	100	100
INVESTISSEMENT 81	Financial Company	FULL	100	100	100	100
(6) JSJ PROMOTION	Real Estate and Real Estate Financing	ESI	45	0	45	0
KOLB INVESTISSEMENT	Financial Company	FULL	100	100	100	100
(4) LA BANQUE POSTALE FINANCEMENT	Specialist Financing	ESI	0	35	0	35
LA CORBEILLERIE	Real Estate and Real Estate Financing	ESI	24	24	40	40
(5) LA CROIX BOISÉE	Real Estate and Real Estate Financing	FULL	0	100	0	100
LA FONCIÈRE DE LA DÉFENSE	Real Estate and Real Estate Financing	FULL	99.99	99.99	100	100
LES ALLÉES DE L'EUROPE	Real Estate and Real Estate Financing	ESI	34	34	34	34
LES CÈDRES BLEUS	Real Estate and Real Estate Financing	ESI	40	40	40	40
LES JARDINS D'ALHAMBRA	Real Estate and Real Estate Financing	ESI	35	35	35	35
LES JARDINS DE L'ALCAZAR	Real Estate and Real Estate Financing	ESI	30	30	30	30
LES MÉSANGES	Real Estate and Real Estate Financing	FULL	55	55	55	55
(6) LES TROIS LUCS 13012	Real Estate and Real Estate Financing	FULL	90.89	0	100	0
LES VILLAS VINCENTI	Real Estate and Real Estate Financing	ESI	30	30	30	30
L'HESPEL	Real Estate and Real Estate Financing	ESI	30	30	30	30
LOTISSEMENT DES FLEURS	Real Estate and Real Estate Financing	ESI	30	30	30	30
LYON LA FABRIC	Real Estate and Real Estate Financing	EJV	50	48.87	50	50
LYXOR ASSET MANAGEMENT	Financial Company	FULL	100	100	100	100
LYXOR GL OVERLAY F	Portfolio Management	FULL	87.27	87.27	87.27	87.27
LYXOR INTERMÉDIATION	Broker	FULL	100	100	100	100
LYXOR INTERNATIONAL ASSET MANAGEMENT	Financial Company	FULL	100	100	100	100
(6) LYXOR SKYFALL FUND	Insurance	FULL	88.98	0	88.98	0
MÉDITERRANÉE GRAND ARC	Real Estate and Real Estate Financing	EJV	43	43	50	50
NORBAIL IMMOBILIER	Real Estate and Real Estate Financing	FULL	100	100	100	100
NORBAIL SOFERGIE	Real Estate and Real Estate Financing	FULL	100	100	100	100
NORMANDIE RÉALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100

Country		Activity	Method*	Group ownership interested		Group voting interested	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	ONYX	Group Real Estate Management Company	EJV	50	50	50	50
	OPCI SOGECAPIMMO	Real Estate and Real Estate Financing	FULL	100	100	100	100
	OPERA 72	Group Real Estate Management Company	FULL	99.99	99.99	100	100
	ORADEA VIE	Insurance	FULL	100	100	100	100
	ORPAVIMOB	Specialist Financing	FULL	100	100	100	100
	PACTIMO	Real Estate and Real Estate Financing	FULL	86	86	86	86
	PARCOURS	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS ANNECY	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS BORDEAUX	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS IMMOBILIER	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS NANTES	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS STRASBOURG	Specialist Financing	FULL	79.82	79.82	100	100
	PARCOURS TOURS	Specialist Financing	FULL	79.82	79.82	100	100
	PAREL	Services	FULL	100	100	100	100
	PHILIPS MÉDICAL CAPITAL FRANCE	Specialist Financing	FULL	60	60	60	60
	PRAGMA	Real Estate and Real Estate Financing	FULL	86	86	100	100
	PRIORIS	Specialist Financing	FULL	94.89	94.89	95	95
	PROGREAL SA	Real Estate and Real Estate Financing	ESI	25.01	25.01	25.01	25.01
	PROJECTIM	Real Estate and Real Estate Financing	FULL	60	60	60	60
	RED & BLACK CONSUMER FRANCE 2013	Financial Company	FULL	100	100	100	100
	RED & BLACK HOME LOANS FRANCE 1	Financial Company	FULL	100	100	100	100
	RIVAPRIM	Real Estate and Real Estate Financing	FULL	100	100	100	100
	RIVAPRIM RÉALISATIONS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCI DU DOMAINE DE STONEHAM	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SAGEMCOM LEASE	Specialist Financing	FULL	99.99	99.99	100	100
	SAINT CLAIR	Real Estate and Real Estate Financing	EJV	50	50	50	50
(6)	SAINTE-MARTHE ÎLOT C	Real Estate and Real Estate Financing	ESI	40	0	40	0
(6)	SAINTE-MARTHE ÎLOT D	Real Estate and Real Estate Financing	ESI	40	0	40	0
	SAINT-MARTIN 3	Real Estate and Real Estate Financing	EJV	50	50	50	50
(8)	SARL CS 72 - KERIADENN	Real Estate and Real Estate Financing	ESI	32.5	32.5	32.5	32.5

Country		Activity	Method*	Group ownership interested		Group voting interested		
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
		SARL D'AMÉNAGEMENT DU MARTINET	Real Estate and Real Estate Financing	EJV	43	43	50	50
		SARL DE LA COTE D'OPALE	Real Estate and Real Estate Financing	ESI	35	35	35	35
		SARL DE LA VECQUERIE	Real Estate and Real Estate Financing	ESI	32.5	32.5	32.5	32.5
		SARL EKO BOUAYE	Real Estate and Real Estate Financing	ESI	35	35	35	35
		SARL SEINE CLICHY	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SAS AMIENS - AVENUE DU GENERAL FOY	Real Estate and Real Estate Financing	FULL	80	80	100	100
		SAS COPRIM RÉSIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SAS ECULLY SO'IN	Real Estate and Real Estate Financing	FULL	75	71.62	75	75
		SAS FOCH SULLY	Real Estate and Real Estate Financing	FULL	90	87.97	90	90
	(8)	SAS LOIRE ATLANTIQUE TERTIAIRE	Real Estate and Real Estate Financing	EJV	50	50	50	50
		SAS MÉRIGNAC OASIS URBAINE	Real Estate and Real Estate Financing	FULL	90	90	90	90
		SAS MS FRANCE	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SAS NOAHO AMÉNAGEMENT	Real Estate and Real Estate Financing	FULL	100	95.5	100	100
		SAS NORMANDIE HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SAS NORMANDIE RÉSIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SAS NOYALIS	Real Estate and Real Estate Financing	ESI	28	28	28	28
	(6)	SAS ODESSA DÉVELOPPEMENT	Real Estate and Real Estate Financing	ESI	49	0	49	0
		SAS PARNASSE	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SAS PROJECTIM IMMOBILIER	Real Estate and Real Estate Financing	FULL	80	80	100	100
	SAS RESIDENCIAL	Real Estate and Real Estate Financing	FULL	68.4	68.4	68.4	68.4	
	SAS ROANNE LA TRILOGIE	Real Estate and Real Estate Financing	ESI	41	40.08	41	41	
	SAS SOGEBROWN POISSY	Real Estate and Real Estate Financing	EJV	50	50	50	50	
	SAS SOGEMYSJ	Real Estate and Real Estate Financing	FULL	51	51	51	51	
	SAS SOGEPROM TERTIAIRE	Real Estate and Real Estate Financing	FULL	100	100	100	100	

Country		Activity	Method*	Group ownership interested		Group voting interested	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SAS SOJEPRIM	Real Estate and Real Estate Financing	FULL	80	80	100	100
	SAS TIR A L'ARC AMÉNAGEMENT	Real Estate and Real Estate Financing	EJV	40	40	50	50
	SAS TOUR D2	Real Estate and Real Estate Financing	JO	50	50	50	50
	SAS ZAC DU TRIANGLE	Real Estate and Real Estate Financing	FULL	51	48.7	51	51
	SC ALICANTE 2000	Group Real Estate Management Company	FULL	100	100	100	100
	SC CHASSAGNE 2000	Group Real Estate Management Company	FULL	100	100	100	100
	SCCV 282 MONTOLIVET 12	Real Estate and Real Estate Financing	FULL	51.6	51.6	60	60
(5)	SCCV 29 ET 31 AVENUE CHARLES DE GAULLE A LA TESTE DE BUCH	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SCCV 3 CHÂTEAUX	Real Estate and Real Estate Financing	EJV	43	43	50	50
	SCCV ALFORTVILLE MANDELA	Real Estate and Real Estate Financing	ESI	49	49	49	49
	SCCV BAHIA	Real Estate and Real Estate Financing	FULL	51	48.7	51	51
(5)	SCCV BLAINVILLE LEMARCHAND	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SCCV BOIS-GUILLAUME PARC DE HALLEY	Real Estate and Real Estate Financing	EJV	50	50	50	50
(4)	SCCV BOURGOIN 140 ROUTE DE LYON	Real Estate and Real Estate Financing	FULL	0	78.2	0	80
	SCCV BRON CARAVELLE	Real Estate and Real Estate Financing	EJV	50	47.75	50	50
	SCCV CAEN CASERNE MARTIN	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV CAEN PANORAMIK	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCCV CHARTREUX LOT C	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV CHARTREUX LOT E	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV CHARTREUX LOTS B-D	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV CITY SQUARE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV CLICHY BRC	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV COURS CLÉMENCEAU	Real Estate and Real Estate Financing	ESI	28	28	28	28
	SCCV CUGNAUX-LÉO LAGRANGE	Real Estate and Real Estate Financing	EJV	43	43	50	50

Country	Activity	Method*	Group ownership interested		Group voting interested	
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SCCV EKO GREEN CITY	Real Estate and Real Estate Financing	ESI	35	35	35
	SCCV EKO PARK OCÉANE	Real Estate and Real Estate Financing	ESI	32.5	32.5	32.5
(6)	SCCV ÉPRON - ZAC L'ORÉE DU GOLF	Real Estate and Real Estate Financing	FULL	70	0	0
	SCCV ESPACES DE DEMAIN	Real Estate and Real Estate Financing	EJV	50	50	50
(6)	SCCV ÉTERVILLE ROUTE D'AUNAY	Real Estate and Real Estate Financing	EJV	50	0	0
	SCCV EURONANTES 1E	Real Estate and Real Estate Financing	EJV	50	50	50
(6)	SCCV FAVERGES	Real Estate and Real Estate Financing	FULL	80	0	0
	SCCV GAO	Real Estate and Real Estate Financing	ESI	32.5	32.5	32.5
	SCCV GIGNAC MOUSSELINE	Real Estate and Real Estate Financing	FULL	60.2	60.2	70
	SCCV GIVORS ROBICHON	Real Estate and Real Estate Financing	EJV	50	47.75	50
(2)	SCCV HALLUARD	Real Estate and Real Estate Financing	ESI	0	35	35
	SCCV HÉROUVILLE ÎLOT A2	Real Estate and Real Estate Financing	ESI	33.33	33.33	33.33
	SCCV HOUSE PARK	Real Estate and Real Estate Financing	ESI	35	35	35
	SCCV JA LE HAVRE 22 COTY	Real Estate and Real Estate Financing	ESI	40	40	40
	SCCV JDA OUISTREHAM	Real Estate and Real Estate Financing	EJV	50	50	50
	SCCV KYMA MÉRIGNAC	Real Estate and Real Estate Financing	ESI	30	30	30
	SCCV LA MADELEINE SAINT-CHARLES	Real Estate and Real Estate Financing	EJV	40	40	50
	SCCV LA PORTE DU CANAL	Real Estate and Real Estate Financing	EJV	50	50	50
	SCCV LACASSAGNE BRICKS	Real Estate and Real Estate Financing	ESI	49	49	49
	SCCV LE BOUSCAT CARRE SOLARIS	Real Estate and Real Estate Financing	ESI	25	25	25
	SCCV LE COURTIL	Real Estate and Real Estate Financing	ESI	35	35	35
(2)	SCCV LE SIX	Real Estate and Real Estate Financing	ESI	0	24.5	24.5
	SCCV LE TEICH CŒUR DE VILLE	Real Estate and Real Estate Financing	ESI	30	30	30

Country		Activity	Method*	Group ownership interested		Group voting interested	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(6)	SCCV LES ÉCRIVAINS	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV LES PATIOS D'OR DE FLEURY LES AUBRAIS	Real Estate and Real Estate Financing	FULL	64	64	80	80
	SCCV LES SUCRES	Real Estate and Real Estate Financing	EJV	50	47.75	50	50
	SCCV LESQUIN PARC	Real Estate and Real Estate Financing	EJV	40	40	50	50
	SCCV LILLE - JEAN MACÉ	Real Estate and Real Estate Financing	ESI	26.72	26.72	33.4	33.4
	SCCV LOOS GAMBETTA	Real Estate and Real Estate Financing	ESI	35	0	35	0
	SCCV MARCQ PROJECTIM	Real Estate and Real Estate Financing	FULL	64	64	80	80
	SCCV MEHUL	Real Estate and Real Estate Financing	FULL	60.2	60.2	70	70
	SCCV MÉRIGNAC 53-55 AVENUE LEON BLUM	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCCV MONROC - LOT 3	Real Estate and Real Estate Financing	EJV	43	43	50	50
	SCCV MONTREUIL ACACIA	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV NATUREO	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCCV NICE ARENAS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV NOISY BOISSIÈRE	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SCCV PARIS ALBERT	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SCCV PARK OCÉANE II	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV PRADES BLEU HORIZON	Real Estate and Real Estate Financing	EJV	43	43	50	50
	SCCV QUAI DE SEINE A ALFORTVILLE	Real Estate and Real Estate Financing	FULL	51	51	51	51
	SCCV ROMAINVILLE DUMAS	Real Estate and Real Estate Financing	FULL	70	70	70	70
	SCCV ROUEN 27 ANGLAIS	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SCCV ROUSSET - LOT 03	Real Estate and Real Estate Financing	FULL	60.2	60.2	70	70
	SCCV SAY	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV SENGHOR	Real Estate and Real Estate Financing	ESI	35	35	35	35

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(6)	SCCV SENSORIUM BUREAUX	Real Estate and Real Estate Financing	EJV	40	0	50	0
(6)	SCCV SENSORIUM LOGEMENT	Real Estate and Real Estate Financing	EJV	40	0	50	0
(6)	SCCV SOGAB ÎLE DE FRANCE	Real Estate and Real Estate Financing	FULL	80	0	80	0
	SCCV SOGAB ROMAINVILLE	Real Estate and Real Estate Financing	FULL	80	80	80	80
	SCCV SOGEPROM LYON HABITAT	Real Estate and Real Estate Financing	FULL	100	97.75	100	100
	SCCV SWING RIVE GAUCHE	Real Estate and Real Estate Financing	EJV	43	43	50	50
	SCCV TALENCE PUR	Real Estate and Real Estate Financing	FULL	95	95	95	95
	SCCV TASSIN - 190 CDG	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCCV VERNAISON - RAZAT	Real Estate and Real Estate Financing	EJV	50	47.75	50	50
	SCCV VILLA CHANZY	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SCCV VILLENAVE D'ORNON GARDEN VO	Real Estate and Real Estate Financing	ESI	25	25	25	25
	SCCV VILLEURBANNE TEMPO	Real Estate and Real Estate Financing	FULL	100	92.8	100	100
	SCI 1134, AVENUE DE L'EUROPE A CASTELNAU LE LEZ	Real Estate and Real Estate Financing	EJV	43	43	50	50
	SCI 637 ROUTE DE FRANS	Real Estate and Real Estate Financing	ESI	30	30	30	30
(2)	SCI ABARITZ	Real Estate and Real Estate Financing	ESI	0	40	0	40
(2)	SCI AGIAN	Real Estate and Real Estate Financing	ESI	0	40	0	40
(2)	SCI ANGLET PROMOTION	Real Estate and Real Estate Financing	ESI	0	38.5	0	38.5
	SCI AQPRIM PROMOTION	Real Estate and Real Estate Financing	FULL	79.8	79.8	50	50
	SCI ASC LA BERGEONNERIE	Real Estate and Real Estate Financing	EJV	42	42	50	50
	SCI AVARICUM	Real Estate and Real Estate Financing	FULL	99	99	99	99
	SCI BOBIGNY HOTEL DE VILLE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SCI BORDEAUX-20-26 RUE DU COMMERCE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SCI CENTRE IMMO PROMOTION RÉSIDENCES	Real Estate and Real Estate Financing	FULL	80	80	100	100
(2)	SCI CHARITÉ - GIRANDIÈRE	Real Estate and Real Estate Financing	EJV	0	50	0	50

Country		Activity	Method *	Group ownership interest		Group voting interest		
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
		SCI CHELLES AULNOY MENDES FRANCE	Real Estate and Real Estate Financing	EJV	50	50	50	50
(2)		SCI DIAGONALE	Real Estate and Real Estate Financing	FULL	0	68	0	75
		SCI DREUX LA ROTULE NORD	Real Estate and Real Estate Financing	FULL	80	80	100	100
		SCI DU 84 RUE DU BAC	Real Estate and Real Estate Financing	EJV	50	50	50	50
		SCI DU PARC SAINT ÉTIENNE	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SCI ÉTAMPES NOTRE-DAME	Real Estate and Real Estate Financing	EJV	50	50	50	50
(2)		SCI ÉTRECHY SAINT NICOLAS	Real Estate and Real Estate Financing	EJV	0	50	0	50
(2)		SCI EUROPARC HAUTE BORNE 1	Real Estate and Real Estate Financing	FULL	0	51	0	51
		SCI EUROPARC ST MARTIN DU TOUCH 2002	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SCI HEGEL PROJECTIM	Real Estate and Real Estate Financing	FULL	68	68	85	85
		SCI LA MANTILLA COMMERCE	Real Estate and Real Estate Financing	FULL	93	93	100	100
		SCI LA MARQUEILLE	Real Estate and Real Estate Financing	EJV	50	50	50	50
		SCI L'ACTUEL	Real Estate and Real Estate Financing	ESI	30	30	30	30
		SCI LAVOISIER	Real Estate and Real Estate Financing	FULL	80	80	80	80
(2)		SCI LE CERCLE DES ARTS	Real Estate and Real Estate Financing	ESI	0	37.5	0	37.5
		SCI LE DOMAINE DU PLESSIS	Real Estate and Real Estate Financing	ESI	20	20	20	20
		SCI LE HAMEAU DES GRANDS PRES	Real Estate and Real Estate Financing	EJV	40	40	40	40
		SCI LE MANOIR DE JÉRÉMY	Real Estate and Real Estate Financing	ESI	40	40	40	40
(8)		SCI LE PARC DE BORDEROUGE	Real Estate and Real Estate Financing	FULL	60	60	60	60
		SCI LES BAIGNOTS	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SCI LES CASTELLINES	Real Estate and Real Estate Financing	ESI	30	30	30	30
		SCI LES JARDINS DE LA BOURBRE	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SCI LES JARDINS D'IRIS	Real Estate and Real Estate Financing	FULL	60	60	60	60

Country	Activity	Method *	Group ownership interest		Group voting interest	
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SCI LES JARDINS DU BLAVET	Real Estate and Real Estate Financing	ESI	40	40	40
	SCI LES PORTES DU LEMAN	Real Estate and Real Estate Financing	FULL	70	70	70
	SCI LES RÉSIDENCES GENEVOISES	Real Estate and Real Estate Financing	FULL	90	90	90
	SCI LIEUSAINTE RUE DE PARIS	Real Estate and Real Estate Financing	EJV	50	50	50
	SCI LINAS CŒUR DE VILLE 1	Real Estate and Real Estate Financing	FULL	70	70	70
	SCI LOCMIÈRE - LAMENNAIS	Real Estate and Real Estate Financing	ESI	30	30	30
	SCI L'ORÉE DES LACS	Real Estate and Real Estate Financing	FULL	70	70	70
(2)	SCI LYON BON LAIT	Real Estate and Real Estate Financing	ESI	0	35	35
(2)	SCI LYON JOANNES	Real Estate and Real Estate Financing	EJV	0	47.8	50
(2)	SCI MARSEILLE LE ZÉPHYR	Real Estate and Real Estate Financing	FULL	0	55.9	65
	SCI MONTPELLIER JACQUES CŒUR	Real Estate and Real Estate Financing	EJV	43	43	50
(2)	SCI PATRIS	Real Estate and Real Estate Financing	EJV	0	25.8	30
(2)	SCI PORTU ONDOAN	Real Estate and Real Estate Financing	ESI	0	40	40
	SCI PROJECTIM HABITAT	Real Estate and Real Estate Financing	FULL	80	80	100
	SCI PROJECTIM MARCQ CŒUR DE VILLE	Real Estate and Real Estate Financing	FULL	48	48	60
	SCI PRONY	Real Estate and Real Estate Financing	EJV	50	50	50
	SCI QUINTEFEUILLE	Real Estate and Real Estate Financing	ESI	30	30	30
	SCI QUINTESENCE-VALESCURE	Real Estate and Real Estate Financing	EJV	50	50	50
(2)	SCI REIMS GARE	Real Estate and Real Estate Financing	FULL	0	100	100
	SCI RÉSIDENCE DU DONJON	Real Estate and Real Estate Financing	EJV	40	40	40
	SCI RHIN ET MOSELLE 1	Real Estate and Real Estate Financing	FULL	100	100	100
	SCI RHIN ET MOSELLE 2	Real Estate and Real Estate Financing	FULL	100	100	100
	SCI RIVAPRIM HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest		
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
		SCI RIVAPRIM RÉSIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
		SCI RSS INVESTIMMO CÔTE BASQUE	Real Estate and Real Estate Financing	ESI	20	20	20	20
	(8)	SCI SAINT JEAN	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SCI SAINT OUEN L'AUMÔNE - L'OISE	Real Estate and Real Estate Financing	EJV	38	38	38	38
		SCI SAINT-DENIS WILSON	Real Estate and Real Estate Financing	FULL	60	60	60	60
		SCI SCS IMMOBILIER D'ENTREPRISES	Real Estate and Real Estate Financing	FULL	52.8	52.8	66	66
		SCI SOGECIP	Real Estate and Real Estate Financing	FULL	80	80	100	100
		SCI SOGECTIM	Real Estate and Real Estate Financing	FULL	80	80	100	100
		SCI SOGEPROM LYON RÉSIDENCES	Real Estate and Real Estate Financing	FULL	100	95.5	100	100
	(8)	SCI STRASBOURG ÉTOILE THUMENAU	Real Estate and Real Estate Financing	ESI	35	35	35	35
	(8)	SCI STRASBOURG ROUTE DE WASSELONNE	Real Estate and Real Estate Financing	ESI	35	35	35	35
		SCI TERRES NOUVELLES FRANCILIENNES	Real Estate and Real Estate Financing	FULL	80	80	80	80
		SCI TOULOUSE CENTREDA 3	Real Estate and Real Estate Financing	FULL	100	100	100	100
	(2)	SCI VAILLANT COUTURIER	Real Estate and Real Estate Financing	ESI	0	25	0	25
	(2)	SCI VALENCE-CHAMPS DE MARS	Real Estate and Real Estate Financing	EJV	0	50	0	50
		SCI VELRI	Group Real Estate Management Company	EJV	50	50	50	50
		SCI VILLA ÉMILIE	Real Estate and Real Estate Financing	ESI	35	35	35	35
		SCI VITAL BOUHOT 16-22 NEUILLY SUR SEINE	Real Estate and Real Estate Financing	ESI	40	40	40	40
		SEFIA	Specialist Financing	FULL	99.89	99.89	100	100
		SERVIPAR	Specialist Financing	FULL	79.82	79.82	100	100
		SG 29 HAUSSMANN	Financial Company	FULL	100	100	100	100
	(6)	SG ACTIONS EURO	Insurance	FULL	47.75	0	47.75	0
		SG ACTIONS EURO SÉLECTION	Financial Company	FULL	40.05	40.05	40.05	40.05
		SG ACTIONS EURO VALUE-C	Insurance	FULL	64.94	64.94	64.94	64.94
		SG ACTIONS FRANCE	Portfolio Management	FULL	38.14	38.14	38.14	38.14
		SG ACTIONS LUXE-C	Insurance	FULL	84.25	84.25	84.25	84.25
		SG ACTIONS MONDE EMERGENT	Insurance	FULL	60.05	60.05	60.05	60.05
		SG ACTIONS US	Portfolio Management	FULL	65.06	65.06	65.06	65.06
	(6)	SG ACTIONS US TECHNO	Insurance	FULL	85.08	0	85.08	0
		SG CAPITAL DÉVELOPPEMENT	Portfolio Management	FULL	100	100	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(5)	SG EUROPEAN MORTGAGE INVESTMENTS	Financial Company	FULL	0	100	0	100
	SG FINANCIAL SERVICES HOLDING	Portfolio Management	FULL	100	100	100	100
	SG FLEXIBLE	Portfolio Management	FULL	92.48	92.48	92.48	92.48
	SG LYXOR GOVERNMENT BOND FUND	Portfolio Management	FULL	100	100	100	100
	SG LYXOR LCR FUND	Portfolio Management	FULL	100	100	100	100
	SG MONE TRESO-E	Insurance	FULL	98.62	98.62	98.62	98.62
	SG MONÉTAIRE PLUS E	Financial Company	FULL	58.93	58.93	58.93	58.93
	SG OBLIG ÉTAT EURO-R	Insurance	FULL	79.94	79.94	79.94	79.94
	SG OBLIGATIONS	Insurance	FULL	82.92	0	82.92	0
	SG OPCIMMO	Real Estate and Real Estate Financing	FULL	97.95	97.95	97.95	97.95
(6)	SG OPTION EUROPE	Broker	FULL	100	100	100	100
	SG VALOR ALPHA ACTIONS FRANCE	Financial Company	FULL	72.77	72.77	72.77	72.77
	SGB FINANCE S.A.	Specialist Financing	FULL	50.94	50.94	51	51
	SGEF SA	Specialist Financing	FULL	100	100	100	100
	SGI 10-16 VILLE L'ÉVÊQUE	Insurance	FULL	100	100	100	100
	SGI 1-5 ASTORG	Insurance	FULL	100	100	100	100
	SGI HOLDING SIS	Group Real Estate Management Company	FULL	100	100	100	100
	SGI PACIFIC	Insurance	FULL	86.17	86.17	89.53	89.53
	SNC CŒUR 8EME MONPLAISIR	Real Estate and Real Estate Financing	ESI	30	25.5	30	30
	SNC COPRIM RÉSIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SNC D'AMÉNAGEMENT FORUM SEINE ISSY LES MOULINEAUX	Real Estate and Real Estate Financing	EJV	33.33	33.33	33.33	33.33
	SNC ISSY FORUM 10	Real Estate and Real Estate Financing	EJV	0	33.33	0	33.33
	SNC ISSY FORUM 11	Real Estate and Real Estate Financing	EJV	33.33	33.33	33.33	33.33
	SNC NEUILLY ÎLE DE LA JATTE	Real Estate and Real Estate Financing	ESI	40	40	40	40
	SNC PROMOSEINE	Real Estate and Real Estate Financing	EJV	33.33	33.33	33.33	33.33
	SOCIETE ANONYME DE CRÉDIT A L'INDUSTRIE FRANÇAISE (CALIF)	Bank	FULL	100	100	100	100
	SOCIÉTÉ CIVILE IMMOBILIÈRE CAP THALASSA	Real Estate and Real Estate Financing	ESI	45	45	45	45
	SOCIÉTÉ CIVILE IMMOBILIÈRE CAP VEYRE	Real Estate and Real Estate Financing	ESI	50	50	50	50
	SOCIÉTÉ CIVILE IMMOBILIÈRE DE DIANE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIÉTÉ CIVILE IMMOBILIÈRE DE PIERLAS	Real Estate and Real Estate Financing	ESI	28	28	28	28
	SOCIÉTÉ CIVILE IMMOBILIÈRE DES COMBEAUX DE TIGERY	Real Estate and Real Estate Financing	FULL	99.99	99.99	100	100
	SOCIÉTÉ CIVILE IMMOBILIÈRE DOMAINE DURANDY	Real Estate and Real Estate Financing	ESI	25	25	25	25

Country	Activity	Method *	Group ownership interest		Group voting interest		
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
	SOCIÉTÉ CIVILE IMMOBILIÈRE ERICA	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIÉTÉ CIVILE IMMOBILIÈRE ESTÉREL TANNERON	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIÉTÉ CIVILE IMMOBILIÈRE FONTENAY - ESTIENNES D'ORVES	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SOCIÉTÉ CIVILE IMMOBILIÈRE GAMBETTA DÉFENSE V	Real Estate and Real Estate Financing	ESI	20	20	20	20
	SOCIÉTÉ CIVILE IMMOBILIÈRE LE BOTERO	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIÉTÉ CIVILE IMMOBILIÈRE LES HAUTS DE L'ESTAQUE	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SOCIÉTÉ CIVILE IMMOBILIÈRE LES HAUTS DE SEPTÈMES	Real Estate and Real Estate Financing	ESI	25	25	25	25
	SOCIÉTÉ CIVILE IMMOBILIÈRE MIRECRAU	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SOCIÉTÉ CIVILE IMMOBILIÈRE NAXOU	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIÉTÉ CIVILE IMMOBILIÈRE TOULDI	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIÉTÉ CIVILE IMMOBILIÈRE VERT COTEAU	Real Estate and Real Estate Financing	ESI	35	35	35	35
	SOCIÉTÉ DE BOURSE GILBERT DUPONT	Financial Company	FULL	100	100	100	100
	SOCIÉTÉ DE LA RUE ÉDOUARD VII	Portfolio Management	FULL	99.91	99.91	99.91	99.91
	SOCIÉTÉ DES TERRAINS ET IMMEUBLES PARISIENS (STIP)	Group Real Estate Management Company	FULL	99.98	99.98	100	100
	SOCIÉTÉ DU PARC D'ACTIVITÉ DE LA VALENTINE	Real Estate and Real Estate Financing	ESI	30	30	30	30
	SOCIÉTÉ EN NOM COLLECTIF PARNASSE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIÉTÉ FINANCIÈRE D'ANALYSE ET DE GESTION	Financial Company	FULL	100	100	100	100
	SOCIÉTÉ GÉNÉRALE	Bank	FULL	100	100	100	100
	SOCIÉTÉ GÉNÉRALE CAPITAL FINANCE	Portfolio Management	FULL	100	100	100	100
	SOCIÉTÉ GÉNÉRALE CAPITAL PARTENAIRES	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE DE BANQUE AUX ANTILLES	Bank	FULL	100	100	100	100
	SOCIETE GENERALE FACTORING	Specialist Financing	FULL	100	100	100	100
	SOCIETE GENERALE PARTICIPATIONS INDUSTRIELLES	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE POUR LE DEVELOPPEMENT DES OPERATIONS DE CREDIT-BAIL IMMOBILIER SOGEBAIL	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE GENERALE REAL ESTATE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE GENERALE SCF	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES HOLDING	Portfolio Management	FULL	100	100	100	100
	SOCIETE GENERALE SFH	Specialist Financing	FULL	100	100	100	100
	SOCIETE IMMOBILIERE DU 29 BOULEVARD HAUSSMANN	Group Real Estate Management Company	FULL	100	100	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SOCIETE IMMOBILIERE URBI ET ORBI	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOCIETE LES PINSONS	Real Estate and Real Estate Financing	EJV	50	50	50	50
	SOCIETE MARSEILLAISE DE CREDIT	Bank	FULL	100	100	100	100
	SOGÉ BEAUJOIRE	Group Real Estate Management Company	FULL	99.99	99.99	100	100
	SOGÉ PERIVAL I	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉ PERIVAL II	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉ PERIVAL III	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉ PERIVAL IV	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉACT.SELEC.MON.	Portfolio Management	FULL	99.78	99.78	99.78	99.78
	SOGÉCAPUS	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉCAP	Insurance	FULL	100	100	100	100
	SOGÉCAP - DIVERSIFIED LOANS FUND	Specialist Financing	FULL	100	100	100	100
	SOGÉCAP DIVERSIFIE 1	Portfolio Management	FULL	100	100	100	100
(6)	SOGÉCAP EQUITY OVERLAY (FEEDER)	Insurance	FULL	100	0	100	0
	SOGÉCAP LONG TERME N°1	Financial Company	FULL	100	100	100	100
	SOGÉCAPIMMO 2	Insurance	FULL	89.39	89.39	90.84	90.84
	SOGÉFIM HOLDING	Portfolio Management	FULL	100	100	100	100
	SOGÉFIMUR	Specialist Financing	FULL	100	100	100	100
	SOGÉFINANCEMENT	Specialist Financing	FULL	100	100	100	100
	SOGÉFINERG SG POUR LE FINANCEMENT DES INVESTISSEMENTS ECONOMISANT L'ENERGIE	Specialist Financing	FULL	100	100	100	100
	SOGÉFONTENAY	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉLEASE FRANCE	Specialist Financing	FULL	100	100	100	100
	SOGÉMARCHE	Group Real Estate Management Company	FULL	100	100	100	100
	SOGÉPARTICIPATIONS	Portfolio Management	FULL	100	100	100	100
	SOGÉPROM	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGÉPROM ALPES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGÉPROM ALPES HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGÉPROM CENTRE-VAL DE LOIRE	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGÉPROM CVL SERVICES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGÉPROM ENTREPRISES	Real Estate and Real Estate Financing	FULL	100	100	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
(5)	SOGEPROM ENTREPRISES REGIONS	Real Estate and Real Estate Financing	FULL	0	100	0	100
	SOGEPROM HABITAT	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM LYON	Real Estate and Real Estate Financing	FULL	100	85	100	85
	SOGEPROM PARTENAIRES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM RESIDENCES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM SERVICES	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM SUD REALISATIONS	Real Estate and Real Estate Financing	FULL	90.9	90.9	100	100
	SOGESSUR	Insurance	FULL	100	100	100	100
	SOGEVIMMO	Group Real Estate Management Company	FULL	85.55	85.55	85.55	85.55
	ST BARNABE 13004	Real Estate and Real Estate Financing	EJV	43	43	50	50
	STAR LEASE	Specialist Financing	FULL	100	100	100	100
	(8) STRACE	Real Estate and Real Estate Financing	ESI	20	20	20	20
	TEMSYS	Specialist Financing	FULL	79.82	79.82	100	100
	(2) URBANISME ET COMMERCE	Real Estate and Real Estate Financing	FULL	0	99.88	0	99.88
(6)	URBANISME ET COMMERCE PROMOTION	Real Estate and Real Estate Financing	FULL	100	100	100	100
	VALMINVEST	Group Real Estate Management Company	FULL	100	100	100	100
	VG PROMOTION	Real Estate and Real Estate Financing	ESI	35	0	35	0
(6)	VILLA D'ARMONT	Real Estate and Real Estate Financing	ESI	40	40	40	40
Ghana							
	SOCIETE GENERALE GHANA LIMITED	Bank	FULL	60.22	60.22	60.22	60.22
Gibraltar							
	HAMBROS (GIBRALTAR NOMINEES) LIMITED	Services	FULL	100	100	100	100
	SG KLEINWORT HAMBROS BANK (GIBRALTAR) LIMITED	Bank	FULL	100	100	100	100
Greece							
	ALD AUTOMOTIVE S.A. LEASE OF CARS	Specialist Financing	FULL	79.82	79.82	100	100
Guinea							
	SG DE BANQUES EN GUINEE	Bank	FULL	57.94	57.94	57.94	57.94
Equatorial Guinea							
	SOCIETE GENERALE DE BANQUES EN GUINEE EQUATORIALE	Bank	FULL	52.44	52.44	57.23	57.23

Country	Activity	Method *	Group ownership interest		Group voting interest		
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
Hong Kong							
	(1)(2) DESCARTES TRADING HONG KONG BRANCH	Financial Company	FULL	0	100	0	100
	SG ASSET FINANCE (HONG KONG) LIMITED	Broker	FULL	100	100	100	100
	(6) SG CORPORATE FINANCE (ASIA PACIFIC) LIMITED	Financial Company	FULL	100	0	100	0
	SG CORPORATE FINANCE (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	SG FINANCE (ASIA PACIFIC) LIMITED	Financial Company	FULL	100	100	100	100
	SG FINANCE (HONG KONG) LIMITED	Financial Company	FULL	100	100	100	100
	(1) SG HONG KONG	Bank	FULL	100	100	100	100
	SG SECURITIES (HK) LIMITED	Broker	FULL	100	100	100	100
	SG SECURITIES (HK) NOMINEES LTD	Broker	FULL	100	100	100	100
	SG SECURITIES ASIA INTERNATIONAL HOLDINGS LIMITED	Broker	FULL	100	100	100	100
	SOCIETE GENERALE ASIA LTD	Financial Company	FULL	100	100	100	100
	TH INVESTMENTS (HONG KONG) 1 LIMITED	Financial Company	FULL	100	100	100	100
	TH INVESTMENTS (HONG KONG) 2 LIMITED	Financial Company	FULL	100	100	100	100
	TH INVESTMENTS (HONG KONG) 5 LIMITED	Financial Company	FULL	100	100	100	100
Hungary							
	ALD AUTOMOTIVE MAGYARORSZAG AUTOPARK-KEZELO ES FINANSZIROZO KORLATOLT FELELOSSEGU TARSASAG	Specialist Financing	FULL	79.82	79.82	100	100
Jersey Island							
	ELMFORD LIMITED	Services	FULL	100	100	100	100
	HANOM I LIMITED	Financial Company	FULL	100	100	100	100
	HANOM II LIMITED	Financial Company	FULL	100	100	100	100
	HANOM III LIMITED	Financial Company	FULL	100	100	100	100
	JD CORPORATE SERVICES LIMITED	Services	FULL	100	100	100	100
	KLEINWORT BENSON CUSTODIAN SERVICES LIMITED	Bank	FULL	100	100	100	100
	(7) LYXOR MASTER FUND	Financial Company	FULL	100	100	100	100
	NEWMEAD TRUSTEES LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS (FOUNDATIONS) LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS NOMINEES (JERSEY) LTD	Financial Company	FULL	100	100	100	100
	SG KLEINWORT HAMBROS BANK (CI) LIMITED	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS CORPORATE SERVICES (CI) LIMITED	Portfolio Management	FULL	100	100	100	100
	SG KLEINWORT HAMBROS TRUST COMPANY (CI) LIMITED	Financial Company	FULL	100	100	100	100
	SGKH TRUSTEES (CI) LIMITED	Services	FULL	100	100	100	100
	SOLENTIS INVESTMENT SOLUTIONS PCC	Financial Company	FULL	100	100	100	100
Isle of Man							
	KBBIOM LIMITED	Bank	FULL	50	50	50	50
	KBTIOM LIMITED	Bank	FULL	100	100	100	100
Guernsey Island							
	ARAMIS II SECURITIES CO. LTD	Financial Company	FULL	100	100	100	100
	CDS INTERNATIONAL LIMITED	Services	FULL	100	100	100	100
	GRANGE NOMINEES LIMITED	Bank	FULL	100	100	100	100
	GUERNSEY FINANCIAL ADVISORY SERVICES LIMITED	Bank	FULL	100	100	100	100
	GUERNSEY NOMINEES LIMITED	Bank	FULL	100	100	100	100
	HAMBROS (GUERNSEY NOMINEES) LTD	Services	FULL	100	100	100	100
	HTG LIMITED	Services	FULL	100	100	100	100
	K.B. (C.I.) NOMINEES LIMITED	Bank	FULL	100	100	100	100
	MISON NOMINEES LIMITED	Bank	FULL	100	100	100	100
	(1) SG HAMBROS BANK (CHANNEL ISLANDS) LTD GUERNSEY BRANCH	Bank	FULL	100	100	100	100

Country	Activity	Method *	Group ownership interest		Group voting interest	
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
British Virgin Islands						
	TSG HOLDINGS LTD	Services	FULL	100	100	100
	TSG MANAGEMENT LTD	Services	FULL	100	100	100
	TSG SERVICES LTD	Services	FULL	100	100	100
India						
	ALD AUTOMOTIVE PRIVATE LIMITED	Specialist Financing	FULL	79.82	79.82	100
(1)	SG MUMBAI	Bank	FULL	100	100	100
	SOCIETE GENERALE GLOBAL SOLUTION CENTRE PRIVATE	Services	FULL	100	100	100
	SOCIETE GENERALE SECURITIES INDIA PRIVATE LIMITED	Broker	FULL	100	100	100
Ireland						
	ALD RE DESIGNATED ACTIVITY COMPANY	Insurance	FULL	79.82	79.82	100
(4)	INORA LIFE LTD	Insurance	FULL	0	100	0
	IRIS II SPV DESIGNATED ACTIVITY COMPANY	Financial Company	FULL	100	100	100
	MERRION FLEET FINANCE LIMITED	Financial Company	FULL	79.82	79.82	100
	MERRION FLEET MANAGEMENT LIMITED	Specialist Financing	FULL	79.82	79.82	100
(1)	SG DUBLIN	Bank	FULL	100	100	100
	SG KLEINWORT HAMBROS PRIVATE INVESTMENT OFFICE SERVICES LIMITED	Bank	FULL	100	100	100
	SGBT FINANCE IRELAND DESIGNATED ACTIVITY COMPANY	Specialist Financing	FULL	100	100	100
	SOCIETE GENERALE HEDGING DESIGNATED ACTIVITY COMPANY	Financial Company	FULL	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES (IRELAND) LTD	Financial Company	FULL	100	100	100
Italy						
	ALD AUTOMOTIVE ITALIA S.R.L	Specialist Financing	FULL	79.82	79.82	100
	FIDITALIA S.P.A	Specialist Financing	FULL	100	100	100
	FRAER LEASING SPA	Specialist Financing	FULL	73.85	73.85	73.85
	SG EQUIPMENT FINANCE ITALY S.P.A.	Specialist Financing	FULL	100	100	100
	SG FACTORING SPA	Specialist Financing	FULL	100	100	100
	SG LEASING SPA	Specialist Financing	FULL	100	100	100
(1)	SG MILAN	Bank	FULL	100	100	100
(1)	SOCECAP SA RAPPRESENTANZA GENERALE PER L'ITALIA	Insurance	FULL	100	100	100
	SOCIETE GENERALE SECURITIES SERVICES S.P.A.	Bank	FULL	100	100	100
(1)	SOGESSUR SA	Insurance	FULL	100	100	100
Japan						
	LYXOR ASSET MANAGEMENT JAPAN CO LTD	Portfolio Management	FULL	100	100	100
(1)	SG TOKYO	Bank	FULL	100	100	100
(1)(2)	SOCIETE GENERALE (NORTH PACIFIC) LTD. TOKYO BRANCH	Bank	FULL	0	100	0
	SOCIETE GENERALE SECURITIES JAPAN LIMITED	Broker	FULL	100	100	100
Latvia						
	ALD AUTOMOTIVE SIA	Specialist Financing	FULL	59.86	59.86	75
Lebanon						
(3)	SG DE BANQUE AU LIBAN	Bank	ESI	16.79	16.79	16.85
Lithuania						
	UAB ALD AUTOMOTIVE	Specialist Financing	FULL	59.86	59.86	75

Country			Activity	Method *	Group ownership interest		Group voting interest	
					At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
Luxembourg								
	(6)	AF EMG MK HD CURR - CLASSE C - LU0907913460	Insurance	FULL	47.7	0	47.7	0
		ALD INTERNATIONAL SERVICES S.A.	Specialist Financing	FULL	79.82	79.82	100	100
	(2)	AXA IM FIIS US SH.DUR.HIGH YIELD A DIS H	Specialist Financing	FULL	0	50.58	0	50.58
		AXUS LUXEMBOURG SA	Specialist Financing	FULL	79.82	79.82	100	100
		BARTON CAPITAL SA	Financial Company	FULL	100	100	100	100
	(6)	CANDRIAM BONDS EURO HIGH YIELD - LU1010337324	Insurance	FULL	45.35	0	45.35	0
	(6)	CODEIS COMPARTIMENT A0084	Insurance	FULL	100	0	100	0
		CODEIS COMPARTIMENT A0076	Financial Company	FULL	100	100	100	100
		CODEIS SECURITIES S.A.	Financial Company	FULL	100	100	100	100
		COVALBA	Financial Company	FULL	100	100	100	100
	(6)	FIDELITY FUNDS EUR HY IQ - LU0954694930	Insurance	FULL	49.6	0	49.6	0
		G FINANCE LUXEMBOURG SA	Financial Company	FULL	100	100	100	100
		IVEFI S.A.	Financial Company	FULL	100	100	100	100
		LX FINANZ S.A.R.L.	Financial Company	FULL	100	100	100	100
	(6)	LYXOR EURO 6M - CLASS SI	Insurance	FULL	64.37	0	64.37	0
	(6)	LYXOR FUNDS SOLUTIONS	Financial Company	FULL	100	0	100	0
		PIONEER INVESTMENTS DIVERSIFIED LOANS FUND	Specialist Financing	FULL	100	100	100	100
		RED & BLACK AUTO LEASE GERMANY 2 S.A.	Financial Company	FULL	79.82	79.82	100	100
	(6)	SALINGER S.A	Bank	FULL	100	0	100	0
		SG ISSUER	Financial Company	FULL	100	100	100	100
		SGBT ASSET BASED FUNDING SA	Financial Company	FULL	100	100	100	100
		SGBTCI	Financial Company	FULL	100	100	100	100
		SOCIETE GENERALE BANK & TRUST	Bank	FULL	100	100	100	100
		SOCIETE GENERALE CAPITAL MARKET FINANCE	Bank	FULL	100	100	100	100
		SOCIETE GENERALE FINANCING AND DISTRIBUTION	Bank	FULL	100	100	100	100
		SOCIETE GENERALE LIFE INSURANCE BROKER SA	Insurance	FULL	100	100	100	100
		SOCIETE GENERALE PRIVATE WEALTH MANAGEMENT S.A.	Financial Company	FULL	100	100	100	100
		SOCIETE GENERALE RE SA	Insurance	FULL	100	100	100	100
		SOCIETE IMMOBILIERE DE L'ARSENAL	Group Real Estate Management Company	FULL	100	100	100	100
		SOGELIFE	Insurance	FULL	100	100	100	100
Macedonia								
	(4)	OHRIDSKA BANKA AD SKOPJE	Bank	FULL	0	74.53	0	75.38
Madagascar								
		BANKY FAMPANDROSOANA VAROTRA SG	Bank	FULL	70	70	70	70
Malta								
	(8)	LNG MALTA INVESTMENT 1 LIMITED	Financial Company	FULL	100	100	100	100
	(8)	LNG MALTA INVESTMENT 2 LIMITED	Financial Company	FULL	100	100	100	100
Morocco								
		ALD AUTOMOTIVE SA MAROC	Specialist Financing	FULL	36.57	36.57	50	50
		ATHENA COURTAGE	Insurance	FULL	58.17	58.45	99.93	99.93
		FONCIMMO	Group Real Estate Management Company	FULL	57.58	57.57	100	100
		LA MAROCAINE VIE	Insurance	FULL	79.19	89.03	99.98	99.98
		SG MAROCAINE DE BANQUES	Bank	FULL	57.58	57.57	57.58	57.57
		SOCIETE D' EQUIPEMENT DOMESTIQUE ET MENAGER EQDOM	Specialist Financing	FULL	30.93	30.93	53.72	53.72
		SOCIETE GENERALE DE LEASING AU MAROC	Specialist Financing	FULL	57.58	57.57	100	100
		SOCIETE GENERALE OFFSHORE	Financial Company	FULL	57.51	57.5	99.88	99.88
		SOGECAPITAL GESTION	Financial Company	FULL	57.54	57.53	99.94	99.94
		SOGECAPITAL PLACEMENT	Portfolio Management	FULL	57.56	57.55	99.96	99.96
	(8)	SOGEFINANCEMENT MAROC	Specialist Financing	FULL	57.58	57.57	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
Mauritius							
	SG SECURITIES BROKING (M) LIMITED	Broker	FULL	100	100	100	100
Mexico							
	ALD AUTOMOTIVE S.A. DE C.V.	Specialist Financing	FULL	79.82	79.82	100	100
	ALD FLEET SA DE CV SOFOM ENR	Specialist Financing	FULL	79.82	79.82	100	100
	SGFP MEXICO. S.A. DE C.V.	Financial Company	FULL	100	99.98	100	100
Moldavia							
(4)	MOBIASBANCA GROUPE SOCIETE GENERALE	Bank	FULL	0	79.93	0	87.9
Monaco							
(1)	CRÉDIT DU NORD - MONACO	Bank	FULL	100	100	100	100
(1)	SMC MONACO	Bank	FULL	100	100	100	100
(6)	SOCIÉTÉ DE BANQUE MONACO	Bank	FULL	100	0	100	0
(1)	SOCIÉTÉ GÉNÉRALE (SUCCURSALE MONACO)	Bank	FULL	100	100	100	100
	SOCIETE GENERALE PRIVATE BANKING (MONACO)	Bank	FULL	100	100	100	100
Montenegro							
(4)	SOCIETE GENERALE BANKA MONTENEGRO A.D.	Bank	FULL	0	90.56	0	90.56
Norway							
	ALD AUTOMOTIVE AS	Specialist Financing	FULL	79.82	79.82	100	100
	NF FLEET AS	Specialist Financing	FULL	63.85	63.85	80	80
	SG FINANS AS	Specialist Financing	FULL	100	100	100	100
New Caledonia							
	CREDICAL	Specialist Financing	FULL	87.07	87.07	96.64	96.64
	SOCIETE GENERALE CALEDONIENNE DE BANQUE	Bank	FULL	90.1	90.1	90.1	90.1
Netherlands							
	ALVARENGA INVESTMENTS B.V.	Specialist Financing	FULL	100	100	100	100
	ASTEROLD B.V.	Financial Company	FULL	100	100	100	100
	AXUS FINANCE NL B.V.	Specialist Financing	FULL	79.82	79.82	100	100
	AXUS NEDERLAND BV	Specialist Financing	FULL	79.82	79.82	100	100
	BRIGANTIA INVESTMENTS B.V.	Financial Company	FULL	100	100	100	100
(6)	CAPEREA B.V.	Specialist Financing	FULL	100	0	100	0
	COPARER HOLDING	Group Real Estate Management Company	FULL	100	100	100	100
	HERFSTTAFEL INVESTMENTS B.V.	Specialist Financing	FULL	100	100	100	100
	HORDLE FINANCE B.V.	Financial Company	FULL	100	100	100	100
	MONTALIS INVESTMENT BV	Specialist Financing	FULL	100	100	100	100
(1)	SG AMSTERDAM	Bank	FULL	100	100	100	100
	SG EQUIPMENT FINANCE BENELUX BV	Specialist Financing	FULL	100	100	100	100
	SOGLEASE B.V.	Specialist Financing	FULL	100	100	100	100
	SOGLEASE FILMS	Specialist Financing	FULL	100	100	100	100
	TYNEVOR B.V.	Financial Company	FULL	100	100	100	100
Poland							
	ALD AUTOMOTIVE POLSKA SP Z O.O.	Specialist Financing	FULL	79.82	79.82	100	100
(4)	EURO BANK S.A.	Bank	FULL	0	99.99	0	99.99
(4)	PEMA POLSKA SP.Z O.O.	Services	FULL	0	100	0	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SG EQUIPMENT LEASING POLSKA SP Z.O.O.	Specialist Financing	FULL	100	100	100	100
(1)	SOCIETE GENERALE S.A. ODDZIAL W POLSCE	Bank	FULL	100	100	100	100
(1)	SOGECAP SPOLKA AKCYJNA ODDZIAL W POLSCE	Insurance	FULL	100	100	100	100
(1)	SOGESSUR SPOLKA AKCYJNA ODDZIAL W POLSCE	Insurance	FULL	100	100	100	100
French Polynesia							
	BANQUE DE POLYNESIE	Bank	FULL	72.1	72.1	72.1	72.1
	SOGLEASE BDP SAS	Specialist Financing	FULL	72.1	72.1	100	100
Portugal							
	SGALD AUTOMOTIVE SOCIEDADE GERAL DE COMERCIO E ALUGUER DE BENZ SA	Specialist Financing	FULL	79.82	79.82	100	100
Czech Republic							
	ALD AUTOMOTIVE SRO	Specialist Financing	FULL	79.82	79.82	100	100
	CATAPS	Services	ESI	0.61	0.61	40	40
	ESSOX SRO	Specialist Financing	FULL	80	80	100	100
	FACTORING KB	Financial Company	FULL	60.73	60.73	100	100
	KB PENZIJNI SPOLECNOST, A.S.	Financial Company	FULL	60.73	60.73	100	100
	KB REAL ESTATE	Real Estate and Real Estate Financing	FULL	60.73	60.73	100	100
(6)	KB SMARTSOLUTIONS, S.R.O.	Bank	FULL	60.73	0	100	0
	KOMERCNI BANKA A.S	Bank	FULL	60.73	60.73	60.73	60.73
	KOMERCNI POJISTOVNA A.S	Insurance	FULL	80.76	80.76	100	100
	MODRA PYRAMIDA STAVEBNI SPORITELNA AS	Financial Company	FULL	60.73	60.73	100	100
(4)	PEMA PRAHA SPOL. S.R.O.	Specialist Financing	FULL	0	100	0	100
	PROTOS	Financial Company	FULL	60.73	60.73	100	100
	SG EQUIPMENT FINANCE CZECH REPUBLIC S.R.O.	Specialist Financing	FULL	80.33	80.33	100	100
	SOGEPROM CESKA REPUBLIKA S.R.O.	Real Estate and Real Estate Financing	FULL	100	100	100	100
	SOGEPROM MICHLE S.R.O.	Real Estate and Real Estate Financing	FULL	100	100	100	100
	STD2, A.S.	Group Real Estate Management Company	FULL	60.73	60.73	100	100
	VN 42	Real Estate and Real Estate Financing	FULL	60.73	60.73	100	100
Romania							
	ALD AUTOMOTIVE SRL	Specialist Financing	FULL	75.89	75.89	100	100
	BRD - GROUPE SOCIETE GENERALE SA	Bank	FULL	60.17	60.17	60.17	60.17
	BRD ASSET MANAGEMENT SAI SA	Portfolio Management	FULL	60.15	60.15	99.97	99.97
	BRD FINANCE IFN S.A.	Financial Company	FULL	80.48	80.48	100	100
	S.C. BRD SOGELEASE IFN S.A.	Specialist Financing	FULL	60.17	60.17	100	100
	S.C. ROGARIU IMOBILIARE S.R.L.	Real Estate and Real Estate Financing	FULL	75	75	75	75
	SOCIETE GENERALE EUROPEAN BUSINESS SERVICES S.A.	Services	FULL	100	100	100	100
	SOGEPROM ROMANIA SRL	Real Estate and Real Estate Financing	FULL	100	100	100	100
(1)	SOGESSUR S.A PARIS - SUCURSALA BUCURESTI	Insurance	FULL	100	100	100	100

Country	Activity	Method *	Group ownership interest		Group voting interest		
			At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
United Kingdom							
	ACR	Financial Company	FULL	100	100	100	100
	ALD AUTOMOTIVE GROUP LIMITED	Specialist Financing	FULL	79.82	79.82	100	100
	ALD AUTOMOTIVE LIMITED	Specialist Financing	FULL	79.82	79.82	100	100
(2)	ALD FUNDING LIMITED	Specialist Financing	FULL	0	79.82	0	100
(1)	BRIGANTIA INVESTMENTS B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100
(1)	DESCARTES TRADING LONDON BRANCH	Financial Company	FULL	100	100	100	100
	FENCHURCH NOMINEES LIMITED	Bank	FULL	100	100	100	100
	FRANK NOMINEES LIMITED	Bank	FULL	100	100	100	100
(1)	HORDLE FINANCE B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100
(2)	JWB LEASE HOLDINGS LIMITED	Specialist Financing	FULL	0	100	0	100
	JWB LEASING LIMITED PARTNERSHIP	Specialist Financing	FULL	100	100	100	100
	KBIM STANDBY NOMINEES LIMITED	Bank	FULL	100	100	100	100
	KBPB NOMINEES LIMITED	Bank	FULL	100	100	100	100
	KH COMPANY SECRETARIES LIMITED	Bank	FULL	100	100	100	100
	KLEINWORT BENSON FARMLAND TRUST (MANAGERS) LIMITED	Bank	FULL	75	75	75	75
	LANGBOURN NOMINEES LIMITED	Bank	FULL	100	100	100	100
	LYXOR ASSET MANAGEMENT UK LLP	Financial Company	FULL	100	100	100	100
	MAGPIE ROSE LIMITED	Bank	FULL	100	100	100	100
	PICO WESTWOOD LIMITED	Bank	FULL	100	100	100	100
	ROBERT BENSON. LONSDALE & CO (CANADA) LIMITED	Bank	FULL	100	100	100	100
	SAINT MELROSE LIMITED	Bank	FULL	100	100	100	100
	SG (MARITIME) LEASING LIMITED	Specialist Financing	FULL	100	100	100	100
	SG EQUIPMENT FINANCE (DECEMBER) LIMITED	Specialist Financing	FULL	100	100	100	100
(2)	SG EQUIPMENT FINANCE LEASING LIMITED	Specialist Financing	FULL	0	100	0	100
(2)	SG EQUIPMENT FINANCE OPERATING LEASING LIMITED	Specialist Financing	FULL	0	100	0	100
(2)	SG EQUIPMENT FINANCE RENTAL LIMITED	Specialist Financing	FULL	0	100	0	100
	SG FINANCIAL SERVICES LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS (LONDON) NOMINEES LIMITED	Financial Company	FULL	100	100	100	100
	SG HAMBROS TRUST COMPANY LTD	Financial Company	FULL	100	100	100	100
	SG HEALTHCARE BENEFITS TRUSTEE COMPANY LIMITED	Financial Company	FULL	100	100	100	100
	SG INVESTMENT LIMITED	Financial Company	FULL	100	100	100	100
	SG KLEINWORT HAMBROS BANK LIMITED	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS LIMITED	Bank	FULL	100	100	100	100
	SG KLEINWORT HAMBROS TRUST COMPANY (UK) LIMITED	Bank	FULL	100	100	100	100
	SG LEASING (ASSETS) LIMITED	Specialist Financing	FULL	100	100	100	100
(8)	SG LEASING (CENTRAL 1) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (CENTRAL 3) LIMITED	Specialist Financing	FULL	100	100	100	100
(2)	SG LEASING (DECEMBER) LIMITED	Specialist Financing	FULL	0	100	0	100
	SG LEASING (GEMS) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (JUNE) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (MARCH) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (USD) LIMITED	Specialist Financing	FULL	100	100	100	100
	SG LEASING (UTILITIES) LIMITED	Specialist Financing	FULL	100	100	100	100

Country		Activity	Method *	Group ownership interest		Group voting interest	
				At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018
	SG LEASING IX	Specialist Financing	FULL	100	100	100	100
	(1) SG LONDRES	Bank	FULL	100	100	100	100
	(8) SGFLD LIMITED	Financial Company	FULL	100	100	100	100
	SOCGEN NOMINEES (UK) LIMITED	Financial Company	FULL	100	100	100	100
	SOCIETE GENERALE EQUIPMENT FINANCE LIMITED	Specialist Financing	FULL	100	100	100	100
	SOCIETE GENERALE INTERNATIONAL LIMITED	Broker	FULL	100	100	100	100
	SOCIETE GENERALE INVESTMENTS (U.K.) LIMITED	Financial Company	FULL	100	100	100	100
	STRABUL NOMINEES LIMITED	Financial Company	FULL	100	100	100	100
	(2) TALOS HOLDING LTD	Financial Company	FULL	0	100	0	100
	(2) TALOS SECURITIES LTD	Broker	FULL	0	100	0	100
	(1) TH INVESTMENTS (HONG KONG) 2 LIMITED (UK BRANCH)	Financial Company	FULL	100	100	100	100
	(1) TYNEVOR B.V. (UK BRANCH)	Financial Company	FULL	100	100	100	100
Russian Federation							
	ALD AUTOMOTIVE OOO	Specialist Financing	FULL	79.82	79.82	100	100
	CLOSED JOINT STOCK COMPANY SG FINANCE	Specialist Financing	FULL	99.97	99.95	100	100
	(5) COMMERCIAL BANK DELTACREDIT JOINT STOCK COMPANY	Bank	FULL	0	99.95	0	100
	CREDIT INSTITUTION OBYEDINYONNAYA RASCHOTNAYA SISTEMA	Financial Company	FULL	99.97	99.95	100	100
	JSC TELSUKOM	Services	FULL	99.97	99.95	100	100
	LLC RUSFINANCE	Bank	FULL	99.97	99.95	100	100
	LLC RUSFINANCE BANK	Bank	FULL	99.97	99.95	100	100
	PJSC ROSBANK	Bank	FULL	99.97	99.95	99.97	99.95
	RB FACTORING LLC	Specialist Financing	FULL	99.97	99.95	100	100
	RB LEASING LLC	Specialist Financing	FULL	99.97	99.95	100	100
	RB SERVICE LLC	Group Real Estate Management Company	FULL	99.97	99.95	100	100
	RB SPECIALIZED DEPOSITARY LLC	Financial Company	FULL	99.97	99.95	100	100
	SOCIETE GENERALE STRAKHOVANIE LLC	Insurance	FULL	99.99	99.99	100	100
	SOCIETE GENERALE STRAKHOVANIE ZHIZNI LLC	Insurance	FULL	99.99	99.99	100	100
Senegal							
	SOCIETE GENERALE SENEGAL	Bank	FULL	64.45	64.45	64.87	64.87
Serbia							
	ALD AUTOMOTIVE D.O.O BEOGRAD	Specialist Financing	FULL	79.82	79.82	100	100
	(4) SOCIETE GENERALE BANKA SRBIJA A.D. BEOGRAD	Bank	FULL	0	100	0	100
	(4) SOGELEASE SRBIJA D.O.O.	Specialist Financing	FULL	0	100	0	100
Singapore							
	SG MARKETS (SEA) PTE. LTD.	Broker	FULL	100	100	100	100
	SG SECURITIES (SINGAPORE) PTE. LTD.	Broker	FULL	100	100	100	100
	(1) SG SINGAPOUR	Bank	FULL	100	100	100	100
	SG TRUST (ASIA) LTD	Financial Company	FULL	100	100	100	100
Slovakia							
	ALD AUTOMOTIVE SLOVAKIA S.R.O.	Specialist Financing	FULL	79.82	79.82	100	100
	ESSOX FINANCE S.R.O	Specialist Financing	FULL	80	80	100	100
	(1) KOMERCNI BANKA BRATISLAVA	Bank	FULL	60.73	60.73	100	100
	(5) PEMA SLOVAKIA SPOL.S.R.O.	Specialist Financing	FULL	0	100	0	100
	(1) SG EQUIPMENT FINANCE CZECH REPUBLIC S.R.O. ORGANIZACNA ZLOZKA (SLOVAK RUPUBLIC BRANCH)	Specialist Financing	FULL	80.33	80.33	100	100

					Group ownership interest		Group voting interest	
Country		Activity	Method *	At 31.12.2019	At 31.12.2018	At 31.12.2019	At 31.12.2018	
Slovenia								
		ALD AUTOMOTIVE OPERATIONAL LEASING DOO	Specialist Financing	FULL	79.82	79.82	100	100
	(4)	SKB LEASING D.O.O.	Specialist Financing	FULL	0	99.73	0	100
	(4)	SKB BANKA D.D. LJUBLJANA	Bank	FULL	0	99.73	0	99.73
	(4)	SKB LEASING SELECT D.O.O.	Specialist Financing	FULL	0	99.73	0	100
Sweden								
		ALD AUTOMOTIVE AB	Specialist Financing	FULL	79.82	79.82	100	100
		NF FLEET AB	Specialist Financing	FULL	63.85	63.85	80	80
	(4)	PEMA TRUCK- OCH TRAILERUTHYRNING AB	Specialist Financing	FULL	0	100	0	100
	(1)	SG FINANS AS SWEDISH BRANCH	Specialist Financing	FULL	100	100	100	100
	(1)	SOCIETE GENERALE SA BANKFILIAL SVERIGE	Bank	FULL	100	100	100	100
Switzerland								
		ALD AUTOMOTIVE AG	Specialist Financing	FULL	79.82	79.82	100	100
	(4)	PEMA TRUCK- UND TRAILERVERMIETUNG GMBH	Specialist Financing	FULL	0	100	0	100
	(8)	ROSBANK (SWITZERLAND)	Bank	FULL	99.97	99.95	100	100
		SG EQUIPMENT FINANCE SCHWEIZ AG	Specialist Financing	FULL	100	100	100	100
	(1)	SG ZURICH	Bank	FULL	100	100	100	100
		SOCIETE GENERALE PRIVATE BANKING (SUISSE) S.A.	Bank	FULL	100	100	100	100
Taiwan								
	(1)	SG SECURITIES (HONG KONG) LIMITED TAIPEI BRANCH	Broker	FULL	100	100	100	100
	(1)	SG TAIPEI	Bank	FULL	100	100	100	100
Chad								
		SOCIETE GENERALE TCHAD	Bank	FULL	56.86	56.86	67.83	67.83
Thailand								
		SOCIETE GENERALE SECURITIES (THAILAND) LTD.	Broker	FULL	100	100	100	100
Togo								
	(1)	SOCIETE GENERALE TOGO	Bank	FULL	90.98	89.64	100	100
Tunisia								
		UNION INTERNATIONALE DE BANQUES	Bank	FULL	55.1	55.1	52.34	52.34
Turkey								
		ALD AUTOMOTIVE TURIZM TICARET ANONIM SIRKETI	Specialist Financing	FULL	79.82	79.82	100	100
	(1)	SG ISTANBUL	Bank	FULL	100	100	100	100
Ukraine								
		ALD AUTOMOTIVE UKRAINE LIMITED LIABILITY COMPANY	Specialist Financing	FULL	79.82	79.82	100	100

* FULL: Full consolidation - JO: Joint Operation - EJV: Equity (Joint Venture) - ESI: Equity (significant influence) - EFS: Equity For Simplification (Entities controlled by the Group that are consolidated using the equity method for simplification because are not significant).

(1) Branches

(2) Entities wound up

(3) Removal from the scope (loss of control or significant influence)

(4) Entities sold

(5) Merged

(6) Newly consolidated

(7) Including 30 funds

(8) Wind up in process.

Additional information related to the consolidation scope and equity investments as required by the regulation 2016-09 of the "Autorité des Normes Comptables" (ANC, the French Accounting standard setter), dated 2 December 2016 is available on the Societe Generale Group website at :

<https://www.societegenerale.com/en/investors>

NOTE 8.7 Fees paid to Statutory Auditors

The consolidated financial statements of Societe Generale Group are certified jointly by Ernst & Young et Autres, represented by Mr. Micha Missakian, on the one hand; and Deloitte et Associés, represented by Mr. Jean-Marc Mickeler, on the other hand.

On the proposal of the Board of Directors and following the recommendation of the Audit and Internal Control Committee of Societe Generale (CACI), the Annual General Meeting held on 23rd May 2018 renewed the mandates of Ernst & Young et Autres and of Deloitte et Associés, for six years.

In accordance with the European regulation on the audit reform, the CACI implements a specific approval policy of the non-audit services of

statutory auditors ("SACC") and their network by to verify its compliance before to the launch of the mission.

A synthesis of the SACC (approved or refused) is presented to every session of the CACI.

The fees by type of mission (audit or non-audit) are submitted to an annual review by the CACI.

Lastly, the Finance Departments of the entities and business divisions annually appraise the quality of the audits performed by Deloitte et Associés and Ernst & Young et Autres. The conclusions of this survey are presented to the CACI.

AMOUNTS OF STATUTORY AUDITORS' FEES PRESENTED IN THE INCOME STATEMENT

		Ernst & Young et Autres		Deloitte et Associés		TOTAL	
(In EURm excluded VAT)		2019 ⁽¹⁾	2018	2019 ⁽²⁾	2018	2019	2018
Statutory audit, certification, examination of parent company and consolidated accounts	Issuer	4	4	7	7	11	11
	Fully consolidated subsidiaries	16	16	12	12	28	28
SUB-TOTAL AUDIT		20	20	19	19	39	39
Non-audit services (SACC)	Issuer	0	2	2	1	2	3
	Fully consolidated subsidiaries	1	1	1	2	2	3
TOTAL		21	23	22	22	43	45

(1) Including Ernst and Young network: EUR 13 million

(2) Including Deloitte network: EUR 10 million

The non-audit services provided by Statutory Auditors this year mainly consisted of missions of compliance review with regard to the regulatory requirements, missions of internal control within the framework of respect of ISAE standards (*International Standard on Assurance Engagement*), agreed upon procedures, and then

complementary audits within the scope of issuing of certificates or EFP Declaration (EFP: Extra-Financial Performance). They include also non-audit services expressly and exclusively entrusted to the Statutory Auditors for EUR 1 million.

NOTE 9 INFORMATION ON RISKS AND LITIGATION

Every quarter, the Group reviews in detail the disputes presenting a significant risk. These disputes may lead to the recording of a provision if it becomes probable or certain that the Group will incur an outflow of resources for the benefit of a third party without receiving at least the equivalent value in exchange. These provisions for litigations are classified among the *Other provisions* included in the *Provisions* item in the liabilities of the balance-sheet.

No detailed information can be disclosed on either the recording or the amount of a specific provision given that such disclosure would likely seriously prejudice the outcome of the disputes in question.

- On 24th October 2012, the Court of Appeal of Paris confirmed the first judgment delivered on 5th October 2010, finding J. Kerviel guilty of breach of trust, fraudulent insertion of data into a computer system, forgery and use of forged documents. J. Kerviel was sentenced to serve a prison sentence of five years, two years of which are suspended, and was ordered to pay EUR 4.9 billion in damages to the bank. On 19th March 2014, the Supreme Court confirmed the criminal liability of J. Kerviel. This decision puts an end to the criminal proceedings. On the civil front, on 23rd September 2016, the Versailles Court of Appeal rejected J. Kerviel's request for an expert determination of the damage suffered by Societe Generale, and therefore confirmed that the net accounting losses suffered by the Bank as a result of his criminal conduct amount to EUR 4.9 billion. It also declared J. Kerviel partially responsible for the damage caused to Societe Generale and sentenced him to pay to Societe Generale EUR 1 million. Societe Generale and J. Kerviel did not appeal before the Supreme Court. Societe Generale considers that this decision has no impact on its tax situation. However, as indicated by the Minister of the Economy and Finance in September 2016, the tax authorities have examined the tax consequences of this book loss and indicated that they intended to call into question the deductibility of the loss caused by the actions of J. Kerviel, amounting to EUR 4.9 billion. This proposed tax rectification has no immediate effect and will possibly have to be confirmed by an adjustment notice sent by the tax authorities when Societe Generale is in a position to deduct the tax loss carry forwards arising from the loss from its taxable income. Such a situation will not occur for several years according to the bank's forecasts. In view of the 2011 opinion of the French Supreme Administrative Court (Conseil d'État) and its established case law which was recently confirmed again in this regard, Societe Generale considers that there is no need to provision the corresponding deferred tax assets. In the event that the authorities decide, in due course, to confirm their current position, Societe Generale group will not fail to assert its rights before the competent courts. By a decision handed down on the 20th September 2018, the Investigation Committee of the reviewing and reassessment Criminal Court has furthermore declared inadmissible the request filed in May 2015 by J. Kerviel against his criminal sentence, confirming the absence of any new element or fact that could justify the reopening of the criminal file.
- Between 2003 and 2008, Societe Generale set up gold consignment lines with the Turkish group Goldas. In February 2008, Societe Generale was alerted to a risk of fraud and embezzlement of gold stocks held by Goldas. These suspicions were rapidly confirmed following the failure by Goldas to pay or refund gold worth EUR 466.4 million. Societe Generale brought civil proceedings against its insurers and various Goldas Group entities. Goldas launched various proceedings in Turkey and in the UK against Societe Generale. In the action brought by Societe Generale against Goldas in the UK, Goldas applied to have the action of SG struck-out and applied to the UK court for damages. On 3rd April 2017, the UK court granted both applications and will, after an inquiry into damages, rule on the amount due to Goldas, if any. On 15th May 2018, the Court of Appeal discharged entirely the inquiry into damages granted by the High Court to Goldas but rejected

Societe Generale's arguments relating to service of the claims issued against Goldas, which are therefore time-barred. On 18th December 2018, the Supreme Court refused permission to appeal to both Societe Generale and Goldas. On 16th February 2017, the Paris Commercial Court dismissed Societe Generale's claims against its insurers. Societe Generale filed an appeal against this decision.

- Societe Generale Algeria (SGA) and several of its branch managers are being prosecuted for breach of Algerian laws on exchange rates and capital transfers with other countries and on money laundering and the financing of terrorism. The defendants are accused of having failed to make complete or accurate statements to the Algerian authorities on capital transfers in connection with exports or imports made by clients of SGA and on cash payment transactions made at SGA counters. The events were discovered during investigations by the Algerian authorities, which subsequently filed civil claims before the criminal court. Sentences were delivered by the court of appeal against SGA and its employees in some proceedings, while charges were dropped in other ones. To date, fifteen cases have ended in favour of SGA, one case has ended against SGA and nine remain pending, seven of which before the Supreme Court.
 - In the early 2000s, the French banking industry decided to transition to a new digital system in order to streamline cheque clearing. To support this reform (known as EIC – *Échange d'Images Chèques*), which has contributed to the improvement of cheque payments security and to the fight against fraud, the banks established several interbank fees (including the CEIC which was abolished in 2007). These fees were implemented under the aegis of the banking sector supervisory authorities, and to the knowledge of the public authorities.
- On 20th September 2010, after several years of investigation, the French competition authority ruled that the joint implementation and the setting of the amount of the CEIC and of two additional fees for related services were in breach of competition law. The authority fined all the participants to the agreement (including the Banque de France) a total of approximately EUR 385 million. Societe Generale was ordered to pay a fine of EUR 53.5 million and Crédit du Nord, its subsidiary, a fine of EUR 7 million. However, in its 23rd February 2012 order, the French Court of Appeal, to which the matter was referred by all the banks involved except Banque de France, held that there was no competition law infringement, allowing the banks to recoup the fines paid. On 14th April 2015, the Supreme Court quashed and annulled the Court of Appeal decision on the grounds that the latter did not examine the arguments of two third parties who voluntarily intervened in the proceedings. The case was heard again on 3rd and 4th November 2016 by the Paris Court of Appeal before which the case was remanded. On 21st December 2017, the Court of Appeal confirmed the fines imposed on Societe Generale and Crédit du Nord by the French competition authority. On 22nd January 2018, Societe Generale and Crédit du Nord filed an appeal before the Supreme court against this decision. The court proceeding is still pending.
- Societe Generale Private Banking (Switzerland), along with several other financial institutions, has been named as a defendant in a putative class action that is pending in the US District Court for the Northern District of Texas. The plaintiffs seek to represent a class of individuals who were customers of Stanford International Bank Ltd. (SIBL), with money on deposit at SIBL and/or holding Certificates of Deposit issued by SIBL as of 16th February 2009. The plaintiffs allege that they suffered losses as a result of fraudulent activity at SIBL and the Stanford Financial Group or related entities, and that the defendants are responsible for those alleged losses. The plaintiffs further seek to recoup payments made through or to the defendants on behalf of SIBL or related entities on the basis that they are

alleged to have been fraudulent transfers. The Official Stanford Investors Committee (OSIC) was permitted to intervene and filed a complaint against Societe Generale Private Banking (Switzerland) and the other defendants seeking similar relief.

The motion by Societe Generale Private Banking (Switzerland) to dismiss these claims on grounds of lack of jurisdiction was denied by the court by order filed 5th June 2014. Societe Generale Private Banking (Switzerland) sought reconsideration of the Court's jurisdictional ruling, which the Court ultimately denied. On 21st April 2015, the Court permitted the substantial majority of the claims brought by the plaintiffs and the OSIC to proceed.

On 7th November 2017, the District Court denied the plaintiffs' motion for class certification. The plaintiffs sought leave to appeal this decision, which the court of appeal denied on 20th April 2018. On 3rd May 2019, several hundred individual plaintiffs filed motions to intervene in the pending OSIC action seeking recovery in their individual capacities for losses on their Stanford investments. The defendant financial institutions, including Societe Generale Private Banking (Switzerland), opposed these motions. By order of 18th September 2019 the court denied the motions to intervene. One group of plaintiffs appealed the denial, and another initiated a separate action in Texas state court in Houston in November 2019.

On 22nd December 2015, the OSIC filed a motion for partial summary judgment seeking return of a transfer of USD 95 million to Societe Generale Private Banking (Switzerland) made in December 2008 (prior to the Stanford insolvency) on the grounds that it is voidable under Texas state law as a fraudulent transfer. Societe Generale Private Banking (Switzerland) has opposed this motion.

- Notwithstanding the agreements reached with the US authorities regarding certain London Interbank Offered Rates and the Euro Interbank Offered Rate ("the IBOR matter"), the Bank continues to defend civil proceedings in the United States (as described below) and has responded to information requests received from other authorities, including the Attorneys General of various States of the United States and the New York Department of Financial Services.

In the United States, Societe Generale, along with other financial institutions, has been named as a defendant in putative class actions involving the setting of US Dollar Libor, Japanese Yen Libor, and Euribor rates and trading in instruments indexed to those rates. Societe Generale has also been named in several individual (non-class) actions concerning the US Dollar Libor rate. All of these actions are pending in the US District Court in Manhattan (the "District Court").

As to US Dollar Libor, all claims against Societe Generale have been dismissed by the District Court or voluntarily dismissed by the plaintiffs, except in two putative class actions and one individual action that are effectively stayed. Certain individual plaintiffs, whose claims were dismissed, filed motions for leave to amend their complaints to add or revive claims against Societe Generale, but those applications were denied by the District Court. The class plaintiffs and a number of individual plaintiffs have appealed the dismissal of their antitrust claims to the United States Court of Appeals for the Second Circuit.

On 13th January 2020, Societe Generale entered into a settlement agreement with the putative class of plaintiffs who purchased financial products tied to US Dollar Libor on an exchange. As part of that settlement, Societe Generale has agreed to pay USD 5.125 million. This settlement is subject to approval by the District Court.

As to Japanese Yen Libor, the District Court dismissed the complaint brought by purchasers of Euroyen over-the-counter derivative products and the plaintiffs have appealed that ruling to the United States Court of Appeals for the Second Circuit. In the other action, brought by purchasers or sellers of Euroyen derivative contracts on the Chicago Mercantile Exchange, the District Court has allowed certain Commodity Exchange Act (CEA) claims to proceed to

discovery. On 27th September 2019, Societe Generale filed a motion for judgment on the pleadings that seeks dismissal of plaintiff's remaining CEA claims. The parties are awaiting a decision. On 27th September 2019, plaintiff filed a motion for class certification. Briefing on plaintiff's motion for class certification has been stayed until the district court rules on defendants' motion for judgment on the pleadings.

As to Euribor, the District Court dismissed all claims against Societe Generale in the putative class action and denied the plaintiffs' motion to file a proposed amended complaint. Plaintiffs have appealed those rulings to the United States Court of Appeals for the Second Circuit.

In Argentina, Societe Generale, along with other financial institutions, has been named as a defendant in litigation brought by a consumer association on behalf of Argentine consumers who held government bonds or other specified instruments that paid interest tied to US Dollar Libor. The allegations concern violations of Argentine consumer protection law in connection with alleged manipulation of the US Dollar Libor rate. Societe Generale has not yet been served with the complaint in this matter.

- Beginning on 15th January 2019, Societe Generale and SG Americas Securities, LLC (SGAS), along with other financial institutions, have been named in three putative antitrust class actions in the US District Court in Manhattan, which have since been consolidated. Plaintiffs allege that the USD ICE Libor panel banks conspired to make artificially low submissions to that benchmark in order to profit on their trading in derivatives tied to USD ICE Libor. Plaintiffs seek to certify a class comprised of US residents (individuals and entities) that transacted with a defendant in floating rate debt instruments or interest rate swaps tied to USD ICE Libor and received a payment at any time between 1st February 2014 to the present, regardless of when the instrument was purchased. On 30th August 2019, Societe Generale and SGAS filed a motion to dismiss all claims asserted against them.
- Societe Generale, along with several other financial institutions, was named as a defendant in a putative class action alleging violations of US antitrust laws and the CEA in connection with foreign exchange spot and derivatives trading. The action was brought by persons or entities that transacted in certain over-the-counter and exchange-traded foreign exchange instruments. Societe Generale has reached a settlement of USD 18 million, which was approved by the Court on 6th August 2018. A separate putative class action on behalf of putative classes of indirect purchasers is also pending. SG has reached a settlement of USD 975,000 to put an end to these proceedings, which is awaiting preliminary approval by the court. On 7th November 2018, a group of individual entities that elected to opt out of the main class action settlement filed a lawsuit against SG, SG Americas Securities, LLC and several other financial institutions. A motion to dismiss was filed on 1st April 2019.
- On 10th December 2012, the French Supreme Administrative Court (Conseil d'État) rendered two decisions confirming that the "précompte tax" which used to be levied on corporations in France does not comply with EU law and defined a methodology for the reimbursement of the amounts levied by the tax authorities. However, such methodology considerably reduces the amount to be reimbursed. Societe Generale purchased in 2005 the "précompte tax" claims of two companies (Rhodia and Suez, now ENGIE) with a limited recourse on the selling companies. One of the above decisions of the French Supreme Administrative Court relates to Rhodia. Societe Generale has brought proceedings before the French administrative courts. The latest court decision rendered is a rejection, on 1st February 2016 by the French Administrative Supreme Court, of an appeal lodged by ENGIE and Societe Generale.

Several French companies applied to the European Commission, who considered that the decisions handed down by the French Supreme Administrative Court on 10th December 2012, which was supposed to implement the decision rendered by the Court of

Justice of the European Union C-310/09 on 15th September 2011, infringed a number of principles of European law. The European Commission subsequently brought infringement proceedings against the French Republic in November 2014, and since then confirmed its position by publishing a reasoned opinion on 29th April 2016 and by referring the matter to the Court of Justice of the European Union on 8th December 2016. The Court of Justice of the European Union rendered its judgement on 4th October 2018 and sentenced France for failure by the French Supreme Administrative Court to disregard the tax on EU sub-subsidiaries in order to secure the withholding tax paid in error as well as on the absence of any preliminary question. With regard to the practical implementation of the decision, Societe Generale will assert its rights before the competent courts and the French tax authority, from which it expects diligent treatment and in accordance with the law.

- Societe Generale, along with other financial institutions, has been named as a defendant in a putative class action alleging violations of US antitrust laws and the CEA in connection with its involvement in the London Gold Market Fixing. The action is brought on behalf of persons or entities that sold physical gold, sold gold futures contracts traded on the CME, sold shares in gold ETFs, sold gold call options traded on CME, bought gold put options traded on CME, sold over-the-counter gold spot or forward contracts or gold call options, or bought over-the-counter gold put options. The action is pending in the US District Court in Manhattan. Motions to dismiss the action were denied by an order dated 4th October 2016, and discovery is now proceeding. Societe Generale, along with other financial institutions, is also named as a defendant in two putative class actions in Canada (in the Ontario Superior Court in Toronto and Quebec Superior Court in Quebec City) involving similar claims.
- Since August 2015, various former and current employees of the Societe Generale group have been under investigation by German criminal prosecution and tax authorities for their alleged participation in the so called “CumEx” patterns in connection with withholding tax on dividends on German shares. These investigations relate to a fund administered by SGSS GmbH proprietary trading activities and transactions carried out on behalf of clients. The Group entities respond to the requests of the German authorities.

SGSS GmbH was informed by the Bonn District Court on 19th June 2019 that criminal proceedings had been initiated against two individuals who were employed by a company having previously advised this fund, the latter being suspected by the German prosecutors to have been involved in potentially fraudulent CumEx transactions. On 19th August 2019, the Bonn District Court ordered SGSS GmbH to join these criminal proceedings, which are currently pending, as a “secondary party”.

- In May 2019, SGAS was named, along with other financial institutions, as a defendant in a putative class action in the US alleging anticompetitive behaviour in the pricing of “agency bonds” issued by US Government Sponsored Enterprises (GSEs), including Federal Home Loan Bank (FHLB), Federal Home Loan Mortgage

Corporation (Freddie Mac), and Federal National Mortgage Association (Fannie Mae). SGAS, along with several other defendants, filed a motion to dismiss on 13th June 2019 which was granted on 29th August 2019 as against SGAS and several other bank defendants. Plaintiffs filed an amended complaint on 9th September 2019, and a motion to dismiss this amended complaint was filed on 17th September 2019. That motion was denied on 15th October 2019. On 16th December 2019, plaintiffs and twelve bank defendants, including SGAS, submitted for court approval a stipulation of settlement in the class action, for USD 250 million. Although SGAS’s share of the settlement is not public, the amount was not material from a financial statement perspective. SGAS also has been named in two separate individual litigations, one brought in September by the State of Louisiana and the other brought in October by City of Baton Rouge/East Baton Rouge Parish. These suits also assert antitrust claims against SGAS and multiple other bank defendants based on these plaintiffs’ purchases of GSE bonds. SGAS has also received a subpoena from the US Department of Justice (DOJ) in connection with its US agency bond business. SGAS is responding to these requests and is cooperating with the DOJ investigation.

- Societe Generale and certain of its subsidiaries are defendants in an action pending in the US Bankruptcy Court in Manhattan brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC (BLMIS). The action is similar to those brought by the BLMIS Trustee against numerous institutions and seeks recovery of amounts allegedly received by the SG entities indirectly from BLMIS through so-called “feeder funds” that were invested in BLMIS and from which the SG entities received redemptions. The suit alleges that the amounts that the SG entities received are avoidable and recoverable under the US Bankruptcy Code and New York state law. The BLMIS Trustee seeks to recover, in the aggregate, approximately USD 150 million from the SG entities. The SG entities are defending the action. In decisions dated 22nd November 2016 and 3rd October 2018, the Court rejected most of the claims brought by the BLMIS Trustee. The Trustee appealed to the US Court of Appeals for the Second Circuit. By order dated 25th February 2019, the Second Circuit vacated the judgements and remanded for further proceedings. By order dated 23rd April 2019, the Second Circuit has stayed the mandate, pending disposition of Defendant-Appellees’ petition for review by the United States Supreme Court.
- On 10th July 2019, Societe Generale was named as a defendant in a litigation filed in the US District Court in Miami by plaintiffs seeking to recover under the Cuban Liberty and Democracy Solidarity (Libertad) Act of 1996 (known as the Helms-Burton Act) for alleged losses stemming from the expropriation by the Cuban government in 1960 of Banco Nunez in which they are alleged to have held an interest. Plaintiff claims damages from Societe Generale under the terms of this statute. Plaintiff filed an amended complaint on 24th September 2019 adding three other banks as defendants and adding several new factual allegations as to Societe Generale. Societe Generale filed a motion to dismiss, which was fully briefed as of 10th January 2020.

6.3 STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

ERNST & YOUNG et Autres
Tour First
TSA 1444492037 Paris-La Défense Cedex
S.A.S. à capital variable
438 476 913 R.C.S. Nanterre

DELOITTE & ASSOCIÉS
6, place de la Pyramide
92908 Paris-La Défense Cedex
S.A.S. au capital de € 2.188.160
572 028 041 R.C.S. Nanterre

Société Générale
Société anonyme
17, cours Valmy
92972 Paris-La Défense

Year ended December 31, 2019

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company that is issued in French language and it is provided solely for the convenience of English-speaking users.

This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of Societe Generale,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of Société Générale for the year ended December 31, 2019.

In our opinion, the consolidated financial statements give a true and fair view of the results of operations of the Group for the year then ended and of its financial position and of its assets and liabilities as at December 31, 2019 in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit and Internal Control Committee.

Basis for Opinion

AUDIT FRAMEWORK

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

INDEPENDENCE

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2019 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of Ethics (*Code de déontologie*) for statutory auditors.

Emphasis of Matter

Without qualifying the opinion expressed above, we draw your attention to:

- Notes 1 « Significant accounting principles » and 8.4 « Tangible and intangible fixed assets » to the consolidated financial statements that present the impacts of the first-time application of IFRS 16 « Leases »;
- Notes 1 « Significant accounting principles » and 6 « Income tax » to the consolidated financial statements that present the impacts of the first-time application of the amendment to IAS 12 « Income taxes ».

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

RECOVERABILITY OF DEFERRED TAX ASSETS IN FRANCE AND IN THE UNITED STATES

Risk identified

As at December 31, 2019 deferred tax assets on tax loss carryforwards were recorded in an amount of 2,659 M€, including 2,586 M€ for the tax groups in France and the United States.

As stated in Note 6 “Income tax” to the consolidated financial statements, the Société Générale Group calculates deferred taxes at the level of each tax entity and recognizes deferred tax assets at the closing date when it is considered probable that the tax entity concerned will have future taxable profits against which temporary differences and tax loss carryforwards can be offset, within a given timeframe.

In addition, as stated in Notes 6 “Income tax” and 9 “Information on risks and litigation” to the consolidated financial statements, certain tax loss carryforwards are challenged by the French tax authorities and are therefore liable to be called into question.

Given the assumptions used to assess the recoverability of the deferred tax assets in France and the United States (which represent the major part of the assets recognized), notably on future taxable profits, and the judgment exercised by Management in this respect, we considered this issue as a key audit matter.

Our response

Our audit approach consisted in assessing the probability that the Société Générale Group will be able to use in the future its tax loss carryforwards generated to date, in particular with regard to its ability to generate future taxable profits in France and the United States.

With the support of tax specialists included in our audit team, we:

- compared the projected results of the previous years with the actual results of the corresponding fiscal years;
- obtained an understanding of the three-year business plan drawn up by Management and approved by the Board of Directors, as well as of the assumptions used by Management beyond the three-year period to prepare projected tax results;
- obtained an understanding of the projected temporary differences over a three-year period;
- analyzed the sensitivity of these assumptions in the event of adverse scenarios defined by the Société Générale Group;
- analyzed the situation of the Société Générale Group, notably by taking note of the opinions of its external tax advisers regarding its tax loss carryforwards in France, partly challenged by the tax authorities;
- examined the information provided by the Group, concerning deferred tax assets, disclosed in Notes 6 “Income tax” and 9 “Information on risks and litigation” to the consolidated financial statements.

PORTFOLIO-BASED INTEREST RATE RISK FAIR VALUE HEDGING OF OUTSTANDINGS OF THE RETAIL BANKING NETWORKS IN FRANCE

Risk identified

To manage the interest rate risk generated by its retail banking activities in France in particular, the Société Générale Group manages a hedging derivatives portfolio to hedge its net interest rate position.

The Group documents these portfolio-based interest rate risk fair value hedging transactions (“macro-hedging”) in its accounts in accordance with IAS 39 as adopted in the European Union, as presented in Note 3.2 “Financial derivatives” to the consolidated financial statements.

This documentation and the accounting treatment are only possible if certain criteria are met, in particular: designation and documentation at inception of the hedging relationship, eligibility of hedging and hedged instruments, demonstration of the hedge effectiveness, measurement of effectiveness. Pursuant to IAS 39 as adopted in the European Union, the documentation of hedging relationships compares:

- the gross outstandings designated for the hedging relationship (identification of eligible financial assets and eligible financial liabilities, for which maturities have been broken down according to the assumptions made by Management as described in Note 10 “Management of financial instruments related risks” to the consolidated financial statements), on the one hand;
- the nominal amounts of the corresponding hedging transactions, broken down by maturity, on the other hand.

In 2019, the Société Générale Group evolved its interest rate risk management of the fair value hedging strategy, to reflect in particular changes in its portfolio of customer deposits of retail banking networks in France in relation to the current interest rate environment, as presented in Note 3.2 “Financial derivatives” to the consolidated financial statements. This change led to a substantial increase in the commitments of interest rate derivatives hedging portfolios of liabilities.

The “macro-hedge” accounting of retail banking transactions in France requires Management to exercise judgment regarding in particular:

- the identification of eligible hedging and hedged items;
- the criteria adopted to schedule the outstandings’ maturities by including behavioral criteria;
- and the performance of effectiveness tests and calculations.

As at December 31, 2019, the fair value of the derivatives instruments hedging portfolios of liabilities totaled 12,466 M€ in assets and 5,600 M€ in liabilities, and the revaluation differences on portfolios hedged against interest rate risk totaled 401 M€ in assets and 6,671 M€ in liabilities.

Considering the documentation requirements for “macro-hedging” relationships, the volume of hedging derivative transactions and the use of Management judgment required, we consider the accounting treatment of portfolio-based interest rate risk fair value hedging of outstandings of the retail banking networks in France to be a key audit matter.

Our response

Our audit procedures in response to the risk relating to the accounting treatment of portfolio-based interest rate risk fair value hedging of outstandings (“macro-hedging”) consisted in obtaining an understanding of the procedures used to manage the structural interest rate risk, and reviewing the control environment set up by Management in particular for the documentation, identification and eligibility of hedged and hedging items, as well as for the performance of effectiveness tests.

With the support of financial modelling experts, where necessary, our work mainly consisted in:

- reviewing the accounting documentation of the hedging relationships;
- testing the eligibility of the financial assets and liabilities used by the Group for the portfolio-based interest rate risk fair value hedge accounting, according to the terms and conditions defined by IAS 39 as adopted in the European Union;
- examining the procedures used to prepare and control the criteria adopted to schedule the maturities of the hedged financial instruments, particularly with regard to the adopted maturities of the eligible financial liabilities;

- assessing the procedures used to determine the effectiveness of these hedging relationships, as well as the related governance;
- analyzing the results of prospective and retrospective tests required by the applicable accounting framework;
- performing recalculations on the portfolio of financial instruments eligible for portfolio-based interest rate risk fair value hedging;
- reviewing the qualitative and quantitative information disclosed in the notes to the consolidated financial statements and their compliance with IFRS 7 "Financial instruments: Disclosures".

CREDIT RISK APPRAISAL AND ASSESSMENT OF IMPAIRMENT FOR CUSTOMER LOANS

Risk identified

Customer loans and receivables carry a credit risk which exposes Société Générale Group to a potential loss if its client or counterparty is unable to meet its financial commitments. The Société Générale Group recognizes impairment to cover this risk.

Such impairment is calculated according to IFRS 9 "Financial instruments" principles, based on the expected credit losses calculation.

The assessment of expected credit losses for customer loans requires the exercise of judgment notably to:

- determine the loan classification criteria under stage 1, stage 2 or stage 3;
- estimate the amount of expected credit losses depending on the different stages;
- prepare macro-economic projections which are embedded in the deterioration criteria and in the expected credit losses measurement.

The qualitative information concerning in particular the recognition and procedure used to estimate expected credit losses are mainly described in Note 3.8 "Impairment and provisions" to the consolidated financial statements.

As at December 31, 2019, total customer loan outstandings exposed to credit risk totaled 460,587 M€; the impairment and provisions totaled 10,727 M€.

We considered the assessment of the credit risk and the measurement of impairment to be a key audit matter, as they require Management to exercise judgement and make estimates, particularly concerning the credit risk on the financing granted to companies in the most sensitive economic sectors and geographical areas, while the loans may represent significant amounts.

Our response

With the support of specialists in risk management and modelling included in the audit team, we focused our work on the most significant loans and/or portfolios of loans to clients, as well as on the financing granted to companies in the most sensitive economic sectors and geographical areas.

We obtained an understanding of the Société Générale Group's internal control and tested the manual and automated key controls relating to the assessment of the credit risk and the measurement of the expected losses.

Concerning impairment, our audit work notably consisted in:

- examining the compliance of policies and methodologies implemented by the Group and declined within the different business units, with IFRS 9 "Financial instruments";
- obtaining an understanding of the governance plan and testing the key controls set up at Group level;

- performing tests on a selection of models implemented in the information systems which are used to prepare financial information;
- performing a counter-calculation of the expected credit losses on a selection of stage 1 and stage 2 portfolios as at December 31, 2019 in order to assess the correct calibration of the models;
- analyzing the main parameters used by the Société Générale Group to classify outstandings and assess stages 1 and 2 impairment calculation as at December 31, 2019, including the integration of macro-economic projections;
- testing, as at December 31, 2019, in particular on a selection of the most significant loans to corporate clients, the main assumptions used to classify loans in stage 3, as well as the estimation of the related individual impairment.

We also examined the qualitative and quantitative disclosures in the notes to the consolidated financial statements relating to credit risk, and in particular the information required by IFRS 7 "Financial instruments: Disclosures".

VALUATION OF COMPLEX FINANCIAL INSTRUMENTS

Risk identified

Within the scope of its market activities, the Société Générale Group holds financial instruments for trading purposes. As at December 31, 2019, total amounts of 385,739 M€ and 364,129 M€ were recorded in assets and liabilities, respectively, on the Société Générale Group's balance sheet.

To determine the fair value of complex instruments, the Group uses techniques or in-house valuation models based on parameters and data, some of which are not observable in the market, which can differ the recognition of the margin in the income statement for transactions involving such financial instruments, as stated in Note 3.4 "Fair value of financial instruments measured at fair value" to the consolidated financial statements. If necessary, these valuations include additional reserves or value adjustments. The models and data used to value these instruments, and their classification under the fair value hierarchy, are based on management's judgment and estimates.

Given the exercise of judgment in determining the fair value, the complexity of the modelling of the latter and the multiplicity of models used, we consider the valuation of complex financial instruments to be a key audit matter.

Our response

Our audit approach is based on the key internal control processes related to the valuation of complex financial instruments.

With the support of experts in the valuation of financial instruments included in the audit team, we designed an approach including the following main stages:

- we obtained an understanding of the procedure to authorize and validate new products and their valuation models, including the process for the entry of these models in the information systems;
- we analyzed the governance set up by the Risk Department for the control of the valuation models;
- based on samples, we specifically analyzed the valuation formulas for certain categories of complex instruments and the relating value adjustments;
- we tested the key controls relating to the independent verification of the valuation parameters, and analyzed certain market parameters used to provide input for the valuation models;
- as regards the process used to explain the changes in fair value, we obtained an understanding of the bank's analysis principles and

performed tests of controls; in addition, we performed “analytical” IT procedures on the daily control data relating to certain activities;

- we obtained the quarterly results of the independent price verification process performed on the valuation models using external market data, and analyzed the differences in parameters with the market data in the event of a significant impact, and the accounting treatment of such differences;
- we performed counter-valuations of a selection of complex derivative financial instruments using our tools;
- we analyzed the observability criteria, among others, used to determine the fair value hierarchy of such instruments, and to estimate deferred margin amounts;
- we examined the compliance of the methods underlying the estimates with the principles described in Note 3.4 “Fair value of financial instruments measured at fair value” to the consolidated financial statements.

INFORMATION TECHNOLOGY RISK ON DERIVATIVE FINANCIAL INSTRUMENTS AND STRUCTURED BONDS ISSUED

Risk identified

The Société Générale Group's derivative financial instruments and structured bonds issued constitute an important activity within the bank's market activities, as illustrated by the significance of the net positions of derivative financial instruments in the transaction portfolio in Note 3.2 “Financial derivatives” to the consolidated financial statements.

This activity is highly complex given the nature of the financial instruments processed, the volume of transactions, and the use of numerous interfaced information systems.

The risk of occurrence of a significant misstatement in the accounts related to an incident in the data processing chains used or the recording of transactions until their transfer into the accounting system may result from:

- changes made to management and financial information by unauthorized persons via the information systems or underlying databases;
- a failure in processing or in the transfer of data between systems;
- a service interruption or an operating incident which may or may not be related to internal or external fraud.

In this context, the monitoring by the Société Générale Group of controls linked to the management of the information systems relating to the derivative financial instruments and structured bonds issued is essential for the reliability of the accounts.

As such, we considered the information technology risk on derivative financial instruments and structured bonds issued to be a key audit matter.

Our response

Our audit approach for this activity is based on the controls related to the management of the information systems set up by Société Générale Group. With the support of specialists in information systems included in the audit team, we tested the IT general controls of the applications that we considered to be key for this activity.

Our work concerned, in particular:

- the controls set up by the Société Générale Group on access rights, notably at sensitive periods in a professional career (recruitment, transfer, resignation, end of contract) with, where applicable, extended audit procedures in the event of ineffective control identified during the financial year;
- potential privileged access to applications and infrastructure;

- change management relating to applications, and more specifically the separation between development and business environments;
- security policies in general and their deployment in IT applications (for example, those related to passwords);
- handling of IT incidents during the audit period;
- governance and the control environment on a sample of applications.

For these same applications, and in order to assess the transfer of information flows, we tested the key application controls relating to the automated interfaces between the systems.

Furthermore, our tests of the IT general controls and application controls were supplemented by data analytics work on certain IT applications.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations on the information relating to the Group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the consolidated non-financial performance statement provided for in Article L.225-102-1 of the French Commercial Code (*Code de commerce*) is included in the information relating to the Group presented in the management report, it being specified that, in accordance with Article L.823-10 of the said Code, we have not verified the fairness of the information contained in this statement or its consistency with the consolidated financial statements that must be verified in a report by an independent third party.

Report on Other Legal and Regulatory Requirements

APPOINTMENT OF THE STATUTORY AUDITORS

We were appointed as statutory auditors of Société Générale by the Annual General Meeting held on April 18, 2003 for DELOITTE & ASSOCIÉS and on May 22, 2012 for ERNST & YOUNG et Autres.

As at December 31, 2019, DELOITTE & ASSOCIÉS was in the seventeenth year of total uninterrupted engagement and ERNST & YOUNG et Autres in the eighth year.

Previously, ERNST & YOUNG Audit was the statutory auditor of Société Générale from 2000 to 2011.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit and Internal Control Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

OBJECTIVE AND AUDIT APPROACH

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (*Code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;

- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- Evaluates the overall presentation of the consolidated financial statements and assesses whether these consolidated statements represent the underlying transactions and events in a manner that achieves fair presentation;
- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

REPORT TO THE AUDIT AND INTERNAL CONTROL COMMITTEE

We submit to the Audit and Internal Control Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit and Internal control Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit and Internal Control Committee with the declaration provided for in Article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (*Code de commerce*) and in the French Code of Ethics (*Code de déontologie*) for statutory auditors. Where appropriate, we discuss with the Audit and Internal Control Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris-La Défense, March 12, 2020

The Statutory Auditors

French original signed by

ERNST & YOUNG et Autres
Micha MISSAKIAN

DELOITTE & ASSOCIÉS
Jean-Marc MICKELER

REGISTERED OFFICE OF THE ISSUER

SG Issuer
16, Boulevard Royal
L-2449 Luxembourg
Luxembourg

REGISTERED OFFICE OF THE GUARANTOR

Société Générale
29, boulevard Haussmann
75009 Paris
France

ISSUER'S AUDITORS

Ernst & Young Société Anonyme
35E, avenue John F. Kennedy
L-1855 Luxembourg
Luxembourg

**Ernst & Young et
Autres**
Tour First
TSA 14444
92037 Paris-La
Défense Cedex
France

GUARANTOR'S AUDITORS

Deloitte & Associés
6, place de la Pyramide
92908 Paris-La Défense
Cedex
France

WARRANT AGENT

THE CENTRAL DEPOSITORY (PTE) LIMITED

11 North Buona Vista Drive
#06-07 The Metropolis Tower 2
Singapore 138589

LEGAL ADVISERS TO THE ISSUER

(as to Singapore law)

ALLEN & GLEDHILL LLP
One Marina Boulevard #28-00
Singapore 018989